Thirty-Sixth Annual Report

Arkansas River Compact Administration

(1984)

For The Report-Year
November 1, 1983 to October 31, 1984

LAMAR, COLORADO
June 1, 1985

THE ADMINISTRATION

FRANK G. COOLEY
Chairman and Representative of the United States

J. WILLIAM McDONALD,
LEO IDLER, and CARL G. GENOVA,
for Colorado

DAVID POPE, CARL E. BENTRUP,
and RONALD OLOMON
for Kansas

****

1000 South Main Street
Lamar, Colorado 81052

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Annual Report Of

ARKANSAS RIVER COMPACT ADMINISTRATION

1984

Report-Year November 1, 1983 to October 31, 1984

TO: THE PRESIDENT OF THE UNITED STATES AND THE GOVERNORS OF THE STATES OF COLORADO AND KANSAS

Sirs:

Pursuant to Article VIII of the Arkansas River Compact, the Arkansas River Compact Administration submits its report for the Report-Year November 1, 1983 through October 31, 1984, as follows:

1. Members of the Administration

Representative of the United States:

Frank G. Cooley

Colorado Representatives:

J. William McDonald, Denver
Leo Idler, Lamar
Carl G. Genova, Pueblo

Kansas Representatives:

David Pope, Topeka
Carl E. Bentrup, Deerfield
Ronald Olomon, Garden City

2. Officers of the Administration

Chairman:

Frank G. Cooley

Vice Chairman:

Carl E. Bentrup

Recording Secretary:

Leo Idler

Operations Secretary:

Robert Jesse

Treasurer:

Leo Idler

3. Standing Committees:

Administrative and Legal Committee:

J. William McDonald (Chairman)
Carl E. Bentrup

Engineering Committee:

David Pope
Carl G. Genova (Chairman)

Operations Committee:

Leo Idler (Chairman)
Ronald Olomon

The Representative of the United States is an ex-officio member of all standing committees.

4. Meetings:

December 13, 1983	Annual Meeting, Lamar, Colorado
January 26, 1984	Special Telephonic Meeting
May 10, 1984	Special Meeting, Las Animas, Colo.
July 2, 1984	Special Telephonic Meeting

The minutes of these meetings are included in Appendices "C-1," "C-2," "C-3," and "C-4."

5. Fiscal

TREASURER'S REPORT
July 1, 1983 thru June 30, 1984

CASH BALANCE JULY 1, 1983		$36,354
RECEIPTS (Rounded):		
Revenue from Assessments:		
Colorado—60%	$17,455	
Kansas—40%	11,636	
Interest	4,462	
TOTAL RECEIPTS		$33,553
TOTAL TO ACCOUNT FOR		$69,907
DISBURSEMENTS: (Rounded)		
U.S. Geological Survey	11,995	
Secretary's Salary	3,600	
Operations Secretary	0	
Bond & Insurance	100	
Telephone	1,536	
Payroll Taxes	288	
Typing & Mailing	184	
Professional Fees	300	
Travel & Meeting	0	
Printing	0	
Office Supplies	363	
Equipment	6,309	
Contingency	0	
TOTAL DISBURSEMENTS		$24,675
CASH BALANCE, JUNE 30, 1984 (Rounded)		$45,232

BALANCE SHEET
July 1, 1984 thru December 10, 1984

CASH BALANCE, JULY 1, 1984		$45,231.75
RECEIPTS:		
Revenue from Assessments:		
Colorado—60%	16,824.72	
Kansas—40%	11,216.48	
Interest	2,904.13	
Excess FICA	42	
TOTAL RECEIPTS:		$30,987.33
TOTAL TO ACCOUNT FOR		$76,219.08
DISBURSEMENTS:		
Insurance	100	
U.S. Geological Survey	12,000	
Equipment	0	
Professional	350	
Office Supplies	85.09	
Printing Annual	2,289.14	
Secretary's Salary	1,674	
Payroll Taxes	206.40	
Telephone	1,317.36	

Typing & Mailing	147.76	
Bank Charges	10	
TOTAL DISBURSEMENTS		$18,179.75
EXCESS OF RECEIPTS OVER DISBURSEMENTS		$58,039.33
Checking Account	$ 106.65	
Savings Account	57,932.68	
	$58,039.33	$58,039.33

REVISED BUDGET AND ASSESSMENTS
Fiscal Year July 1, 1985-June 30, 1986

BUDGET ITEMS		
A. SALARIES:		$ 9,941.20
1. Recording Secretary	$ 3,600	
2. Operations Secretary	6,100	
3. Payroll Taxes	241.20	
B. GAGING STATIONS		12,900
1. U.S. Geological Survey Cooperative Agreement	12,400	
2. Telemark Telephone John Martin Dam Granada Gage	500	
C. OPERATING EXPENSE		6,350
1. Treasurer's Bond	100	
2. Annual Report	2,500	
3. Office Expense	3,200	
A. Telephone	$2,500	
B. Supplies	350	
C. Printing	350	
4. Travel and Meetings	200	
5. Audit	350	
D. CONTINGENCY		2,000
E. TOTAL BUDGET		31,191.20
ASSESSMENTS July 1, 1985-June 30, 1986		$28,000.00
Colorado (60%)	16,800	
Kansas (40%)	11,200	
EXPENDITURE IN EXCESS OF ASSESSMENTS*		3,191.20

*From Surplus Funds

Revised and adopted by the Arkansas River Compact Administration at the December 11, 1984, Annual Meeting.

/s/ Leo Idler, Recording Sec., 12-11-84

6. Facts about the John Martin Project:

The John Martin Reservoir Project was built by the Corps of Engineers, United States Army. The project was authorized by Congress in the Flood Control Act of June 22, 1936, when the federal responsibility for flood control throughout the country was assigned to the Corps of Engineers. It is located on the Arkansas River, 58 miles upstream from the Colorado-Kansas stateline and 18 miles upstream from the city of Lamar, Colorado. Construction of the project began in the fall of 1939, but work was suspended by World War II from the spring of 1943 to the spring of 1946. The project was completed in October 1948 at a cost of about $15 million. The War Department Civil Appropriation Act of June 24, 1940, changed the name of the project from Caddoa Reservoir Project to John Martin Reservoir Project, in honor of the late Congressman John A. Martin of Colorado. It is operated by the United States Army Engineer District, Albuquerque, New Mexico. Mr. Russell Smith has been the resident superintendent of the project since October, 1976.

The John Martin Reservoir Project is part of the comprehensive plan for the control of floods and the development of the water resources of the entire Arkansas River basin. The reservoir provides 270,375 acre-feet of storage capacity for flood control. It protects the fertile Arkansas River Valley below the dam. It provides 350,951 acre-feet of storage space for conservation and recreation. John Martin Reservoir supplies water to the irrigated lands below the dam as far as Garden City, Kansas. The top of the conservation pool is 3,851 feet above mean sea level, which provides 350,951 acre-feet of storage for irrigation. The release of stored flood waters in excess of the conservation and recreation pools and above elevation 3,851 feet is planned so that, when combined with flows originating downstream from the dam, the capacity of the channel will not be exceeded. Upon request of the Arkansas River Compact Administration, irrigation water for downstream water users is released through the outlet works in the base of the dam. Downstream flood damages prevented by John Martin dam already exceed the cost of the project. Benefits have already passed the $92 million mark.

Recreation and favorable fish and wildlife habitats are derived from this project. With reservoir lands open to all, there are many attractive public use areas for outdoor recreation, water sports, fishing and boating, or just relaxed living. During construction some embankment material was obtained from a 75-acre tract of land immediately downstream of the dam. This excavated area, averaging 12 feet deep, filled with water and formed Lake Hasty, the center of year-round recreation.

John Martin Dam consists of a concrete gravity structure 1,644 feet long and 120 feet high, and an earthfill structure 2,600 feet long. The concrete gravity structure contains a gated spillway provided with sixteen 30 feet by 64 feet tainter gates with their operating machinery. There are earthen wing dams on either side of the main dam. The north wing dam is 3,880 feet long, connecting to the earthfill structure of the main dam at the north abutment. The south wing dam is 5,807 feet long and connects to the south end of the concrete structure of the main dam. A bituminous-surfaced roadway, 21 feet wide, extends along the crest of the north wing dam, main dam, and southwing dam. The overall length of the structure is 2.6 miles. Detailed project data are shown below.

DAM

Total length, feet	13,945
Maximum height above streambed, feet	118
Width of roadway on dam, feet	21

SPILLWAY

Total length, including piers, feet	1,174
Crest gates, 30' x 64'	16
Discharge capacity, cubic feet per second	639,200

OUTLET WORKS

Sluicing conduits, 6' x 7½'	4
Regulating conduits, 4' x 4'	2

RESERVOIR

Capacity, acre-feet	621,326
Flood control storage, acre-feet	270,375
Conservation (irrigation) and recreation, storage, acre-feet	350,951
Water surface at spillway crest, acres	8,960
Water surface at top of conservation pool, acres	11,655
Water surface at top of flood control pool, acres	17,630
Drainage areas, square miles	18,915

A ½-mile of the historic Santa Fe Trail north of the reservoir has been enclosed by a fence. An appropriate sign perpetuates this bit of Americana for posterity.

7. Cooperative Studies and Activities:

(a) Article VIII G (1) of Arkansas River Compact requires the Administration to cooperate with the Chief Official of each of the states of Colorado and Kansas charged with the administration of water rights in their respective States, and with the Federal agencies in systematically determining and correlating the facts pertaining to the flow and diversion of the water of the Arkansas River and to the operation and siltation of John Martin Reservoir and other related structure. Article VIII G (2) requests the Director of the United States Geological Survey, the Commissioner of the United States Bureau of Reclamation, and the Chief of Engineers, United States Army, to cooperate and collaborate with the Administration and with appropriate State officials in such determinations and correlations of streamflow and related data. Under the By-Laws of the Administration, these cooperative studies and activities are assigned to the Engineering Committee of the Administration.

(b) During the year covered by this report the Administration has received excellent cooperation from all agencies referred to in the foregoing provisions of the Compact. The United States Geological Survey has continued the operation of the compact gaging stations and the analysis of and compilation of the hydrologic data presented in this report and used in the administration of the compact.

(c) The Corps of Engineers continued to operate the conservation pool

of John Martin Reservoir in accordance with the terms of the Compact and the orders of the Administration. A new area capacity table for John Martin Reservoir was issued by the Army Corps of Engineers and put into effect August 12, 1981.

8. Water Supply, Reservoir Operations and Hydrologic Data

The 1984 Arkansas River Compact year and the winter storage season for John Martin Reservoir began at 0001 hour November 1, 1983 with 67,443.59 acre-feet in the reservoir distributed as follows:

Agreement Accounts	54,066.62 a.f.
Permanent Pool	13,376.97 a.f.
	67,443.59 a.f.

Winter Storage ended at 0200 hour on May 18, 1984 with a total of 131,117.4 a.f. stored during this period in the following accounts:

Compact Water	89,116.53 a.f.
Amity Canal Winter Water	27,724.07 a.f.
Ft. Lyon Canal Winter Water	9,930.27 a.f.
Las Animas Consolidated Winter Water	4,346.53 a.f.

Following the transfer of the stored inflows to John Martin Reservoir into the agreement accounts in accordance with the Operating Plan, adopted April 24, 1980 the allocation of the reservoir contents at 0200 hour May 18, 1984 were as follows:

Compact Water	0 a.f.
Amity Canal Winter Water	28,391.64 a.f.
Ft. Lyon Canal Winter Water	6,196.16 a.f.
Las Animas Consolidated Winter Water	2,713.39 a.f.
Agreement Water	122,647.77 a.f.
Permanent Pool	12,511.01 a.f.
	172,459.97 a.f.

Summer storage period began at 0200 hour May 18, 1984. At that time the Conservation Pool was empty. During the summer season inflow to the Conservation Pool totalled 222,060.09 a.f. This total, minus evaporation losses, was all released into accounts in accordance with the Operating Plan, adopted April 24, 1980. The Conservation Pool was empty at 2400 hour, October 31, 1984. The summer operations of the Conservation Pool are tabulated as follows:

	Contents, A.F. Beginning Date Shown	Inflow A.F.	Evaporation A.F.	Release A.F.	Contents, A.F. End of Month
May 18	0	26,862.03	24.12	11,901.00	14,936.91
June 1	14,963.91	79,754.48	670.35	72,609.86	21,411.18
July 1	21,411.18	31,730.30	173.01	52,968.47	0
Aug. 1	0	42,613.70	145.08	23,828.19	18,640.43
Sept. 1	18,640.43	7,906.85	134.81	26,412.47	0
Oct. 1	0	33,192.73	.29	33,192.44	0
TOTALS		222,060.09	1,147.66	220,912.43	

During the summer storage period inflows to the permanent pool consisted of a small storage event in August under the Division of

Wildlife's Muddy Creek decree and purchased transmountain water in October. These were:

August 1, 1984	78.09 a.f.
October 1, 1983	2,122.41 a.f.

During the summer storage season water was also stored under Article III of the 1980 Operating Plan in the following accounts:

Amity Canal	69,578.61 a.f.
Ft. Lyon Canal	13,973.93 a.f.

A small temporary account for the Las Animas Golf Course was approved by the Administration during 1984. The status of this account was as follows:

Total Inflow	Evap.	Releases	Contents Oct. 31, 1984
269 a.f.	17.25 a.f.	134.69 a.f.	117.06 a.f.

The following represents the inflow, releases and contents of the transit loss account:

Transit Loss Account

	Contents, A.F. Beg. Date Shown	Inflow A. Ft.	Evaporation A. Ft.	Release A. Ft.	Contents, A. Ft. End of Month
May 18	13802.76	50.36	140.96	0	13712.16
June 1	13712.16	43.80	323.52	3273.17	10159.27
July 1	10159.27	10940.05*	429.70	6060.18**	14609.44
Aug. 1	14609.44	6810.57	443.86	0	20976.15
Sept. 1	20976.15	1405.98	495.66	0	21886.47
Oct. 1	21886.47	10082.31	223.18	0	31745.60***
TOTALS		29333.07	2056.88	9333.35	

*Includes 4890.88 A. Ft. of 35% charge on Adobe Creek Reservoir Storage

**Includes 4890.88 - 33.20 evap. = 4857.68 A. Ft. 35% charge on Adobe Creek Res. storage released to Conservation Pool.

***11/35 (9977.19 A. Ft.) transferred to Kansas account @ 0001 Hr., 11/1/84.

At the close of the compact year at 2400 hour October 31, 1984 the status of the contents of John Martin Reservoir were as follows:

Conservation Pool	0 a.f.
Kansas Agreement Account	34,290.41 a.f.
Colorado Accounts	125,660.96 a.f.
Transit Loss Account	31,745.60 a.f.
Permanent Pool	13,210.03 a.f.
Total	204,907.00 a.f.

The technical data for this section was compiled by the Colorado Water Conservation Board staff using data from the Annual Report of the Operations Secretary, Arkansas River Compact Administration, the U.S.

Geological Survey, Colorado Division of Water Resources and the minutes and correspondence of the Arkansas River Compact Administration.

9. Gaging Stations

In general, streamflow records of satisfactory accuracy were obtained at the Compact stations. Emphasis was again placed on obtaining more field data, particularly in the form of discharge measurements at various stages of flow. Several more measurements were made at each site than are required under agreement with the Compact. Measurements made by personnel of the Colorado State Engineer were incorporated into the records.

There were no critical problems at the stations during the year, with the exception of the continuing unstable channels and controls.

The administration approved a cooperative agreement with the U.S. Geological Survey for the fiscal year October 1, 1983, to September 30, 1984, in the amount of $16,500 — $8,250 for each party. These funds are for supplemental measurements at the sites; the operation of one station, Arkansas River near Granada, Colorado; operation of a telemark at John Martin Dam, maintenance of radio-equipment, and the preparation of records for the annual report.

10. Findings of Fact by the Administration

There were no findings of fact made by the Administration during Compact Year 1984.

APPENDICES FOR
ANNUAL REPORT OF THE
ARKANSAS RIVER COMPACT
ADMINISTRATION

For the Report-Year
November 1, 1983, to October 31, 1984

APPENDIX "A-1"

Auditors's Report

ARKANSAS RIVER COMPACT ADMINISTRATION
CASH BASIS FINANCIAL STATEMENTS
JUNE 30, 1984
with
REPORT OF INDEPENDENT
CERTIFIED PUBLIC ACCOUNTANTS

Crimond, Farmer & Co.
Certified Public Accountants
203 East Oak, P.O. Box 1173, Lamar, CO 81052

December 10, 1984

Ark River Compact Administration
Lamar
Colorado 81052

We have received a request to explain the budget statement presentation of the item of equipment purchased for $6,309 during the fiscal year ending June 30, 1984. In our examination of the transaction records it was found that this purchase was for a computer which we understand was installed in the operations secretary's office for their use in doing Compact administration recording. Since this equipment was purchased directly by the Compact administration it was deemed by us to be an equipment budgetary item and was so classed. It is our understanding that it was intended to be offset against the operations secretary's budget expense but since we have no verification that this piece of equipment satisfied any salary obligations it is not possible to show this in that respect on the budget comparison. If it is the intent of the board that this piece of equipment be transferred to another agency or office permanently than you should take such action in your minutes to accomplish the transaction.

I trust the above explanation will suffice as to why the item is shown in the budget as it is but should further information be desired, please contact this office.

Yours very truly,
Crimond, Farmer & Co.
/s/ Richard P. Crimond

RPC/lk

To the Representatives
Arkansas River Compact Administration
Lamar, Colorado 81052

We have examined the Statement of Assets & Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of June 30, 1984, and the Statement of Cash Receipts and Disbursements, Changes in Cash Balance and the Statement of Cash Receipts and Disbursements with Budget Comparison for the year ended June 30, 1984. Our examination was conducted in accordance with generally accepted auditing standards, and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As described in Note 1 of the Notes to Financial Statements, the accompanying statements are prepared on the cash basis of accounting and accordingly they are not intended to be presented in conformity with generally accepted accounting principles.

In our opinion, the financial statement presents fairly the Assets and Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of June 30, 1984, and the results of Cash Transactions for the year then ended on a basis consistent with the previous year.

/s/ Crimond, Farmer & Co.
Certified Public Accountants

August 22, 1984
Lamar, Colorado

ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF ASSETS AND LIABILITIES
ARISING FROM CASH TRANSACTIONS
June 30, 1984

ASSETS:	
Cash & Savings	$45,232
Excess FICA Receivable	42
Equipment	15,893
Concrete Control	8,000
TOTAL ASSETS	$69,167
LIABILITIES:	0
CASH BASIS EQUITY:	
Expended:	
Equipment	15,893
Concrete	8,000
Unexpended	45,274
TOTAL CASH BASIS EQUITY—NOTE 1a	69,167
TOTAL LIABILITIES & CASH BASIS EQUITY	$69,167

The accompanying notes are an integral part of the financial statements.

ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
AND CHANGES IN CASH BALANCE
FOR YEAR ENDED JUNE 30, 1984

CASH BALANCE, JULY 1, 1983		$36,354
RECEIPTS:		
Revenue from Assessments:		
Colorado	$17,455	
Kansas	11,636	
Interest	4,462	
TOTAL RECEIPTS		33,553
DISBURSEMENTS:		
Insurance	100	
Geological Survey	11,995	
Equipment	6,309	
Professional	300	
Office Supplies	363	
Printing		
Secretary's Salary	3,600	
Payroll Taxes	288	
Telephone	1,536	
Typing, Mailing & Miscellaneous	184	
Travel & Meetings	0	
TOTAL DISBURSEMENTS		24,675
EXCESS OF RECEIPTS OVER DISBURSEMENTS		8,878
CASH BALANCE, JUNE 30, 1984		$45,232

The accompanying notes are an integral part of the financial statements.

ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS WITH BUDGET COMPARISON FOR THE BUDGET YEAR JULY 1, 1983 TO JUNE 30, 1984

	BUDGET	ACTUAL	OVER/ UNDER
CASH BALANCE, JULY 1, 1983	$ 0	$36,354	$36,354
RECEIPTS:			
Revenues from Assessments:			
Colorado—60%	17,455	17,455	0
Kansas—40%	11,636	11,636	0
Interest	0	4,462	4,462
TOTAL RECEIPTS	29,091	33,553	4,462
TOTAL TO ACCOUNT FOR	29,091	69,907	40,816
DISBURSEMENTS:			
U.S. Geological Survey	12,500	11,995	(505)
Secretary's Salary	3,600	3,600	0
Operations Secretary	6,100	0	(6,100)
Bond & Insurance	100	100	0
Telephone	1,500	1,536	36
Payroll Taxes	241	288	47
Typing & Mailing	1,500	184	(1,316)
Travel & Meeting	250	0	(250)
Professional Fees	300	300	0
Office Supplies	500	363	(137)
Printing	500	0	(500)
Equipment	0	6,309	6,309
Contingency	2,000	0	(2,000)
TOTAL DISBURSEMENTS	29,091	24,675	(4,416)
CASH BALANCE, JUNE 30, 1984	$ 0	$45,232	$45,232

The accompanying notes are an integral part of the financial statements.

ARKANSAS RIVER COMPACT ADMINISTRATION
NOTES TO CASH BASIS STATEMENTS
JUNE 30, 1984

Note 1 — Summary of significant accounting policies:

a. The Administration maintains financial records using the cash basis of accounting. By using the cash basis of accounting, certain key accounts needed to present financial position and results of operations are omitted; examples of these accounts are accounts receivable and accounts payable.

APPENDIX "B-1"

ARKANSAS RIVER ABOVE PUEBLO, COLORADO

Report-Year ending October 31, 1984
CDWR Records
USGS Gaging Station No. 07099400

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	352	80	81	84	82	430	2130	4390	4100	1970	2190	610
2	396	80	81	84	82	420	2900	4570	4440	2090	1640	615
3	420	80	81	84	82	388	4960	4620	4330	2320	1450	600
4	344	80	81	84	82	340	4960	4480	3990	1780	1300	824
5	380	83	81	140	82	332	2230	3920	3500	2760	1210	1580
6	372	86	81	140	82	336	742	3280	2350	1570	1420	1520
7	364	80	81	84	82	440	542	2830	2400	1970	1580	955
8	344	80	81	84	82	864	316	2730	2310	2200	1410	1040
9	328	80	82	83	82	1850	419	2500	2490	2270	1180	1130
10	340	80	82	82	82	1420	712	2200	2920	2270	1110	1000
11	356	80	82	82	82	455	748	2340	3750	2020	1020	943
12	356	80	83	82	82	3970	802	3080	3400	1800	838	883
13	356	80	83	82	82	2800	1030	3610	2700	1490	718	829
14	333	80	84	82	191	560	1040	1940	2380	1650	844	763
15	80	80	84	82	340	550	1110	2590	2270	2050	868	734
16	80	81	83	83	372	560	1570	3720	2380	2320	874	829
17	80	81	83	83	348	600	2320	4060	2180	2530	916	1260
18	80	82	83	83	364	904	2120	4200	2080	2860	910	1470
19	80	82	83	83	384	886	2240	3820	1820	3560	880	1550
20	80	82	82	83	400	700	2030	3580	1550	5180	782	1790
21	80	82	82	83	388	537	1970	3540	2140	3770	742	1480
22	80	82	82	83	404	465	2240	3720	2470	2070	844	1340
23	80	81	82	83	450	538	3090	4030	2310	3400	874	1250
24	80	81	82	83	460	694	3700	4060	1960	4440	844	1100
25	80	81	82	83	450	706	5040	3990	2070	4790	808	1040
26	80	81	83	83	475	748	5200	4250	2170	4600	790	992
27	80	81	83	83	515	814	5220	4330	1510	2910	742	1060
28	80	81	83	83	510	655	5210	4230	1810	3040	640	1180
29	80	81	83	82	440	718	4470	4060	2080	3080	530	1230
30	80	81	84		430	1140	4230	3960	1990	2940	560	1260
31		81	84		450		4180		2560	2510		1270
TOTAL sec. ft.	6321	2510	2552	2520	8437	25820	79471	108850	80410	84210	30514	34147
ac. ft.	12540	4980	5060	5000	16730	51210	157600	215900	159500	167000	60520	67730

THE YEAR 923,770 acre-feet

APPENDIX "B-2"

ARKANSAS RIVER AT LAS ANIMAS, COLORADO

Report-Year ending October 31, 1984
CDWR Records
USGS Gaging Station No. 0712400

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	210	284	250	310	153	127	192	2240	1660	226		
2	84	301	200	314	156	109	192	2290	1490	346	938	382
3	65	336	200	222	146	109	359	2960	2100	278	823	293
4	62	379	250	170	142	106	1420	3340	2650	398	547	339
5	59	362	250	154	130	103	1600	2780	2050	453	384	449
6	55	283	250	144	128	109	1250	2560	1520	179	329	436
7	52	343	250	188	191	109	372	1720	1300	492	317	1050
8	52	378	250	252	268	97	305	1140	883	261	232	1030
9	52	350	240	259	451	112	234	980	546	157	189	1050
10	54	326	240	170	469	112	195	1120	302	185	204	619
11	52	298	228	151	501	114	173	784	236	221	319	537
12	47	293	216	148	510	102	140	359	491	295	197	859
13	44	277	178	148	462	289	161	269	1440	180	151	683
14	46	212	137	196	444	965	528	759	752	107	165	444
15	101	197	100	348	298	265	346	837	573	82	175	572
16	111	193	100	360	153	222	277	365	566	74	329	933
17	99	192	140	361	103	312	201	529	758	86	334	1520
18	93	168	100	360	97	222	558	1820	552	73	318	1170
19	87	150	100	360	100	192	896	2080	352	213	317	1230
20	85	150	120	380	97	190	861	1520	245	1050	373	1790
21	81	190	150	398	103	539	462	1250	173	1620	399	1760
22	78	150	200	372	106	432	409	1160	127	3090	368	1700
23	75	90	180	325	109	375	344	1200	211	5350	394	1860
24	75	90	180	277	109	252	378	1220	284	4020	373	1570
25	75	90	200	186	112	170	590	1300	131	2590	351	1480
26	73	90	250	177	115	148	1590	1380	88	2710	387	1510
27	99	150	230	170	124	148	1900	1290	88	2760	448	1500
28	104	150	230	165	112	158	2680	1430	799	1790	480	1550
29	176	120	250	154	115	162	2740	1390	223	1090	390	1490
30	276	120	250		106	178	2180	1290	126	1150	491	1590
31		200	250		115		2040		189	1050	471	1440
TOTAL												1170
sec. ft.	2622	6912	6169	7219	6225	6528	25573	43362	22905	32576	11183	34006
ac. ft.	5200	13710	12240	14320	12350	12950	50720	86010	45430	64610	22180	67450

THE YEAR 407,170 acre-feet

APPENDIX "B-3"

PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

Report-Year ending October 31, 1984
CDWR Records
USGS Gaging Station No. 07128500

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	35	20	36	43	47	132	150	19	9.9	6.5	9.5	41
2	33	30	31	45	45	129	165	20	9.8	6.2	9.6	67
3	32	35	30	45	44	120	166	30	12	65	7.7	75
4	30	35	67	45	44	126	164	21	18	96	7.9	66
5	18	40	52	50	44	115	142	24	17	26	6.6	56
6	18	32	59	55	45	103	158	74	11	15	5.7	102
7	20	35	65	60	45	93	295	69	8.9	11	5.8	95
8	22	40	70	56	44	137	281	45	7.7	8.6	6.6	82
9	28	45	66	53	43	308	223	34	5.7	7.3	5.7	72
10	32	50	64	55	41	427	169	41	5.2	14	4.9	97
11	30	55	69	52	40	343	132	59	4.6	20	4.7	113
12	31	54	72	53	41	381	120	47	3.9	35	4.7	76
13	26	45	77	51	42	338	146	27	4.6	21	4.3	58
14	24	47	72	48	41	306	192	19	7.7	29	3.9	69
15	23	45	55	43	40	236	154	127	19	45	13	70
16	23	39	35	39	39	203	127	176	22	16	9.2	66
17	19	40	32	46	39	185	122	87	107	14	5.7	83
18	19	29	39	42	41	147	141	124	19	7.0	4.2	83
19	19	25	29	35	52	149	166	76	8.5	4.2	4.1	76
20	22	25	24	40	84	179	136	31	7.4	3.9	24	74
21	34	30	27	45	74	298	118	90	5.8	3.5	23	65
22	35	25	23	55	74	310	94	60	4.3	1180	17	51
23	36	20	24	57	84	225	82	33	6.2	971	7.9	48
24	39	20	40	48	113	179	69	23	5.7	669	10	61
25	45	20	37	51	123	150	52	17	4.2	159	7.8	56
26	50	20	36	57	104	167	53	22	3.0	102	12	55
27	36	22	36	55	116	241	41	17	4.0	39	16	48
28	24	25	34	49	149	248	37	18	9.3	31	11	44
29	19	22	27	48	168	190	22	12	12	25	15	55
30	20	25	32		139	161	17	10	4.6	13	21	61
31		32	36		129		22		4.4	12		48
TOTAL												
sec. ft.	842	1027	1386	1421	2174	6326	3956	1452	372.4	3655.2	288.5	2113
ac. ft.	1670	2040	2750	2820	4310	12550	7850	2880	739	7250	572	4190

THE YEAR 49,621 acre-feet

APPENDIX "B-4"

RIVER FLOW INTO JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1984
USGS Records

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	245	304	286	353	200	259	342	2259	1669.9	232.5	947.5	423
2	117	331	231	359	201	238	357	2310	1499.8	352.2	832.6	360
3	97	371	230	267	190	229	525	2990	2112	343	554.7	414
4	92	414	307	215	186	232	1584	3361	2668	494	391.9	515
5	77	402	302	204	174	218	1742	2804	2067	479	335.6	492
6	73	315	309	199	173	212	1408	2634	1531	194	322.7	1152
7	72	378	315	248	236	202	667	1789	1308.9	503	237.8	1125
8	74	418	320	308	312	234	586	1185	890.7	269.6	195.6	1137
9	80	395	306	312	494	420	457	1014	551.7	164.3	209.7	691
10	86	376	304	225	510	539	364	1161	307.2	199	323.9	634
11	82	353	297	203	541	457	305	843	240.6	241	201.7	972
12	78	347	288	201	551	483	260	406	494.9	330	155.7	759
13	70	322	255	199	504	627	307	296	1444.6	201	169.3	502
14	70	259	209	244	485	1271	720	778	759.7	136	178.9	641
15	124	242	155	391	338	501	500	964	592	127	342	1003
16	134	232	135	399	192	425	404	541	588	90	343.2	1586
17	118	232	172	407	142	497	323	616	865	100	323.7	1253
18	112	197	139	402	138	369	699	1944	571	80	321.2	1313
19	106	175	129	395	152	341	1062	2156	360.5	217.2	377.1	1866
20	107	175	144	420	181	369	997	1551	252.4	1053.9	423	1834
21	115	220	177	443	177	837	580	1340	178.8	1623.5	391	1765
22	113	175	223	427	180	742	503	1220	131.3	4270	401	1911
23	111	110	204	382	193	600	426	1233	217.2	6321	380.9	1618
24	114	110	220	325	222	431	447	1243	289.7	4689	361	1541
25	120	110	237	237	235	320	642	1317	135.2	2749	394.8	1566
26	123	110	286	234	219	315	1643	1402	91	2812	460	1555
27	135	172	266	225	240	389	1941	1307	92	2799	496	1598
28	128	175	264	214	261	406	2717	1448	808.3	1821	401	1534
29	195	142	277	202	283	352	2762	1402	235	1115	506	1645
30	296	145	282		245	339	2197	1300	130.6	1163	492	1501
31		232	286		244		2062		193.4	1062		1218
TOTAL												
sec. ft.	3464	7939	7555	8640	8399	12854	29529	44814	23277.4	36231.2	11471.5	36119
ac. ft.	6871	15747	14985	17137	16659	25496	58571	88889	46171	71865	22754	71642

THE YEAR 456,787 acre-feet

The Riverflow into JMR is the sum of the daily flows of the Arkansas River near Las Animas (Appendix B-2) and the Purgatoire River near Las Animas (Appendix B-3)

APPENDIX "B-5"
CONTENTS OF
JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1964
Corps of Engineers Records
[Midnight contents in acre-feet from capacity table based on April/June 1960 hyrographic surveys and November 1960 aerial photographs used since August 12, 1961]

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	67749	75662	89799	105375	122807	142746	162979	194200	199782	183553	185808	144404
2	68209	76083	90187	106129	124051	143675	163417	196864	200026	182633	185109	144338
3	68534	76790	90624	106614	124538	143873	163490	199782	201246	182024	184253	144205
4	68543	77750	90964	107367	124903	144139	165900	203361	203768	181492	183186	144536
5	68835	78578	91449	107798	125025	144536	169134	206778	206371	181187	182785	145200
6	69044	79058	91934	108229	125330	145200	171524	210034	207940	180578	180350	146061
7	69253	79799	92613	108875	125817	145465	172197	211123	208610	180046	178525	147064
8	69503	80367	93147	109360	126304	145730	172645	210704	209364	179742	177079	148924
9	69712	81133	93778	110067	127096	146592	172869	209950	209280	178220	175558	149662
10	69921	81583	94380	110575	128023	147546	172869	209029	208610	177003	174064	150714
11	70069	82078	95258	111138	129068	148580	172845	208191	206127	175259	172645	151886
12	70256	82934	95757	111475	130215	149406	172496	206534	204093	173616	170777	153677
13	70465	83519	96356	111926	131155	150301	172794	204968	203361	171749	168910	154671
14	70715	84059	96755	112433	132156	152575	173018	203686	202223	169906	167267	156236
15	70882	84465	96905	112997	132845	153539	173018	202955	201816	168163	165462	158371
16	71174	84780	97204	113561	133472	154529	172869	201490	201165	165681	164147	161154
17	71383	85199	97603	115138	133722	155240	172944	199701	201735	163782	162687	163636
18	71805	85340	97853	115420	135266	156165	172570	200026	201735	161592	161300	165097
19	71976	85621	98352	116418	135653	156379	173616	201003	201735	159439	159794	168387
20	72148	85949	98851	117244	136104	157660	174438	201490	200352	158229	158229	171599
21	72362	86183	99100	118070	136555	159063	174737	201653	198492	158514	156663	174737
22	72533	86511	99402	118885	137328	160435	174587	201084	198664	161811	155240	178525
23	72748	86688	99866	119721	137906	161300	174064	200596	194677	166922	153195	181340
24	72962	87072	100383	120429	138294	162030	173616	200108	193246	174811	151610	184409
25	73262	87447	100951	121078	139197	162541	173243	200108	191339	177688	149888	187320
26	73604	87775	101364	122041	139454	162541	174512	199863	189309	180807	148373	190476
27	73819	88056	101932	122406	139969	162468	177155	199619	187209	183090	147270	193326
28	73862	88571	102551	122833	140625	162887	180578	199375	186121	185809	146459	196108
29	74119	88899	103171	123320	140956	162906	184798	199457	185809	186121	145730	198050
30	74548	89180	103791		141619	163052	188920	199457	185109	186121	144735	201165
31		89414	104514		142017		191577		184098	185965		204907

NOTE — Difference between published U.S. Geological Survey and Compact report figures is due to rounding procedures. Figures in this table are rounded to the nearest acre-foot only.

APPENDIX "B-5a"

CONTENTS OF JOHN MARTIN RESERVOIR CONSERVATION POOL

Contents of John Martin Reservoir Conservation Pool (contents at 2400 hours)
Report-Year ending October 31, 1984
Source: Operations Secretary, Arkansas River Compact Administration
(rounded to the nearest acre-foot)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	DAY
1	358	6980	11746	18564	25468	39417	7909	16819	21429	0	17554	0	1
2	870	6879	11885	18942	25518	40402	7010	18599	21333	0	16006	0	2
3	1033	7062	12087	19045	25810	40650	5746	21046	22155	0	14665	0	3
4	1270	7539	12186	19405	25986	40954	6835	23754	24265	0	13399	0	4
5	1593	7820	12422	19536	26035	41393	8744	26064	25943	0	12621	0	5
6	1833	7916	12633	19704	26175	42103	9861	28696	6892	0	11213	0	6
7	2046	8273	13057	20108	26526	40766	9269	30123	6196	0	9630	0	7
8	2313	8407	13258	20333	26750	38627	8495	30134	5095	0	8360	529	8
9	2532	8763	13494	20819	27195	37061	7567	29729	3262	0	7041	0	9
10	2759	8798	13610	21085	27484	35568	6511	29170	2242	0	5528	0	10
11	2946	8870	14119	21396	27862	34209	5168	28733	398	0	4060	0	11
12	3132	9323	14300	21509	28250	32626	3970	27273	9668	0	2312	0	12
13	3361	9514	14563	21741	28389	31142	3140	25756	2460	0	518	0	13
14	3658	9671	14684	22034	28730	31049	2454	24808	757	0	0	0	14
15	3844	9752	14736	22197	28795	29618	1741	24487	377	0	0	0	15
16	4056	9871	14796	22310	29366	28192	789	23524	0	0	0	0	16
17	4188	9922	14959	22669	29677	26162	74	22138	0	0	0	0	17
18	4532	9978	14983	22779	31282	24316	0	22621	0	0	0	0	18
19	4632	10066	15276	23064	31728	22190	456	23605	0	0	0	180	19
20	4737	10225	15385	23135	32239	20700	578	24094	0	0	0	254	20
21	4886	10296	15639	23257	32750	19654	217	24277	0	624	0	95	21
22	4963	10416	15728	23403	33583	18808	0	23661	0	4000	0	262	22
23	5145	10484	15993	23587	34222	17462	0	23119	0	8810	0	0	23
24	5301	10650	16261	23728	34668	16219	0	22618	0	16697	0	0	24
25	5546	10846	16551	23936	35630	15305	0	22581	0	18637	0	0	25
26	5832	11019	16684	24622	35946	13967	810	22302	0	20464	0	0	26
27	5983	11138	16911	24730	36520	12652	2935	22014	0	21183	0	0	27
28	6066	11393	17185	24916	37235	11569	5760	21700	0	22355	0	0	28
29	6245	11483	17447	25175	37624	10479	9416	21631	0	21145	0	0	29
30	6395	11549	17705		38290	9332	13013	21411	0	19755	0	30	30
31		11586	18070		38688		14937		0	18640		0	31

APPENDIX "B-6"

OUTFLOW FROM JOHN MARTIN RESERVOIR

ARKANSAS RIVER BELOW JOHM MARTIN RESERVOIR

Report-Year ending October 31, 1984
USGS Records
USGS Gaging Station No. 07130500

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	179	4.0	2.0	2.4	1.5	2.5	304	598	1020	561	1070	638
2	26	4.0	2.3	2.2	1.7	2.6	301	596	991	577	1070	434
3	5.1	4.0	2.5	2.2	2.0	2.3	297	597	972	589	1070	416
4	5.8	3.6	2.3	2.2	2.0	2.1	299	598	964	579	1040	385
5	5.3	2.6	2.1	2.2	1.9	2.0	305	596	692	563	1020	390
6	4.8	1.6	2.0	2.2	1.7	1.8	305	828	536	573	997	394
7	4.8	1.6	2.0	2.2	1.7	1.7	318	1310	551	577	998	394
8	4.8	1.6	2.0	2.2	1.6	2.1	345	1330	551	577	1010	394
9	4.4	1.6	2.0	2.3	1.5	3.1	355	1320	520	733	1010	373
10	4.4	1.6	2.0	2.2	1.4	3.2	366	1320	943	958	1000	130
11	4.8	1.6	2.0	2.1	1.6	3.0	372	1310	1240	1020	1010	4.8
12	4.8	1.6	2.0	2.2	1.4	2.8	369	1270	1330	1080	1010	4.4
13	4.4	1.6	2.0	2.2	1.4	2.8	370	1140	1300	1110	1010	4.4
14	4.4	1.6	2.0	2.3	1.7	3.1	465	1300	1250	1080	1010	4.4
15	4.4	1.6	2.0	1.9	2.0	3.0	526	1370	1240	1080	1010	117
16	4.8	1.6	2.0	2.2	1.8	3.0	541	1400	791	1120	1020	153
17	4.8	1.4	2.0	2.3	1.9	3.2	613	1380	365	1140	1010	107
18	4.8	1.4	2.0	2.4	3.0	3.2	646	1270	476	1120	1030	97
19	4.4	1.4	2.2	2.2	2.1	28	643	1180	498	1060	1040	76
20	4.4	1.4	2.2	2.0	2.0	42	639	1180	815	1060	1040	63
21	4.4	1.4	2.2	1.7	2.2	32	616	1180	1020	1040	1050	63
22	4.4	1.4	2.2	1.6	2.4	32	599	1170	1020	1010	1040	61
23	4.0	1.4	2.2	1.5	2.3	33	653	1160	1040	1040	1040	28
24	4.0	1.4	2.4	1.7	2.2	28	676	1160	1050	1040	1030	3.6
25	4.4	1.4	2.5	1.5	2.2	160	693	1170	1050	1050	1020	3.2
26	4.4	1.4	2.5	1.5	2.2	262	664	1180	1040	1050	997	3.6
27	4.0	1.6	2.5	1.4	2.2	292	664	1180	1040	1020	962	2.8
28	4.4	2.0	2.5	1.4	2.2	314	652	1140	880	1010	887	2.2
29	4.0	2.0	2.5	1.4	2.2	318	682	1090	604	1020	851	2.6
30	4.0	2.0	2.5		2.2	314	719	1020	577	1040	850	3.2
31		2.0	2.5		2.5		649		561	1060		4.4
TOTAL sec. ft.	332.4	59.4	68.1	57.8	60.7	1902.5	15646	33343	26927	28557	30202	4756.6
ac. ft.	659	118	135	115	120	3770	31030	66140	53410	56640	59910	9430

THE YEAR 281,477 acre-feet

APPENDIX "B-7"
ARKANSAS RIVER AT LAMAR, COLORADO

Report-Year ending October 31, 1984
USGS Records
USGS Gaging Station No. 07133000

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	15	48	30	34	25	33	6.3	83	537	35	540	455
2	15	46	30	33	25	38	5.8	68	516	30	540	193
3	12	45	42	29	26	40	6.1	64	498	24	540	160
4	10	45	33	26	25	34	6.5	69	350	34	520	140
5	10	45	32	26	25	33	6.4	72	160	28	500	120
6	10	47	31	26	24	15	6.4	74	115	36	500	100
7	10	37	29	25	23	5.2	6.4	568	95	59	500	100
8	9.5	34	29	26	23	5.2	6.4	689	80	47	500	110
9	9.5	36	27	27	24	14	21	675	70	53	520	110
10	9.5	37	27	26	22	33	25	686	400	339	540	80
11	9.5	38	28	26	22	35	8.2	679	650	493	542	80
12	9.5	36	27	26	21	21	7.7	667	720	546	543	70
13	9.5	34	26	26	15	5.7	7.8	672	728	597	536	60
14	9.5	33	25	27	5.5	5.2	7.5	679	650	595	535	50
15	9.0	34	25	26	5.5	5.2	14	774	664	590	520	50
16	9.0	42	25	26	5.5	5.2	12	821	1090	655	521	60
17	9.0	29	25	26	5.5	5.2	18	836	242	611	515	94
18	15	25	20	27	5.5	5.2	86	828	130	597	506	77
19	20	25	20	29	20	5.2	87	685	109	550	516	65
20	20	25	25	29	33	6.1	88	673	135	542	529	63
21	20	30	28	29	37	5.8	95	670	471	500	515	61
22	20	25	30	29	38	5.2	89	671	510	500	532	56
23	25	20	30	33	38	5.2	78	636	504	520	542	58
24	30	20	30	29	36	5.2	68	638	475	520	539	84
25	40	20	30	27	35	5.2	61	629	485	530	519	79
26	45	25	32	28	35	5.2	66	638	496	530	511	73
27	45	27	32	27	33	5.2	55	630	483	510	496	64
28	40	25	35	25	32	5.8	52	611	478	490	491	63
29	45	25	36	25	31	32	49	562	118	470	469	35
30	45	25	35		29	29	41	514	83	490	468	30
31		25	35		32		77		57	500		25
TOTAL												
sec. ft.	585.5	1008	909	798	756.5	453.2	1163.5	16561	12099	12021	15545	2865
ac. ft.	1160	2000	1800	1580	1500	899	2310	32850	24000	23840	30830	5680

THE YEAR 128,449 acre-feet

APPENDIX "B-8"

ARKANSAS RIVER NEAR GRANADA, COLORADO

Report-Year ending October 31, 1984
USGS Records
USGS Gaging Station No. 07134180

DAY	NOV.	DEC.	JAN.	FEB	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	60	125	153	124	107	129	51	12	450	160	401	460
2	57	128	141	118	106	139	38	11	469	140	431	382
3	61	135	130	113	108	149	36	9.7	443	127	436	361
4	56	137	129	102	106	147	32	8.6	458	110	422	227
5	57	139	130	99	105	136	30	8.6	455	107	421	207
6	55	134	125	103	104	127	29	9.1	317	89	404	177
7	54	138	120	104	106	108	26	144	199	90	391	166
8	52	136	120	103	105	109	23	472	171	84	390	161
9	50	136	118	105	102	104	24	538	153	79	390	177
10	48	138	116	106	97	139	29	567	123	145	394	171
11	47	135	119	98	96	163	28	571	321	283	410	145
12	45	136	114	92	97	159	25	523	574	353	431	148
13	43	132	108	95	95	141	24	500	664	416	426	138
14	42	132	105	103	92	137	22	445	631	453	425	132
15	39	125	100	105	83	126	21	450	631	452	437	132
16	40	121	90	94	78	127	21	500	1130	467	434	142
17	39	118	90	100	76	120	17	650	833	490	430	149
18	45	102	80	101	80	106	26	700	347	484	413	162
19	51	95	77	94	82	96	38	700	265	463	424	145
20	53	95	77	96	108	95	17	552	225	450	435	142
21	53	100	77	104	125	105	18	546	336	437	442	141
22	54	90	114	108	121	136	20	540	444	385	443	136
23	62	90	118	115	126	129	18	526	453	392	458	133
24	67	90	115	112	130	106	17	519	427	420	470	145
25	73	90	125	111	131	93	15	526	431	430	463	162
26	75	95	124	108	137	111	15	538	430	430	463	156
27	115	100	121	106	132	96	14	537	438	434	469	145
28	131	98	118	100	125	46	12	543	443	417	451	135
29	115	98	120	103	122	71	11	511	338	397	456	130
30	124	129	121		122	79	9.7	472	221	373	438	123
31		135	123		128		9.0		187	390		132
TOTAL												
sec. ft.	1863	3652	3518	3022	3332	3529	714.7	12629	13007	9947	12898	5362
ac. ft.	3700	7240	6980	5990	6610	7000	1420	25050	25800	19730	25580	10640

THE YEAR 145,740 acre-feet

APPENDIX "B-9"

ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

ear ending October 31, 1984
USGS Records

DAY	NOV.	DEC	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	DAY
1	151	158	118	168	132	159	209	114	465	311	498	627	1
2	143	164	160	166	132	180	196	103	472	287	512	622	2
3	139	168	215	150	132	187	152	109	452	261	546	487	3
4	130	169	260	147	133	183	126	103	446	242	547	423.4	4
5	127	169	220	142	130	187	123	100	452	221	525	400.17	5
6	137	166	184	139	126	181	121	94	425	207	502	358.4	6
7	128	163	175	142	125	169	132	104	301	199	471	337	7
8	123	165	170	139	124	157	129	264	249	200	448	331	8
9	121	163	164	140	128	158	118	443	225	176	456	379	9
10	121	163	159	144	126	265	105	493	205	173	467	361.03	10
11	126	162	160	146	126	210	105	523	213	240	460	348	11
12	115	167	154	136	127	191	102	534	412	337	481.3	312	12
13	112	167	145	133	130.8	181	97	525	527	421	477	268	13
14	110	163	141	132	153	175	143	494	586	501	476	258	14
15	106	159	137	141	126	172	112	506	597	520	496	271	15
16	103	156	120	134	118	163	93	569	2182	532	505	340	16
17	106	154	105	134	114	162	91	618	2654	574	522	349	17
18	110	147	94	139	114	159	100	641.5	813.28	576	495	343	18
19	115	122	85	123	122	150	108	649	527	574	484	305	19
20	124	120	80	124	139	146	127	555	454	574	494	290	20
21	130	115	90	131	148	163	136	550	434	581	519	293	21
22	129	110	100	140	152	193	127	537	548	548	525	274	22
23	131	110	115	142	150	202	112	533	583	510	530	281	23
24	131	105	130	141	153	180	105	512	561	539	537	290.42	24
25	135	110	145	142	160	151	104	519	553	544	550	369.6	25
26	136	115	160	138	198	139	114	528	541	556	588	304.19	26
27	124	110	178	130	171	146	117	528	528	559	616	289	27
28	117	100	210	127	161	153	105	540	536	543	610	262	28
29	132	95	190	127	159	195	101	516	528	511	622	253	29
30	144	90	176	--	155	198	105	497	394	483	617.7	246	30
31	--	95	169	--	159	--	115	--	340	485	--	241	
TOTAL													
sec. ft.	3756	4320	4709	4037	4323.8	5255	3731	12791.5	17603.28	12985	15577	10513.21	
ac. ft.	7450	8570	9340	8010	8580	10420	7400	25370	34920	25760	30900	20850	

THE YEAR 197,570 acre feet

The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas, U.S.G.S. Gaging Station No. 07137500 and the Frontier Ditch, U.S.G.S. Gaging Station No. 0713700.

APPENDIX "B-10"

TRANSFER OF COMPACT WATER FROM THE JOHN MARTIN RESERVOIR CONSERVATION POOL INTO AGREEMENT ACCOUNTS

Transfer of Compact Water from the John Martin Reservoir Conservation Pool Into Agreement Accounts 1/
Report-Year ending October 31, 1984
Source: Operations Secretary, Arkansas River Compact Administration
(acre-feet)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	DAY
1	0	0	0	0	0	0	1983.50	1983.50	2479.38	0	1983.50	0	1
2	0	0	0	0	0	0	1983.50	1983.50	2479.38	0	1983.50	0	2
3	0	0	0	0	0	0	1983.50	1983.50	2479.38	0	1983.50	0	3
4	0	0	0	0	0	0	1983.50	2195.48	2479.38	0	1983.50	0	4
5	0	0	0	0	0	0	1983.50	2479.38	2479.38	0	1983.50	0	5
6	0	0	0	0	0	0	1983.50	2479.38	21913.25	0	1983.50	0	6
7	0	0	0	0	0	1652.92	1983.50	2479.38	1983.50	0	1983.50	826.46	7
8	0	0	0	0	0	2479.38	1983.50	2479.38	1983.50	0	1983.50	904.30	8
9	0	0	0	0	0	2479.38	1983.50	2479.38	1983.50	0	1983.50	622.50	9
10	0	0	0	0	0	2479.38	1983.50	2479.38	1983.50	0	1983.50	626.52	10
11	0	0	0	0	0	2479.38	1983.50	2479.38	1963.50	0	1983.50	626.40	11
12	0	0	0	0	0	2479.38	1983.50	2479.38	1983.50	0	1983.50	626.40	12
13	0	0	0	0	0	2479.38	1983.50	2479.38	1963.50	0	1983.50	690.26	13
14	0	0	0	0	0	2479.38	1983.50	2479.38	1983.50	0	626.97	1071.21	14
15	0	0	0	0	0	2479.38	1983.50	2479.38	1963.50	0	0	1744.99	15
16	0	0	0	0	0	2479.38	1983.50	2479.38	906.84	0	0	1804.66	16
17	0	0	0	0	0	2479.38	1983.50	2479.38	0	0	0	1491.48	17
18	0	0	0	0	0	2479.38	165.22	2479.38	0	0	0	383.00	18
19	0	0	0	0	0	2479.38	1983.50	2479.38	0	0	0	1983.50	19
20	0	0	0	0	0	2479.38	1983.50	2479.38	0	0	0	1983.50	20
21	0	0	0	0	0	2259.33	1983.50	2479.38	0	1983.50	0	1983.50	21
22	0	0	0	0	0	1983.50	500.03	2479.38	0	1983.50	0	1983.50	22
23	0	0	0	0	0	1983.50	0	2479.38	0	1983.50	0	1380.43	23
24	0	0	0	0	0	1983.50	0	2479.38	0	1983.50	0	1313.97	24
25	0	0	0	0	0	1983.50	0	2479.38	0	1983.50	0	1390.97	25
26	0	0	0	0	0	1983.50	1983.50	2479.38	0	2129.46	0	1705.00	26
27	0	0	0	0	0	1983.50	1983.50	2479.38	0	2479.38	0	1657.57	27
28	0	0	0	0	0	1983.50	1983.50	2479.38	0	2479.38	0	1586.63	28
29	0	0	0		0	1983.50	1983.50	2479.38	0	2479.38	0	1719.62	29
30	0	0	0		0	1983.50	1983.50	2479.38	0	2359.59	0	1983.50	30
31		0	0		0		1983.50		0	1983.50		1726.97	31
TOTAL	0	0	0	0	0	53995.69	52236.25	72809.86	52968.47	23828.19	26412.47	33192.44	

THE YEAR 315,243.37 acre-feet

1/All conservation pool water apportioned as follows into Colorado and Kansas Accounts:
40% to Kansas and 60% to Colorado, as described in the 1980 Colorado-Kansas Storage Resolution, and 35% of all "other water" delivered to John Martin Reservoir to the Kansas transit loss account.

APPENDIX "B-11"

DEMANDS BY COLORADO FOR AGREEMENT ACCOUNT WATER IN JOHN MARTIN RESERVOIR

Demands by Colorado for Agreement Account Water in John Martin Reservoir
Report-Year ending October 31, 1984
Source: Operations Secretary, Arkansas River Compact Administration
(acre-feet)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	DAY
1	26.26	0	0	0	0	0	569.97	1151.04	1228.76	928.28	1150.22	0	1
2	26.26	0	0	0	0	0	566.21	1172.13	1179.09	930.16	1150.22	0	2
3	9.85	0	0	0	0	0	566.21	1172.13	1124.42	637.06	1152.23	0	3
4	0	0	0	0	0	0	592.57	1184.53	1109.49	626.88	1115.16	0	4
5	0	0	0	0	0	0	608.38	1182.03	1053.76	626.88	1092.16	0	5
6	0	0	0	0	0	0	608.38	1156.22	1071.65	578.90	1079.52	0	6
7	0	0	0	0	0	0	648.03	1246.20	1102.41	399.10	1038.42	0	7
8	0	0	0	0	0	0	696.61	1331.94	1102.41	123.12	1031.82	285.38	8
9	0	0	0	0	0	0	699.09	1349.07	1037.77	123.12	1031.82	694.90	9
10	0	0	0	0	0	0	722.83	1375.77	1060.92	117.51	1031.82	256.84	10
11	0	0	0	0	0	0	734.60	1441.04	1266.26	134.64	1005.82	0	11
12	0	0	0	0	0	0	730.46	1468.03	1303.69	222.89	955.38	0	12
13	0	0	0	0	0	0	730.46	1261.64	1263.37	228.05	934.48	0	13
14	0	0	0	0	0	0	915.16	1466.51	1402.73	288.05	712.99	0	14
15	0	0	0	0	0	0	1025.99	1447.85	1402.73	237.43	599.17	228.12	15
16	0	0	0	0	0	0	1046.99	1436.65	1080.70	378.72	547.49	284.79	16
17	0	0	0	0	0	0	1150.29	1436.65	0	222.71	385.06	204.58	17
18	0	0	0	0	0	0	423.59	1399.03	477.97	222.71	235.85	171.74	18
19	0	0	0	0	0	27.41	1192.12	1345.62	429.47	222.71	321.91	124.58	19
20	0	0	0	0	0	43.86	1192.12	1331.56	711.44	222.71	315.42	101.36	20
21	0	0	0	0	0	43.86	1166.75	1321.84	737.48	1350.50	307.75	101.36	21
22	0	0	0	0	0	43.86	532.22	1308.65	551.11	1199.22	307.75	101.36	22
23	0	0	0	0	0	43.86	433.93	1301.19	820.50	1108.46	307.75	38.01	23
24	0	0	0	0	0	43.86	214.93	1301.19	755.89	1069.81	307.75	0	24
25	0	0	0	0	0	365.66	46.06	1301.19	892.62	1078.63	468.79	0	25
26	0	0	0	0	0	558.74	1286.02	1288.51	892.62	1078.63	468.79	0	26
27	0	0	0	0	0	607.00	1299.47	1293.59	892.88	1051.98	0	0	27
28	0	0	0	0	0	639.31	1274.56	1255.93	883.04	1060.87	0	0	28
29	0	0	0		0	639.31	1329.77	1154.38	893.04	1088.46	0	0	29
30	0	0	0		0	599.89	1356.74	1228.76	564.90	1096.05	0	0	30
31		0	0		0		1204.63		727.31	1129.90		0	31
TOTAL	62.37	0	0	0	0	3656.62	25565.14	39112.87	29040.43	19804.14	19055.56	2583.02	

THE YEAR 138,880.15 acre-feet

APPENDIX "B-12"

DEMANDS BY KANSAS FOR AGREEMENT ACCOUNT WATER IN JOHN MARTIN RESERVOIR

Demands by Kansas for Agreement Account Water in John Martin Reservoir
(not including trasit loss releases)
Report-Year ending October 31, 1984
Source: Annual Report for the Operations Secretary, 1984
(acre-feet)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	Day
1	0	0	0	0	0	0	0	0	793.40	0	991.75	247.94	1
2	0	0	0	0	0	0	0	0	793.40	0	991.75	0	2
3	0	0	0	0	0	0	0	0	793.40	0	991.75	0	3
4	0	0	0	0	0	0	0	0	793.40	0	991.75	0	4
5	0	0	0	0	0	0	0	0	297.53	0	991.75	0	5
6	0	0	0	0	0	0	0	371.91	0	0	991.75	0	6
7	0	0	0	0	0	0	0	991.75	0	0	991.75	0	7
8	0	0	0	0	0	0	0	991.75	0	0	991.75	0	8
9	0	0	0	0	0	0	0	991.75	0	429.76	991.75	0	9
10	0	0	0	0	0	0	0	991.75	661.17	793.40	991.75	0	10
11	0	0	0	0	0	0	0	991.75	991.75	793.40	991.75	0	11
12	0	0	0	0	0	0	0	991.75	991.75	793.40	991.75	0	12
13	0	0	0	0	0	0	0	909.10	991.75	793.40	991.75	0	13
14	0	0	0	0	0	0	0	991.75	991.75	793.40	991.75	0	14
15	0	0	0	0	0	0	0	991.75	991.75	884.31	991.75	0	15
16	0	0	0	0	0	0	0	991.75	371.91	991.75	991.75	0	16
17	0	0	0	0	0	0	0	991.75	0	991.75	991.75	0	17
18	0	0	0	0	0	0	0	991.75	0	991.75	991.75	0	18
19	0	0	0	0	0	0	0	991.75	0	991.75	991.75	0	19
20	0	0	0	0	0	0	0	991.75	619.84	991.75	991.75	0	20
21	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	21
22	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	22
23	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	23
24	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	24
25	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	25
26	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	26
27	0	0	0	0	0	0	0	991.75	991.75	991.75	991.75	0	27
28	0	0	0	0	0	0	0	991.75	587.86	991.75	991.75	0	28
29	0	0	0	0	0	0	0	917.37	0	991.75	743.81	0	29
30	0	0	0	0	0	0	0	793.40	0	991.75	595.05	0	30
31		0	0		0				0	991.75		0	31
TOTAL	0	0	0	0	0	0	0	23,818.53	17,582.91	21,149.07	29,107.86	247.94	

THE YEA 91,906.31 acre-feet

APPENDIX "B-13"

STATELINE FLOWS OF DAYS OF KANSAS DEMANDS

Arkansas River at the State Line
Stateline Flows of Days of Kansas Demands
Report-Year ending October 31, 1984
(cubic feet per second)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	Day
1	—	—	—	—	—	—	—	—	465	311	498	627	1
2	—	—	—	—	—	—	—	—	472	287	512	622	2
3	—	—	—	—	—	—	—	—	452	261	546	497	3
4	—	—	—	—	—	—	—	—	446	242	547	423	4
5	—	—	—	—	—	—	—	—	452	—	525	400	5
6	—	—	—	—	—	—	—	—	425	—	502	358	6
7	—	—	—	—	—	—	—	—	301	—	471	337	7
8	—	—	—	—	—	—	—	—	249	—	448	331	8
9	—	—	—	—	—	—	—	264	225	—	456	—	9
10	—	—	—	—	—	—	—	443	205	—	467	—	10
11	—	—	—	—	—	—	—	493	213	240	460	—	11
12	—	—	—	—	—	—	—	523	412	337	481	—	12
13	—	—	—	—	—	—	—	534	527	421	477	—	13
14	—	—	—	—	—	—	—	525	527	421	477	—	14
15	—	—	—	—	—	—	—	494	586	501	476	—	14
16	—	—	—	—	—	—	—	506	597	520	496	—	15
17	—	—	—	—	—	—	—	568	2182	532	505	—	16
18	—	—	—	—	—	—	—	618	2054	574	522	—	17
19	—	—	—	—	—	—	—	642	813	576	495	—	18
20	—	—	—	—	—	—	—	649	527	574	494	—	19
21	—	—	—	—	—	—	—	555	454	574	494	—	20
22	—	—	—	—	—	—	—	550	434	581	519	—	21
23	—	—	—	—	—	—	—	537	548	548	525	—	22
24	—	—	—	—	—	—	—	533	583	510	530	—	23
25	—	—	—	—	—	—	—	512	561	539	537	—	24
26	—	—	—	—	—	—	—	519	553	544	560	—	25
27	—	—	—	—	—	—	—	528	541	556	588	—	26
28	—	—	—	—	—	—	—	528	528	559	616	—	27
29	—	—	—	—	—	—	—	540	536	543	610	—	28
30	—	—	—	—	—	—	—	516	528	511	622	—	29
31		—	—	—	—	—	—	487	394	483	618	—	30
TOTAL									340	485		—	31
sec. ft.	—	—	—	—	—	—	—	12065	17603	11809	15577	3585	
ac. ft.	—	—	—	—	—	—	—	23931	34915	23423	30897	7111	

The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas and the Frontier Ditch

THE YEAR 120,277 acre-feet

APPENDIX "B-14a"
DIVERSION BY DITCHES
IN COLORADO WATER DISTRICT 14

Diversion by Ditches in Colorado
Water District 14
Report-Year ending October 31, 1984
Source: Water Commissioner's Monthly Reports
(acre-feet)

NAME OF CANAL	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Bessemer (River)	498	0	0	0	2495	8860	12182	13452	17520	14557	4723	3104	77,391
Res. or Imported	0	0	0	0	0	914	1113	0	0	746	3507	216	6,496
Total Bessemer	498	0	0	0	2495	9774	13295	13452	17520	15303	8230	3320	83,887
Minnequa-Ft. Union	7307	12359	18570	25381	30355	34830	39916	45585	50698	54635	58648	63024	442,518
West Pueblo (River)	0	0	0	0	0	0	131	313	605	238	0	29.8	1,316.8
Excelsior (River)	0	0	0	0	0	0	0	0	0	163	77.4	0	240.4
Res. or Imported	0	0	0	0	0	0	0	0	0	0	0	0	0
Total: Excelsior	0	0	0		0	0	0	0	0	163	77.4	0	240.4
Collier	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorado Canal (River)	0	0	0	0	3946	5148	11262	25098	27110	17793	14595	9778	114,730
Res. or Imported	0	0	0	4362	4431	5208	4299	26.3	0	5860	7933	597	32,716.3
Total: Colo. Canal	0	0	0	4362	8377	10356	15561	25124.3	27110	23653	22528	10375	147,446.3
Highline (River)	3853	0	0	0	4151	11779	14951	23060	21906	15589	10469	5849	111,607
Res. or Imported	0	0	0	0	190	0	1547	0	0	1069	5081	0	7,887
Total: Highline	3853	0	0	0	4341	11779	16498	23060	21906	16658	15550	5849	119,494
Oxford Farmers (River)	753	0	0	0	1247	3804	4882	7370	7596	5594	3507	2528	37,281
Res. or imported	0		0	0	84	0	0	0	0	0	337	0	421
Total: Oxford Farmers	753	0	0	0	1331	3804	4882	7370	7596	5594	3844	2528	37,702
River District #14	12411	12359	18570	25381	42194	64421	83324	114888	125435	108569	93219.4	84312.8	785,084.20
Res. or Import Dist. #14	0	0	0	4362	4705	6122	6959	26.3	0	7675	16658	813	47,520.30
Total: District #14	12411	12359	18570	29743	46899	70543	90283	114914.3	125435	116244	110077.4	85125.8	832,604.50

APPENDIX "B-14b"

DIVERSION BY DITCHES IN COLORADO WATER DISTRICT 17

Diversion by Ditches in Colorado
Water District 17
Report-Year ending October 31, 1984
Source: Water Commissioner's Monthly Reports
(acre-feet)

NAME OF CANAL	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Otero	0	0	0	0	0	2149	1824	2192	2732	1591	535	1998	13,021
Res. or Imported	0	0	0	0	0	245	255	0	0	277	158	0	935
Total: Otero	0	0	0	0	0	2394	2079	2192	2732	1868	693	1998	13,956
Catlin Canal (River)	2360	0	0	0	4140	9524	13478	18330	19270	15226	10700	6283	99,311
Res. or Imported	0	0	0	0	283	0	0	0	0	198	0	0	481
Total: Catlin	2360	0	0	0	4423	9524	13478	18330	19270	15424	10700	6283	99,792
Holbrook (River)	0	0	0	0	0	5429	9921	14822	13295	13708	4032	973	62,180
Res. or Imported	0	0	0	0	0	773	0	0	0	2095	6102	5527	14,497
Total: Holbrook	0	0	0	0	0	6202	9921	14822	13295	15803	10134	6500	76,677
Rocky Ford	2708	0	0	0	1658	4152	5212	6117	6258	5528	4521	2593	38,747
Ft. Lyon (storage)	9603	15870	22408	8072	0	3162	16159	0	0	18894	3057	0	97,225
Ft. Lyon (Riv.)	14357	0	0	0	23256	40484	78691	69712	60750	66258	32383	30420	416,311
Res. or Imported	8023	0	0	0	0	0	0	0	0	10478	4940	0	22,941
Kicking Bird*	0	0	0	0	15390	11807	22499	17492	3632	0	0	0	70,820
Total: Ft. Lyon-K.B.	31983	15870	22408	8072	38646	55453	117349	87204	64382	95630	39780	30420	607,197
Las Animas Consol.	1394	0	0	0	0	862	3893	6494	5460	6584	4233	2311	31,221
Native—District #17	30422	15870	22408	8072	44444	77569	151677	135149	111397	127789	59461	44578	828,836
Res. or Imported — District #17	8023	0	0	0	283	1018	255	0	0	13048	10600	5527	38,754
Total: District #17	38445	15870	22408	8072	44727	78587	151932	135149	111397	140837	70061	50105	867,590
Native Dist. #14-#7	42833	28229	40978	33453	86638	141990	235001	250037	236832	236358	152880.4	128890.8	1,613,920.2
Res. or Imported Dist. #14-#17	8023	0	0	4362	4988	7140	7214	26.3	0	20723	27458	6340	86,274.3
Total Dist. #14-#17	50856	28229	40978	37815	91626	149130	242215	250063.3	236832	257081	180138.4	135230.8	1,700,194.50

GRAND TOTAL -

*Bifurcation from Fort Lyon

APPENDIX "B-15"

DIVERSION BY DITCHES IN COLORADO WATER DISTRICT 67

Diversion by Ditches in Colorado Water District 67
Report-Year ending October 31, 1984
Source: Water Commissioner's Monthly Reports
(acre-feet)

NAME OF CANAL	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Fort Bent	276	0	0	0	0	29.8	2951	5008	3356	4693	3858	383	20,554.8
Keesee Ditch	300	0	0	0	0	0	670	1063	992	1107	807	0	4,939
Amity	589	0	0	0	0	2400	4628	16400	16880	18405	18272	6900	84,474
Lamar	1918	0	0	0	0	1125	5387	9576	6861	8859	8630	2001	44,457
Hyde	0	0	0	0	0	0	0	367	244	313	298	228	1,450
Manvel	0	0	0	0	0	0	0	766	2231	0	0	0	2,997
X, Y, & Graham	0	0	0	0	0	0	986	2186	1676	2009	2656	0	9,513
Buffalo	2392	49.6	0	0	0	301	4124	5282	4794	4679	3826	2091	27,538.6
TOTAL: District 67	5475	49.6	0	0	0	3855.8	18746	40648	37034	40165	38347	11603	196,923.4
Trans. Min. Diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	5475	49.6	0	0	0	3855.8	18746	40648	37034	40165	38347	11603	196,923.4

APPENDIX "B-16"

DIVERSION BY DITCHES IN KANSAS STATELINE TO GARDEN CITY

Diversion by Ditches in Kansas
Report-Year ending October 31, 1984
(acre-feet)
Source: Frontier Ditch: U.S.G.S. Records
Other Ditches: Kansas Division of Water Resources Records

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Frontier	0	0	0	0	60	0	548	1535	1511	1572	1198	206	6,630*
Ft. Aubrey Canal													
Total Stateline to Syracuse	0	0	0	0	60	0	548	1535	1511	1572	1198	206	6,630*
Amazon Canal	1675	0	0	0	595	4989	3087	2923	8034	4164	3858	4891	34,216
Great Eastern Canal	0	0	0	1581	3438	0	0	5687	9523	5050	6899	2985	35,163
South Side Ditch	1433	0	0	0	0	0	0	2839	4451	3227	5714	4056	21,720
Farmers Ditch	1295	0	0	0	0	0	1690	3801	4075	4031	4914	1086	20,892
Garden City Canal	52	0	0	0	0	0	11	615	564	554	496	92	2,384
Total Syracuse To Garden City	4455	0	0	1581	4033	4989	4778	15865	26647	17026	21881	13110	114,365
Total Stateline To Garden City	4455	0	0	1581	4093	4989	5326	17400	28158	18598	23079	13316	120,995

* 3038 acre-feet returned directly to the river.

APPENDIX "B-17"

TRANSMOUNTAIN DIVERSIONS

Transmountain Diversions
Report-Year ending October 31, 1984
Source: Division Engineer
Colorado Water Division #2
(acre-feet)

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	TOTAL
Columbine Ditch	0	0	0	0	0	0	407	1550	819	286	127	54	3,243
Ewing Ditch	0	0	0	0	0	0	544	1190	454	299	223	0	2,710
Wurtz Ditch	0	0	0	0	0	0	1400	2790	995	404	133	46	5,768
Larkspur Ditch	0	0	0	0	0	0	0	298	144	96	35	0	573
Homestake Tunnel	740	0	0	0	2730	0	1690	3130	4230	12680	2530	0	27,730
Twin Lake Tunnel	390	330	114	60	52	46	111	53	2180	3810	876	860	8,882
Boosted Tunnel	0	0	0	0	0	0	21890	45770	25010	12010	2950	2075	109,705
Busk-Ivanhoe Tunnel	0	0	0	0	0	0	697	4170	3510	990	380	248	9,995
Blue River Project 1/	1065	968	528	436	264	218	1129	1821	1903	1900	1841	1614	13,687
TOTAL	2195	1298	642	496	3046	264	27868	60772	39245	32475	9095	4897	182,293

THE YEAR 182,293 acre-feet

1/ Blue River project includes diversions from the Blue River through the Hoosier Pass Tunnel plus diversions from the South Platte Basin as well.

APPENDIX "B-18"

SUMMARY TABULATION

Summary Tabulation
Report-Year 1964
November 1, 1963 to October 31, 1964

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Arkansas River at Las Animas, Colorado - cfs	2622	6912	6169	7219	6225	6528	25573	43362	22905	32576	11183	34606	
- a.f.	5200	13710	12240	14320	12350	12950	50720	86010	45430	64610	22180	67450	407,170
Purgatoire River near Las Animas, Colorado - cfs	842	1027	1386	1421	2174	6226	3956	1452	372	3655	288	2113	
- a.f.	1670	2040	2750	2820	4310	12550	7850	2880	739	7250	572	4190	49,621
River Flow Into John Martin Reservoir - cfs	3464	7939	7555	8640	8399	12854	29529	44614	23277	36231	11471	36119	
- a.f.	6871	15747	14985	17137	16659	25496	58571	88889	46171	71865	22754	71642	456,787
Contents of John Martin Reservoir at end of Month - a.f.	74548	89414	104514	123320	142017	163052	191577	199457	184088	185965	144735	204907	
Net Change in Reservoir contents - a.f.	+7008	+14866	+15100	+27806	+18697	+21035	+28525	+7880	-15359	+1867	-41230	+60172	
Outflow from John Martin Reservoir - cfs	332.4	59.4	68.1	57.8	60.7	1902.5	15646	33343	26927	28557	30202	4756.6	
- a.f.	659	118	135	115	120	3770	31030	66140	53410	56640	59910	9430	231,477
Diversion in District 67, Colorado - a.f.	5475	49.6	0	0	0	3655.8	18746	40648	37034	40165	38347	11603	195,923.4
Arkansas River at Colorado-Kansas Stateline - a.f.	7450	8570	9340	8010	8580	10420	7400	25370	34920	25760	30900	20850	197,570
Diversion by Ditches in Kansas Stateline to Garden City - a.f.	4455	0	0	1581	4063	4989	5336	17400	28158	18598	29079	13316	120,995

APPENDIX "C-1"

MINUTES OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

REGULAR ANNUAL MEETING

December 13, 1983
Cow Palace Inn, Lamar, Colorado

The regular annual meeting of the Arkansas River Compact Administration was held at the Cow Palace Inn in Lamar, Colorado, on December 13, 1983. The meeting was called to order at 12:35 p.m. (MST) by Mr. Frank G. Cooley, Chairman and United States representative. Other members in attendance were:

For Kansas:
Carl E. Bentrup — Deerfield, Kansas
Ronald Olomon — Garden City, Kansas
David Pope — Topeka, Kansas

For Colorado:
Carl Genova — Pueblo, Colorado
Leo Idler — Lamar, Colorado
J. William McDonald — Denver, Colorado

Mr. Cooley introduced the members of the Administration. Mr. McDonald introduced the members of his staff and Mr. Pope introduced his staff members and others from Kansas.

The agenda for the meeting was introduced by Mr. Cooley and approved without change. The agenda is included as Attachment A.

The third item on the agenda was the approval of the minutes of the August 26, 1983, Special Meeting. Mr. McDonald stated that the minutes would be mailed to the members the next few weeks for review.

Under agenda item #4, Report of Officers, Mr. Cooley, as chairman, noted there were differences between Kansas and Colorado which had not yet been resolved. He indicated that he would do everything possible to achieve a settlement by negotiation and arbitration to prevent a third lawsuit before the Supreme Court.

Following these comments, the Recording Secretary's report, Attachment B, was placed into the record without discussion.

Mr. Cooley then entered the Treasurer's Report, Attachment C, into the record. Mr. Cooley asked about the investment of Compact Administration funds. Mr. Bentrup stated that they were invested in

money market accounts. Mr. Genova indicated that the funds were earning about 9% interest.

Mr. Cooley then asked Mr. Jesse to present the Report of the Operations Secretary. Mr. Jesse briefly outlined the highlights of his annual report. Mr. Jesse stated that the water remaining in the Kansas transit loss account at the end of the year was distributed to the other accounts in John Martin Reservoir according to the operating plan. He noted that the Colorado Division of Wildlife made two major purchases from transmountain water that replenished the permanent pool and brought it to 13,480.61 acre-feet in September, 1983.

Mr. McDonald then moved that the Operations Secretary's, Recording Secretary's, and Treasurer's reports be received with the latter two to be included in the minutes. The motion was seconded by Mr. Olomon and passed upon the unanimous vote of Kansas and Colorado.

The Auditor's report for the fiscal year ending June 30, 1983, was then passed out but deferred for action later in the meeting.

The next items addressed were the committee reports. Mr. Cooley asked Mr. McDonald to present the Administrative and Legal Committee report. Mr. McDonald stated that the committee had met prior to the March 25, 1983, Special Meeting to discuss the proposed procedures of arbitration, but that no decision was reached on the matter. Mr. McDonald added that Colorado was pleased that Kansas had obtained funds to define the issues with which it was concerned and that Colorado would be available for discussion at such time as Kansas was ready to proceed.

Mr. Genova, as chairman of the Engineering Committee, stated that the Engineering Committee had not met during the preceding compact year and that there was no report.

Mr. Idler, as chairman of the Operations Committee, advised that there was a correction to the Operations Committee Report. The appropriate corrections were made by Mr. Cooley.

Mr. Olomon moved, seconded by Mr. Genova, that all committee reports be received and that the corrected Operations Committee Report (Attachment D), be included in the minutes. The motion was approved by Kansas and Colorado.

The next item taken up was the report by the U.S. Geological Survey presented by Doug Cain.

Mr. Cain stated that the new subdistrict chief would be Russ Livingston and that he would take over his duties around the first of March. Mr. Cain also briefly reported on the status of a comprehensive model of the Arkansas River basin that the USGS is preparing. The report will be in 4 parts and 3 parts of it should be approved this year. The fourth part of the study will be used to model various management alternatives. Mr. Lloyd Stulken, from the USGS in Kansas, briefly reported on two groundwater modeling projects for the Arkansas River in Kansas. There followed some general discussion on the need, frequency and accuracy of the flow measurements made by the USGS in Kansas, but no formal action was taken.

Mr. Mike Mocek presented a brief report on Corps of Engineers activities. He stated that because of District boundary changes the Tulsa District was now responsible for Corps activities in Kansas. He briefly described the status of several flood control studies as well as a small

hydropower study on John Martin Reservoir and stated that any hydropower facility on John Martin Reservoir would not affect its operation. He also advised that there had been no Corps of Engineers flood control operations in either Trinidad Reservoir or John Martin Reservoir. There were several questions raised about a sediment resurvey of John Martin Reservoir. Mr. Mocek stated that there was no resurvey scheduled. It was requested that Mr. Cooley write to the Corps to determine the status of the resurvey programs and request a new sediment survey.

Mr. Ray Wilms of the Bureau of Reclamation then gave a brief report upon the status of the Fryingpan-Arkansas Project. He stated that the annual operating plan meeting would be held the following day in Pueblo.

The next item was the approval of the Auditor's report. Mr. McDonald moved, and Mr. Bentrup seconded, the approval of the corrected Auditor's report. The motion was passed upon the unanimous vote of Kansas and Colorado.

The next item on the agenda was the election of officers for Compact Year 1984. After a brief discussion, Mr. McDonald moved the nomination of the four existing officers to serve in their same capacity for the current compact year. The motion was seconded by Mr. Pope and was unanimously approved.

With respect to the appointment of committee members for compact year 1984, Mr. Cooley reappointed all committee members to their current committees.

The next item on the agenda was a review of the FY 83-84 expenditures, a review of the FY 84-85 budget, and the adoption of the FY 85-86 budget.

Mr. McDonald asked if the expenditures made during 1983-84 to date were consistent with the adopted budget (Attachment E) and if there were any anticipated problems of over expenditures. Mr. Idler indicated that expenditures were within budget. Mr. McDonald stated that since the 1983-84 budget had been approved previously and since there were no problems, no action was required by the Administration.

Mr. McDonald noted that the 1984-85 budget had also been adopted previously but that it was necessary to determine if changes needed to be made. Mr. Idler stated that the amount budgeted for the Annual Report was probably too small. After some discussion on the need for publishing the minutes of the Administration's meetings in the Annual Report and the budget process with respect to the USGS cooperative agreement, Mr. McDonald moved that:

a. The Administration revise the budget for FY 84-85 by changing the USGS line item to $15,750 and adjust all the totals accordingly,
b. The assessments for FY 84-85 as previously approved to be changed, and
c. The budgeted expenditures be taken out of the surplus funds available to the Administration to the extent that budgeted expenditures will exceed assessments.

Mr. Pope seconded the motion which was then unanimously approved. The original and revised budget is included as Attachment F.

The next item was the adoption of the FY 1985-86 budget. After some discussion, Mr. McDonald moved that the USGS cooperative agreement be budgeted at $16,050 and the budget be adopted with that change. The

motion was seconded by Mr. Pope and the budget was unanimously approved and is included as Attachment G.

With respect to agenda Item 11a, the Nine Mile-Highland Proposed Water Storage Program, Mr. McDonald stated that this is a request by the Colorado delegation that the Ninemile-Highland Canal Companies be granted an account for winter water storage in John Martin Reservoir. Colorado had provided to the Kansas delegation a proposed resolution which would create such an account. However, he indicated that Kansas had requested additional engineering data and anlaysis and that Colorado would therefore not bring the resolution to a vote. He emphasized that Colorado would like to work toward establishing an account by the next storage season.

With respect to Agenda Item 11b, Annual Report for 1982, Mr. McDonald reported that it was being drafted and would be out for review shortly.

With respect to Agenda 11c, Transit Loss Account, Mr. McDonald stated that the Colorado delegation had some concerns with the present transit loss account system, but had no specific recommendations at this time. He requested that the Administration concur in directing the engineering committee to examine the provisions in the operating plan and if it finds desirable any potential changes, to bring those to the Administration. Kansas offered no objection to referring the request to the engineering committee.

With respect to agenda Item 11d, the proposed transfer of the Rocky Ford ditch rights, Mr. McDonald noted that this item was added at the request of Mr. Bentrup. He stated that the change of water rights filing had been made in water court and that the State Engineer had intervened in the case to assure no injury to the river.

Mr. Bentrup stated that Kansas had prepared a resolution (Attachment H) and that the Administration coud consider intervening in the transfer case in the Colorado water Court. Mr. McDonald stated that Colorado would need to take a closer look at the resolution before discussing it.

Mr. Cooley then asked that Mr. Thomson, Southeast Colorado Water Conservancy District, give a brief report on the satellite gaging program. Mr. Thomson stated that there had been a request made earlier in the year to the General Assembly for $500,000 for funding the Comsat satellite program which however was not funded. The Colorado Water Resources and Power Development Authority was subsequently authorized to finance such a program. The Authority authorized a contract with Sutron Corporation to install 82 gaging stations throughout Colorado. These stations will be administered by the state Engineer and the various Division Engineers.

Following Mr. Thomson's remarks, Mr. Mocek stated that he had just checked with the Corps' District Office and that there was no definite schedule for the sediment survey of John Martin Reservoir. The cost would be between $50,000-$200,000 and could not be budgeted until after FY 1985. There was no further discussion on this matter.

Mr. McDonald stated that the Colorado delegation had some conversations with Leo Pollart regarding Amity's account for other waters in John Martin Reservoir. He indicated that Amity had some concerns about how their account is administered. Mr. McDonald

indicated that the Colorado delegation wished to discuss the matter further and may request in the future that adjustments be made by way of amendments to the 1980 Operating Plan.

Following this the Rocky Ford transfer case was brought up again. Mr. McDonald read into the record the resolution proposed by Kansas (Attachment H) and asked for a recess, which was granted by Mr. Cooley. Following recess, Mr. Cooley asked Mr. Bentrup to move for adjournment. Mr. Bentrup stated that they did not wish to adjourn. Mr. Cooley then observed that action on the proposed resolution raised major legal issues and that if there were no objections, he would declare the meeting adjourned.

There being no further business to come before the Administration, Mr. Cooley adjourned the meeting at 3:30 p.m.

The foregoing minutes were adopted on May 10, 1984 at the Special Meeting of the Arkansas River Compact Administration held in Las Animas, Colorado.

/s/ Carl E. Bentrup
Vice Chairman
for Frank G. Cooley
Chairman

/s/ Leo Idler
Recording Secretary

ATTACHMENT A

ANNUAL MEETING
ARKANSAS RIVER COMPACT ADMINISTRATION

December 13, 1983
Cow Palace, Lamar, Colorado

12:30 p.m. (MST)

1) Call to Order and Introductions
2) Approval of Agenda
3) Approval of Minutes
   August 26, 1983 (Special Meeting)
4) Report of Officers
   a) Chairman
   b) Recording Secretary
   c) Treasurer
   d) Operations Secretary
5) Auditor's Report for F.Y. 82-83
6) Committee Reports
   a) Administrative and Legal
   b) Engineering
   c) Operations
7) Election of Officers for Compact Year 1984
   (November 1, 1983-October 31, 1984)
   a) Vice Chairman
   b) Recording Secretary
   c) Operations Secretary
   d) Treasurer
8) Appointment of Committee Members for Compact Year 1984
   (November 1, 1983-October 31, 1984)
   a) Administrative and Legal
   b) Engineering
   c) Operations
9) Reports of Federal Agencies
   a) Geological Survey
   b) Corps of Engineers
   c) Bureau of Reclamation
10) Budget Matters
   a) Review F.Y. 83-84 expenditures
   b) Review previously adopted F.Y. 84-85 budget
   c) Prepare and adopt F.Y. 85-86 budget
11) Other Matters
   a) Ninemile-Highland Proposed Water Storage Program
   b) Annual Report for 1982
   c) Transit Loss Account, John Martin Operating Plan
   d) Proposed Transfer of Rocky Ford Ditch Rights
12) Adjournment

/bm

ATTACHMENT B

SECRETARY'S REPORT DEC. 13, 1983

The 1983 irrigation season, water wise, was one of the best I have experienced since I started farming.

We had an above average snowpack and a very wet spring. This made a very good runoff into John Martin Reservoir. Our summer was very dry with many days above one hundred degrees, making the need for irrigation water for our farmland extremely high.

We have experienced very good relations with the U.S.G.S. personnel in their cooperation to keep the water measuring stations in working condition. One improvement I would suggest would be one stream measurement at the state line three days after water is turned out of John Martin Reservoir for Kansas and another a week later to help in regulating the water delivery to them. The river seems to change considerably when the water in it rises abruptly making for much guessing on the part of Colorado water commissioners in their effort to deliver Kansas' share of water.

I believe that rather than living on some of the surplus funds we have on hand it would be better to use them for further improvement of our gauging stations, such as telephones on the various creeks during the summer time only, when it would be most advantageous. We could pay for observers that live close to the creeks and have telephones for first hand reports of conditions after rain storms. To make their observations more accurate we could have staff gauges on bridges located close to their homes for accurate observations.

Respectfully submitted,
/s/ Leo Idler

ATTACHMENT C

TREASURER'S REPORT
July 1, 1982 thru June 30, 1983

CASH BALANCE, JULY 1, 1982		$37,799
RECEIPTS:		
Revenue from Assessments:		
Colorado—60%	$11,608	
Kansas—40%	7,736	
Interest	2,803	
TOTAL RECEIPTS		22,147
DISBURSEMENTS:		
Insurance	100	
Geological Survey	10,845	
Equipment	2,483	
Professional Fees	250	
Office Supplies	550	

Printing Annual Report	1,849	
Secretary's Salary—Net	3,359	
Payroll Taxes	482	
Telephone	1,336	
Typing & Mailing	326	
Bank Charges	12	
Travel & Meetings	73	
Secretarial	1,927	
TOTAL DISBURSEMENTS		23,592
EXCESS OF RECEIPTS UNDER DISBURSEMENTS		(1,445)
CASH BALANCE, JUNE 30, 1984		$36,354

BALANCE SHEET
July 1, 1983 thru December 10, 1983

CASH BALANCE, JULY 1, 1983		$36,354.68
RECEIPTS:		
Revenue from Assessments:		
Colorado—60%	17,454.72	
Kansas—40%	11,636.48	
Interest	2,082.36	
TOTAL RECEIPTS		31,173.56
DISBURSEMENTS:		
Insurance	100	
U.S. Geological Survey	11,995	
Professional Fees	300	
Office Supplies	90.82	
Printing Annual Report		
Secretary's Salary—Net	1,679.40	
Payroll Taxes	241.20	
Telephone	747.50	
Typing & Mailing	87.14	
Travel & Meetings		
Operations Secretary		
Office Expense	1,512.10	
Bank Charges	10	
TOTAL DISBURSEMENTS		16,763.16
EXCESS OF RECEIPTS OVER DISBURSEMENTS		14,410.40
CASH BALANCE DECEMBER 10, 1983		50,765.08
Checking Account	74.11	
Savings Account	50,690.97	
	50,765.08	50,765.08

CHECKS WRITTEN SINCE JULY 1, 1983

Date	Check Number	To — For	Amount
July 8	583	Video Concepts — Supplies-Operations Sec	$ 1,309.30
July 8	584	Void — Typing Mistake	
July 8	585	Leo Idler — Salary-Supplies-Postage	293.98
July 8	586	Lewan & Associates — Supplies-Operations Sec	202.80
July 8	587	Federal Reserve — Payroll Taxes	40.20
July 8	588	Mountain Bell — Telephone	182.24
Aug. 5	589	Guaranty Abstract Co. — Treasurer's Bond	100.00
Aug. 5	590	Void	
Aug. 5	591	Leo Idler — Salary-Supplies-Postage	308.00
Aug. 5	592	Mountain Bell — Telephone	144.96
Aug. 5	593	Federal Reserve — Payroll Taxes	40.20
Sept. 6	594	Mountain Bell — Telephone	138.99
Sept. 6	595	Leo Idler — Salary-Postage	285.32
Sept. 6	596	Federal Reserve — Payroll Taxes	40.20
Oct. 5	597	U.S.G.S. — Cooperative Agreement	8,425.00
Oct. 5	598	Crimond & Farmer — Audit	300.00
Oct. 5	599	Crimond & Farmer — Coping	51.52
Oct. 5	600	Mountain Bell — Telephone	73.81
Oct. 5	601	Federal Reserve — Payroll Taxes	40.20
Oct. 5	602	Leo Idler — Salary-Supplies	284.16
Nov. 5	603	Mountain Bell — Telephone	121.33
Nov. 5	604	Gobin's — Supplies	20.48
Nov. 5	605	U.S.G.S. — Cooperative Agreement	3,570.00
Nov. 5	606	Federal Reserve — Payroll Taxes	40.20
Nov. 5	607	Leo Idler — Salary	279.90
Dec. 5	608	Leo Idler — Salary-Supplies-Postage	292.29
Dec. 5	609	Mountain Bell — Telephone	86.17
Dec. 5	610	Federal Reserve — Payroll Taxes	40.20
Dec. 5	611	The Lamar Daily News — Ream Stationery	41.71
			$16,753.16
		Bank Charges	10.00
			$16,763.16

ATTACHMENT D

OPERATIONS COMMITTEE REPORT
DEC. 13, 1983

The transfer of water to the accounts of the various entities in District 67 in Colorado and the Kansas account began on April 7th.

Delivery of the first irrigation water for the year started on April 28th when a ditch in Colorado put in a call for water. Kansas' first call came on May 6th.

The contents of John Martin Reservoir reached its highest elevation for 1983 when 218,311 acre feet of water were stored on July 12.

John Martin Reservoir conservation pool was declared empty on August 27th. No more water was stored in the conservation pool after that date for the season.

There were 104,785.43 acre feet of water released for Kansas ditches during the 1983 irrigation season. This included 5,800.52 acre feet of transit water loss account water added to their release to deliver their water across the state line. On October 31st, there remained 15,112.19 acre feet of water in their account. All measured flows passing the state line, from April 1st thru October 31st, were 129,160 acre feet. The Frontier ditch diverted 8,164 acre feet of water during this time making a total of 137,324 acre feet.

During the irrigation season of April through October there were 151,643.21 acre feet of water released for District 67 ditches. On October 31st, there remained 17,642.25 acre feet of water in the accounts of the ditches in District 67 for 1983.

The figures for the above all came from Robert Jessee's report to the Operations Committee for 1983. Mr. Robert Jessee is the Water Commissioner for the Arkansas River in Colorado and is also the Operation Committee secretary for the Arkansas River Compact Admin.

Respectfully submitted,
/s/ Leo Idler
/s/ Ronald Olomon

ATTACHMENT E

BUDGET
Fiscal Year July, 1983-June 30, 1984

A. SALARIES			$ 9,941.20
1. Recording Secretary	$ 3,600		
2. Operations Secretary	6,100		
3. Payroll Taxes	241.20		
B. GAUGING STATIONS			12,500
1. Maintenance and Operation			
A. Cooperative Agreement	$12,000		
B. Telemark Telephone John Martin Dam Granada	500		
C. OPERATING EXPENSE			4,650
1. Treasurer's Bond	100		
2. Annual Report	1,500		
3. Office Expense			
A. Telephone	1,500		
B. Supplies	500		
C. Printing	500		
4. Travel and Meetings	250		
5. Audit	300		
D. CONTINGENCY			2,000
E. TOTAL BUDGET			$29,091.20
Colorado (60%)		$17,454.72	
Kansas (40%)		$11,636.48	

ATTACHMENT F

BUDGET
Fiscal year July 1, 1984-June 30, 1985

A. SALARIES			$ 9,941.20
1. Recording Secretary	$ 3,600		
2. Operations Secretary	6,100		
3. Payroll Taxes	241.20		
B. GAUGING STATIONS			16,250
1. Maintenance and Operation			
A. Cooperative-changed to	15,750	(Dec. 13, 1983)	
Agreement	12,000		
B. Telemark Telephone			
John Martin Dam			
Granada Gauge	500		
C. OPERATING EXPENSE			4,600
1. Treasurer's Bond	100		
2. Annual Report	1,650		
3. Office Expense			
A. Telephone	1,600		
B. Supplies	350		
C. Printing	350		
4. Travel and Meetings	200		
5. Audit	350		
D. CONTINGENCY			1,000
E. TOTAL BUDGET			$31,791.20
Colorado (60%)	$16,824.72		
Kansas (40%)	$11,216.48		

Budgeted expenditures in excess of assessments will come out of surplus. This was adopted Dec. 13, 1983.

ATTACHMENT G

BUDGET
Fiscal Year July 1, 1985-June 30, 1986

A. SALARIES			$ 9,941.20
1. Recording Secretary	$ 3,600		
2. Operations Secretary	6,100		
3. Payroll Taxes	241.20		
B. GAUGING STATIONS			17,000
1. Maintenance and Operation			
A. Cooperative Agreement	16,500		
B. Telemark Telephone John Martin Dam Granada Gauge	500		
C. OPERATING EXPENSE			4,950
1. Treasurer's Bond	100		
2. Annual Report	2,000		
3. Office Expense			
A. Telephone	1,600		
B. Supplies	350		
C. Printing	350		
4. Travel and Meetings	200		
5. Audit	350		
D. CONTINGENCY			1,000
E. TOTAL BUDGET			$32,891.20
Colorado (60%)		$19,734.72	
Kansas (40%)		$13,156.48	

REVISED AND ADOPTED
DECEMBER 13, 1983
LAMAR, COLORADO

ATTACHMENT H

Kansas Resolution
Annual Meeting
Arkansas River Compact Administration
December 13, 1983
Lamar, Colorado

Resolve:

The Arkansas River Compact Administration's Legal and Administration Committee shall investigate and produce a report concerning the limitations if any exist on the Administration's ability to participate in state court proceedings. Said report shall be completed and delivered to the chairman not later than March 1, 1984.

APPENDIX "C-2"

MINUTES OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

SPECIAL TELEPHONIC MEETING

JANUARY 26, 1984

A special telephonic meeting of the Arkansas River Compact Administration was held on January 26, 1984.

The special telephonic meeting held by conference call was called to order at 5 p.m. (MST) by Mr. Carl E. Bentrup, Vice Chairman of the Arkansas River Compact. Compact members participating in the conference call were:

For Kansas
Carl E. Bentrup — Deerfield, Kansas
Ronald Olomon — Garden City, Kansas
For Colorado
Carl G. Genova — Pueblo, Colorado
Leo Idler — Lamar, Colorado

Mr. Idler moved, seconded by Mr. Olomon, the adoption of a resolution concerning the John Martin Reservoir operating plan (see Attachment A). There being no discussion, Mr. Bentrup called for a vote. The resolution was passed upon the affirmative vote of both states.

/s/ Frank G. Cooley

RESOLUTION
CONCERNING
THE JOHN MARTIN RESERVOIR
OPERATING PLAN

WHEREAS, the Arkansas River Compact Administration has adopted a "Resolution Concerning an Operating Plan for John Martin Reservoir," which resolution was entered April 24, 1980; and

WHEREAS, paragraph VII of the said resolution provides that either Colorado or Kansas, through its compact delegation, can give written notice to the Administration by February 1 that the resolution shall be terminated on the next succeeding March 31; and

WHEREAS, Colorado and Kansas agree that it would be desirable to extend the date for giving of the written notice of termination due February 1, 1984 until March 15, 1984.

NOW, THEREFORE, BE IT RESOLVED that notwithstanding the provisions of paragraph VII. A. of the "Resolution Concerning an

Operating Plan for John Martin Reservoir," either Colorado or Kansas, acting through its delegation to the Administration, may terminate said resolution on March 31, 1984, so long as written notification of such termination is provided to the Administration at its offices in Lamar, Colorado, on or before March 15, 1984.

Entered this 26th day of January, 1984, at a special telephonic meeting of the Administration.

/s/ Frank J. Cooley

Leo Idler

APPENDIX "C-3"

MINUTES OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

SPECIAL MEETING

May 10, 1984
Las Animas, Colorado

A special meeting of the Arkansas River Compact Administration was held at the Bent's Fort Inn in Las Animas, Colorado, on May 10, 1984. The agenda for the meeting is included as Attachment A.

The meeting was called to order at 8:50 a.m. (MDT) by Mr. Carl Bentrup, Vice-Chairman. The following members of the Administration were in attendance.

For Kansas:	
Carl E. Bentrup	Deerfield, Kansas
Ronald Olomon	Garden City, Kansas
David Pope	Topeka, Kansas
For Colorado:	
Carl Genova	Pueblo, Colorado
Leo Idler	Lamar, Colorado
J. William McDonald	Denver, Colorado

Mr. Bentrup introduced the Kansas members of the Administration, as well as Messrs. Howard Corrigan, Dale Jacobs, Lee Rolfs, and Jerry Hilmes from Kansas. Mr. McDonald introduced the Colorado members of the Administration, and Messrs. Gene Jencsok, Bill Paddock, Bob Jesse, and Bill Howland from Colorado.

The first item on the agenda was the review and approval of the minutes of the August 26, 1983, special meeting. Several minor changes and typographical corrections were offered by Mr. McDonald. Mr. Pope had some concern with language relating to the Administration's 1951 resolution concerning Pueblo Reservoir. At Mr. McDonald's suggestion, the language was deleted. Approval of these minutes was deferred to later in the meeting to give the members additional time to review the minutes.

The minutes of the December 13, 1983, annual meeting were reviewed and, except for one typographical error, no changes were made. Mr. McDonald moved the adoption of the December 13, 1983, minutes as

printed and Mr. Olomon seconded the motion. The motion passed on the unanimous vote of both states.

Mr. Bentrup then requested that the Operations Secretary present his report. Mr. Jesse briefly summarized his report (Attachment B). He also reported that he had reached agreement with Howard Corrigan on the calculaton of transit losses for stateline deliveries for 1984 pursuant to section II.E (4) of the Operating Plan for John Martin Reservoir, which agreement is included as Attachment C.

Mr. Idler moved, seconded by Mr. Olomon, to accept the report of the Operations Secretary. The motion was passed upon the unanimous vote of both states.

The next item on the agenda was the report of the Recording Secretary and Treasurer. Mr. Idler briefly presented his report and submitted a list of checks written as well as a statement on the status of the Administration's checking and savings accounts (Attachment D). Mr. McDonald moved to accept the report and enter the list of checks into the record. Mr. Olomon seconded the motion, which was passed upon the unanimous vote of Kansas and Colorado.

The next item on the agenda was the approval of the 1982 Annual Report. After a brief discussion, Mr. Pope moved, seconded by Mr. Idler, that the 1982 Annual Report be approved subject to certain changes which had been agreed to by Howard Corrigan and Gene Jencsok. The motion was adopted upon the unanimous vote of both states.

At this time Mr. Bentrup stated that the proposed transfer of Keesee Ditch water rights would be added to the agenda and that the next item of discussion would be the operation of Pueblo Reservoir.

Subsequent to the May 10, 1985 Special Meeting Mr. David Pope requested that the verbatim transcript of the discussion on the operation of Pueblo Reservoir be included in the minutes. A transcript was prepared from the tape recording, reviewed and corrected by Kansas and Colorado and is included in the minutes as Attachment F.

Mr. Thomson then briefly described the status of the satellite monitoring program. He stated that the Colorado Water Resources and Power Development Authority had signed a contract with the Sutron Corporation and that the system would probably be operational by August.

The next item discussed was the proposed Keesee Ditch transfer. Mr. McDonald stated that the compact provides for notice to the Administration in the event of a proposed transfer of a water right from District 67. At the request of the applicant, the water court directed that a copy of its amended application be mailed to the Administration. This notice has now been received by the Administration.

After this introduction, Mr. Paddock, a Colorado Assistant Attorney General, summarized the history of the application. The application had been filed in August, 1982, requesting a change of water right for the Keesee Ditch, which diverts water for irrigation in District 67 below John Martin Reservoir. In the original application the Keesee proposed to move the consumptive use of the ditch to Pueblo Reservoir for use for municipal, industrial, irrigation, and other beneficial uses by municipalities and others interested in acquiring the water rights. The proposed change allegedly would have had no adverse impacts on other

water users because only the consumptive use of water would have been transferred.

The Colorado State Engineer filed a Statement of Opposition alleging that the transfer could not go forward without the Administration's approval. The applicant subsequently amended the application and proposed to change its direct flow rights to storage in John Martin Reservoir and then to exchange the water to Pueblo Reservoir. The applicant proposed the establishment of two sub-accounts in John Martin Reservoir: (1) a consumptive use account that would store water that Keesee had historically used, and (2) a return flow account which would store water that had historically returned to the river. The water in the consumptive use account would be exchanged upstream to Pueblo Reservoir whenever stream conditions permitted. The water in the return flow account would be released to the river to duplicate historical patterns of irrigation return flows.

Mr. Paddock noted that under Article V. H of the Compact, whenever a ditch in District 67 seeks to change its point of diversion or places of use upstream from John Martin Dam, then the Administration is required to make certain findings of fact. To deal with this matter, Mr. Paddock recommended that the Administration direct the chairman to send a letter drafted by Mr. Paddock and Mr. Lee Rolfs to John R. Tracy, Water Judge in Division 2. Further, Mr. Paddock suggested that the Administration ask legal counsel for Colorado and Kansas to confer about the implications of Article V. H and to advise the Administration on this matter.

Mr. Paddock then read the proposed letter. Mr. McDonald moved that the Administration direct the chairman to send the letter. Mr. Pope seconded the motion. The motion passed upon the unanimous vote of both states. Mr. Idler then made the motion to send copies of the letter to various other interests. Mr. Genova seconded the motion, which was also passed. A copy of the letter as well as the mailing list is included as Attachment E.

The next item on the agenda was the Engineering Committee report. Mr. Genova stated that the Engineering Committee had studied the provisions of the Operating Plan for John Martin Reservoir concerning the Kansas transit loss account and that Colorado had proposed some revisions. After discussing these proposed revisions with Kansas, Kansas advised that they needed to study the proposal further before acting on it. Therefore, no action was being recommended at this time by the Engineering Committee.

Mr. Genova stated that Colorado also proposed a change in Section VII. A of the operating plan. This change would extend the date for the accounting of the operations by the Operations Secretary from November 15 to December 1. Mr. Genova moved to change the accounting date from November 15 to December 1. Mr. Pope seconded the motion, which was then unanimously approved.

Mr. Bentrup then questioned Mr. Mike Mocek, Corps of Engineers, about the discharge capacity of the John Martin Reservoir spillways as published in the Administration's annual report. Mr. Mocek replied that he would check it, whereupon Mr. Bentrup recessed the meeting from 10:10 to 10:50 a.m.

After the recess, Mr. Mocek reported that the discharge capacity of

639,000 cfs shown in the Administration's annual report was in fact correct, but that such flows would only occur under the most severe flood conditions. There was then some general discussion as to the hydrologic conditions under which such flows would occur.

The next item on the agenda was the consideration of a winter storage account in John Martin Reservoir for the Highland Irrigation and Ninemile Ditch Companies. Mr. McDonald gave a brief review of the Highland-Ninemile proposal. He stated that it was proposed that an account be established under Section III of the Operating Plan for John Martin Reservoir. He then read a proposed amendment to the operating plan.

Since the Highland-Ninemile people were not present, Mr. McDonald recommended that discussion be deferred and that the Administration return to the minutes of the August 26, 1983, special meeting. Mr. Pope stated that he had reviewed the minutes and that, except for the change agreed to earlier, he had no further changes. Mr. McDonald then moved, seconded by Mr. Olomon, that the minutes be approved with the agreed upon changes. The motion was unanimously adopted.

Mr. McDonald then moved that the minutes of the January 26, 1984, special telephonic meeting, as previously executed by the Chairman and Recording Secretary, be formally approved. Mr. Olomon seconded the motion. The minutes were approved upon the unanimous vote of both states.

At this time discussion of the proposed Highland-Ninemile account resumed. Mr. Duane Helton, consulting engineer for Highland-Ninemile, stated that they thought that their winter storage proposal was fair and that it would not injure any water users. Mr. McDonald them moved that the John Martin Reservoir Operating Plan be amended to include a new subsection III. D, with the new subsection to take effect in compact year 1985 and to read as follows:

> A single account for the Highland Irrigation Company and the Ninemile Ditch Company (the Companies) is hereby granted in John Martin Reservoir for agricultural purposes only. The Companies may deliver water to said account pursuant to the provisions of paragraphs 1, 2, 3, 4, 5, and 8 of Appendix A in the April 13, 1984, letter report to the members of the Administration from the Companies' consulting engineer, Tipton and Kalmach, Inc. The Companies may use the water in this account for exchange with existing priorities. However, this account shall not be used in any manner to increase the permanent recreation pool, either by exchange, transfer, change of use, or otherwise. In the event that water accumulated in this account has not been completely released by the end of the compact year, then that water shall become conservation storage controlled by subsection II A, herein."

Mr. Pope stated that Kansas was still concerned about potential injury to downstream water users, but that they were willing to try to resolve the remaining issues. He then moved to table Mr. McDonald's motion until these concerns could be addressed. Mr. McDonald seconded Mr. Pope's motion. The motion to table was passed upon the unanimous vote of both states.

Mr. Helton commented that Highland-Ninemile are concerned about being discriminated against and that they were asked to do more

engineering analyses than was asked of others in a winter storage program. Mr. Bentrup responded that more data was needed because Ninemile-Highland were on a tributary rather than on the mainstem of the Arkansas River.

There being no further business to come before the Administration, Mr. Bentrup adjourned the meeting at 11:10 a.m.

The foregoing minutes were adopted on December 10, 1985, at the annual Meeting of the Arkansas River Compact Administration held in Pueblo, Colorado.
/s/ Frank G. Cooley, Chairman

ATTACHMENT A

Special Meeting
of the
Arkansas River Compact Administration

May 10, 1984, 8:30 a.m. (MDT)

Ft. Bent Inn, Las Animas, Colorado

The Administration will convene at the hour and location noted above. The tentative agenda is as follows:

1. Call to order
2. Approval of minutes
   a. August 26, 1983, special meeting
   b. December 13, 1983, annual meeting
3. Report of Operations Secretary
4. Report of Recording Secretary and Treasurer
5. Approval of 1982 annual report
6. Consideration of a winter storage account in John Martin Reservoir for Highland and Ninemile Canal Companies
7. Report of Engineering Committee on transit loss account
8. Operation of Pueblo Reservoir

ATTACHMENT B

Operations Secretary Report, May 10, 1984

I will not go into too many numbers and will round off and approximate where possible. If anyone wants an exact figure, please see me or Bill after the meeting.

During the Winter season, we stored approximately 40,000 A.F. in the Conservation Pool. We won't know exactly until the Conservation Pool goes dry, which it has not done yet. But we project it will be sometime this

weekend if no major inflows occur, more on this later. The Amity stored 27,000 A.F. during the Pueblo Winter Storage season, which ended on March 15; this is before the 35% was transferred to the Transit Loss Account. The Fort Lyon has 7,000 A.F. in its John Martin account stored both during the Winter Water season and some 2,000 or so that was stored in Meredith and then transferred to John Martin.

The Consolidated Canal has about 4,000 A.F. in its account moved down during the Winter Water season. The breakdown today or actually the morning of the 9th:

Total Contents	172645 A.F.	Conservation Pool	8495 A.F.
Kansas Account	42406 A.F.	All Other Accounts	57550 A.F.
Transit Loss Account	13928 A.F.	Permanent Pool	12625 A.F.

The remainder is the Winter Water accounts 37641 A.F.

There was a release from Pueblo in the middle of April when about 13,000 A.F. was evacuted from the Joint Use Pool; this will be addressed later in the program. The release began at about 500 cfs and was increased in hourly increments until the total out of Pueblo was 5,000. This was maintained for about a day and a half then cut back to about 600 cfs in 1,000 cfs per hour cuts. There was a flow of about 5,600 at Avondale.

The Corps has a limit of 6,000 c.f.s. There was some bank erosion mainly in the Baxter area, but we did not find any major out of channel flow, this run was mainly to check the transit time studies and flood routing model. The run went through quite a bit quicker than expected (24 hours Pueblo to La Junta, for example). And resulted in about 3,000 A.F. getting to John Martin. Another release from Pueblo, from Winter Water carry-over (Tommy will talk about this later) was made last week at about the same rate, we don't know how much came through La Junta yet, as the drain-down has not completed, but a substantial flow did get to the Conservation Pool which would have been dry by now had it not been for this run.

Howard and I did reach an agreement on the computation of the State Line delivery which all the commissioners at least have seen.

We are looking forward to our new satellite system which is not in yet, but as I understand, all the paper work is done. Tommy may speak on this later, as he was one of the prime movers in getting this done.

The reported snowpack is still way over 100% and we got a little more on Monday of this week. The Portland gage on Monday only had about 600 c.f.s. natural, so it is yet to come. We are all a little anxious especially above Pueblo, as a very hot spell could mean trouble, and the longer the melt waits to begin, the more tense we become. I don't know if Mike or Tom will agree but I would speculate we will store some in the "Flood Pool" this year. This will of course go to whomever would have gotten it if it were not stored. In this case, John Martin. So the year for water looks good, lots of snow and quite a bit of water in storage. It has been generally damp to wet and cool to cold, so most farmers are a little late.

One other item I came across while I was getting this report ready that I found interesting was the evaporation from John Martin last year was over 26,000 A.F. one day last July it was at a rate of 150 c.f.s., we forget

sometimes that the lake itself does consume quite a bit of water.

If there are no questions, I will conclude now. All the figures I have given will be in my annual report for December, and if anyone wants more precise numbers or some I didn't report, let me or Bill know.

ATTACHMENT C

March 6, 1984

AGREEMENT

1. The Agreement will expire Nov. 1, 1984
2. Kansas and Colorado will cooperate in all release rates to secure the most efficient delivery of water to the Stateline and to Kansas water users.
3. Credit for delivery to Kansas will stop at the Stateline 7 days after the end of the run at John Martin Reservoir. No credit for over-delivery will be carried forward to any subsequent run.
   3a. In the event Kansas calls for a second run before the first run's 7 days have elapsed, then there will be a meeting between the Kansas Water Commissioner and the Colorado Division Engineer to establish the delivery.
4. When delivery of water to the Stateline exceeds the demand of 400 to 600 c.f.s., delivery will be computed at not to exceed 105% of daily average flow.
5. 35% of all "other water" will be transferred into Kansas transit loss account. In the event that water in Kansas transit loss account exceeds the transit loss at the end of the irrigation year, the excess balance will be transferred into the Kansas and Colorado storage accounts.

/s/ Howard Corrigan, Hydrologist
Kansas State Board
of Agriculture
Division of Water Resources

/s/ Robert Jesse
Colorado Division Engineer

ATTACHMENT D
CHECKS WRITTEN SINCE
ANNUAL MEETING DEC. 13, 1984

Date	Check Number	To — For	Amount
Jan 6	612	Mountain Bell—Telephone	132.71
Jan 6	613	Federal Reserve—Payroll Taxes	40.20
Jan 6	614	Leo Idler—Salary-Supplies-Postage	303.59
Jan 13	615	Federal Reserve—Payroll Taxes	21.00
Jan 30	616	Federal Reserve—Payroll Taxes	21.00

Feb 5	617	Mountain Bell—Telephone	107.46
Feb 5	618	Leo Idler—Salary-Supplies-Postage	309.14
Feb 5	619	Federal Reserve—Payroll Taxes	21.00
Feb 14	620	Federal Reserve—Payroll Taxes	21.00
Mar 5	621	Leo Idler—Salary-Postage	281.96
Mar 5	622	Mountain Bell—Telephone	86.72
Mar 5	623	Federal Reserve—Payroll Taxes	21.00
Mar 15	624	Federal Reserve—Payroll Taxes	21.00
Apr 4	625	Mountain Bell—Telephone	126.54
Apr 4	626	Void—Typing Mistake	
Apr 4	627	Leo Idler—Salary-Supplies-Postage	310.13
Apr 4	628	Federal Reserve—Payroll Taxes	21.00
Apr 14	629	Federal Reserve—Payroll Taxes	21.00

Amount of interest collected in 1983.....4,217.73
Amount of interest collected in 1984 to date...1,543.85
Amount in checking account May 1st, 1984... 95.65
Amount in savings account May 1st, 1984....50,740.20

ATTACHMENT E

May 21, 1984

The Honorable John R. Tracey
Water Judge
Water Division No. 2
Pueblo County Court House
Pueblo, Colorado 81022

Re: Amended Application for Change
of Water Right, Case No. 82CW130

Dear Judge Tracey:

This letter is to acknowledge that pursuant to Article V H of the Arkansas River Compact, the Arkansas River Compact Administration has received mailed notice of the Amended Application for Change of Water Rights filed herein. The amended application requests a change of water right for the Keesee Ditch, currently located in former Water District 67 and below John Martin Dam. The requested change of water right is from direct flow for irrigation purposes to storage in John Martin Reservoir for subsequent exchange upstream of former Water District 67, to be used for irrigation, domestic, municipal, commercial, industrial and all other beneficial uses.

Article V H of the Arkansas River Compact provides, in pertinent part, as follows:

> If the usable quantity and availability for use of the waters of the Arkansas River to water users in Colorado Water District 67 and Kansas will thereby be materially depleted or adversely effected, (1)

priority rights now decreed to ditches of Colorado Water District 67 shall not hereafter be transferred to other water districts in Colorado or to points of diversion or places of use upstream from John Martin Dam; ... without the administration, .., making findings of fact that no such depletion or adverse effect will result from the proposed transfer ... notice of legal proceedings for any such proposed transfer ... shall be given to the administration in the manner and within the time provided by the laws of Colorado or Kansas in such cases.

This amended application is the first occasion on which notice of such legal proceedings has been mailed to the Administration. The Administration will now proceed to discharge its responsibilities under Article V H of the Compact and will advise the Court of the results of its deliberations. By acknowledging receipt of this notice the Administration is not submitting itself to the jurisdiction of this Court, not consenting to judicial review of its actions by this Court, and not waiving any other rights or defenses it may have.

Sincerely yours,
/s/ Frank G. Cooley
Chairman

FGC:cd
cc: Compact Members
Attached Mailing List

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ATTACHMENT F

Special Meeting
of the
Arkansas River Compact Administration
May 10, 1984
Agenda Item No. 8: Operation of Pueblo Reservoir

Mr. Bentrup: We have added one item that will be the request transfer of Keesee water rights and then we have moved item number to _____* by 11 o'clock, some of the farmers wanted to be here, so we will delay that discussion until later. Items 6, 7, and 8 will be discussed next. Is that agreeable?

Mr. McDonald: Right. Then add the Kesee transfer.

Carl: Yes. Now I would like to ask Tommy Thomson to _____, Kansas put this on the agenda, the question in our mind on this, what winter storage carryover is. Would you be ready now to discuss that with us?

Mr. Thomson: I hoped we'd hear the other discussion first, but

Mr. Bentrup: It makes no difference to us.

Mr. Thomson: Well I can respond to the questions on carryover but first, in the letter calling from Mr. Pope asking that the winter storage be on this agenda, you inquired about the joint use pool and I would like to explain on that one because I think it is terribly important that everybody understands it. There are many different accounts in Pueblo reservoir and because of the fact that most of our entities didn't use their project

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water in 1983, I am talking about project water that was brought through the mountains that was in the system, I've got a report which will show some of those amounts. I did not bring enough copies for this size of an audience. But I detected from your letters the combination of winter storage is the culprit on that — there is one for each company and the figures that I am going to be talking about are the ones on the back. And those are mostly municipal accounts — for instance, on December 30, 1983 in Pueblo there were 240,000 a.f. as compared to 133,000 a.f. on December 30, 1982. That was because most of the entities in 1982 took their project water out and practically all of their winter water, but because of the wet conditions in 1983 they didn't take their project water and some winter water that they hadn't used either. Now that then got us up in to what is known by the Bureau and the Corps of Engineers as the joint use pool which is designed in the construction of Pueblo Dam. That is when you get above 264. On March 15 we are 283,000 a.f. and that was in the joint use pool and that's exactly according to the plan of operation and so on. But that wasn't all winter stored water. It was just that winter stored water was part of that total pool. Now that's some of the water released or that was the water that was released that Bob Jesse reported on last week. The entities weren't not able to use it and were not going through the carryover which posed one of the problems last year. We had a meeting with the owners of that water in my office two weeks ago and they all agreed that it would be released. In the meantime, the Bureau and Bob had worked out release on April 13, 14, and 15, that was that 5,000, and that was what was known as temporary water. Those are contracts with private entities. Holbrook, Colorado Canal and others have with the Bureau on their other water and that was released. So that is why we got into joint use pool, but I just wanted to be sure that particularly the gentlemen from Kansas understood that it wasn't all winter water. It was primarily project water that caused that and that's what we are working on right now because as Bob pointed out there is a whale of a big snowpack up there and we know from your estimate right now there is about 80-90,000 a.f.

Mr. _____: 107,000

Mr. Thomson: That is Colorado River water and we are going to bring that through and that is posing an interesting situation, so I hope Mr. Pope that will answer your question on why the joint use pool — it was not the winter storage only.

Mr. Pope: I think we understand that Tommy. I think the question goes back maybe a little bit further in terms of the original authorization and how the joint use pool, when and how it was created. If you could elaborate on that I think it would be helpful. I don't know if we have ever really seen or understood the whole background on that. I understand that it exists but —

Mr. Pope: Maybe at a later time.

Mr. Thomson: _____ it was well designed and well thought out — there is no doubt about that.

Mr. Gibbens: Originally the capacity of Pueblo Dam in the substantiating report for the authorization document, the Pueblo Dam

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was to be 400,000 a.f. capacity. Of course subsequent to authorization, we do model and model studies, hydrology studies, to size the dams and reservoirs to an optimum size to get the most beneficial use out of it. Consequently to that, substantiating document had a total acting capacity of something like 767,000 a.f. in all of our reservoirs. We have now built those reservoirs and we only have a total capacity of 516,000 a.f. So our total storage is actually 251,000 a.f. less than what was in the substantiating report. The joint use pool come about in cooperation with the Corps of Engineers — we needed to move some of our water down from the upstream reservoirs during the winter months so that we could make room for our imported water from the Colorado River Basin during the spring. So it became obvious that we could use some additional capacity in Pueblo Reservoir during the winter. And the Corps, in their studies determined that the major flood threat — Pueblo is from the summer thunderstorms — so we were able to reduce required flood control in the winter to about 27,000 a.f. of space, and in the summer it is required to be 93,000 a.f. of space. So with that type of operation we were able to make 66,000 a.f. of space available for joint uses for other purposes. And the Bureau — we don't necessarily say that the winter water would push that in there or whether it would be a project water or whatever type of water it was, it is just conservation space that we can use during that time. And this year is the first time that we did go to store water into that space and, as Tommy reported, about 18,000 a.f. The City of Pueblo I believe sold 4,000 a.f. to Ft. Lyon Canal. So we were only required to release about 13,000 to 14,000 a.f. to evacuate that water by April 15, and that is essentially how the joint use pool came about.

Mr. Pope: You indicated that the primary reason originally for creating the joint use pool was discussions between the Bureau and the Corps in order to be able to move water from the upstream reservoirs down to Pueblo to make room for Colorado River water or transmountain water.

Mr. Gibbens: That is correct.

Mr. Pope: And then at what point, he alluded to it, at what point was it determined that space could also be used for any types of storage that we need to use it for. And winter water in storage is just one of the purposes of the project that was also included in the substantiating report. _____winter storage water.

Mr. Pope: But the concept of a joint use pool per se was not included in the substantiating report.

Mr. Gibbens: No, not exactly.

Mr. Pope: Well, is _____.

Mr. Gibbens: Well let me go further, some of this spill that we have made is the result of — like I was saying earlier — to make use of the upstream reservoir for inflow from the Colorado River Basin. We presently, we've spilled 43,000 a.f. of water to date from Pueblo and that's made 66,000 a.f. available in our upstream reservoir for Colorado River imports. Our present forecast is for an additional 40,000 or a 107,000 a.f. from the Colorado River. If we actually get that much water but there is going to have to be a demand between now and about the middle of

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August that will provide us with at least 40,000 a.f. more space. But if that demand isn't there to use that water we will be spilling more water.

Mr. Pope: To make room for project water.

Mr. Gibbens: To make room for project water. The last three years we've imported 200,000 a.f. of Colorado River Basin. And they have been critical years here in the Arkansas Valley. For example, last year the Southeast District didn't take delivery of any project water and we did bring 90,000 a.f. in last year. The year before we brought in 75,000 a.f. of water and I believe they took delivery of something like 15,000. So they have been pretty good years here on the east slope and we haven't used our project water. The major portion of that storage is the project water from the Colorado River Basin.

Mr. Bentrup: Bill.

Mr. McDonald: Tom, do I understand correctly that the 1977 Master Water Control Manual sets out the joint use pool?

Mr. Gibbens: Yes, it does.

Mr. McDonald: and the conditions under which it operates?

Mr. Gibbens: Yes.

Mr. Thomson: To follow along with that I think that it is terribly important we don't paint these different bodies of water blue, and green and so on — maybe that would be the easiest way if we did. I attended a meeting Monday of this week with Colorado Springs and they are anxious that more space be available for project water because Tom said they going to _____. Let's take a look down at the bottom at these municipalities. When you see the Fountain Valley Authority, that's Colorado Springs and the other four entities. They've got 32,545, now Tom will say that isn't necessarily in Pueblo, it is in the system. But it is in there and winter storage program that you gentlemen know has been worked out by all the entities and you folks have been on the mailing list. And I guess that I am repeating now the August meeting. I didn't get to read those minutes but this is going to be very repetitious. But it is agreed that the winter storage program will be for four months; it starts on November 15 and ends on April 15. And it is stored by a very carefully designed formula and so on. Now to say that because we went into the joint use pool is the fault of winter storage — we can't say that because we started out as I said with a very full reservoir, a fuller reservoir than we had previously at the end of the winter storage program. So it is just a combination of everything and get ready for this year because as you can see our entities, one that 82-83 column is now void. All that water, that's what was released last week, most of it is down here in John Martin or soon will be. So if it dries out, our entities will start using — and I am talking about ag entities as well as municipalities — will use their 82 project water. Then if they run out of that, they will use their 83 project water. Then if they run out of that, the ag entities will probably start using a little of their 83-84 winter water. But let's say that the year continues as last year did and they won't be needing their any water because, as Bob pointed out, we've got a whale of a snowpack on this side of the mountain. As a matter of fact the snowpack on this side of the mountain this year is about 50 percent greater than it was last year. Last

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year most of the snow was on the west and this time it is on our side. We were up in Leadville just 3 weeks ago and they told us what was 5 inches of water more this year just in Tennessee Pass-Twin Lakes drainage area and Monarch Pass. It is now twice as much as it was a year ago. So the river is going to be pretty much able to take care of all of the increase so I doubt if many of the entities will be using either their winter stored water or project water this year.

Mr. Pope: Tom, let me ask you a question here, though, in terms of the comments you made a minute ago about it wasn't the fault of the winter storage that caused it to go into the joint use pool. However isn't it also true that if that space was not available for winter storage water that that water would have had to come on downstream and would have ended up in John Martin Reservoir? Let's just take an example that if the reservoir was not able to be used for that purpose.

Mr. Thomson: I guess that you could say that, but then we are going to end up with a beautiful civil war in Colorado with the ag people telling the cities "get your water out." And Colorado Springs is going to say, "Go to hell," and so on. So it was designed then — I mean right now I wish that they would have built it for 400,000 then we wouldn't have that problem. I don't know what the problem is with the joint use pool. It is good water management practices to use that space. The criteria was to get it out by April 15 and use flood control.

Mr. McDonald: Dave, I think that in a way you are right, but the point I would emphasize is that had space not been availble to store that water then the historic winter diversion practices would have gone forward and the water would have been diverted out of the river. More than likely the river would have been dried up at Fort Lyon and you would have had consumptive use occur. And the conditions on the winter storage program were designed to insure that no greater consumption occurs that historically was the case. I think that the lack of the bucket or the lack of the space doesn't lead to the conclusion, at all, that there would not have been consumption and that water would have necessarily reached John Martin — that is not the case — there would have been winter diversions, historically in many cases drying up the river.

Mr. Pope: Those entities that would have been diverting in priority were not diverting — is that what you are saying?

Mr. McDonald: They did not this year. They did not divert. If they are in winter storage program they don't direct flow divert. You can't have your cake and eat it too, you either have to be in the winter storage program or not in it and doing your historical practice; but you don't do both. Obviously, that would be double counting and inappropriate.

Mr. Pope: I understand that, but let's assume, with the year that we have had, and as wet as it has been, would they have diverted anyway — even though, yes, physically they perhaps could have.

Mr. Thomson: You bet. If they are decree holders, you bet they would have. Cause that's the law of the river — without the winter storage program you use it or you lose it. All they have to do is go back and look at the records prewinter storage and the river pretty well dried up the Fort Lyon headgate because it was going down Fort Lyon to Amity, Kicking Bird and so on.

Mr. Pope: Let's take it one step further then in terms of winter storage for the coming summer, in other words, storing water this winter for the

following year for example. Then what also seems, and I think that this is what Carl eluded to earlier, to carry that forward another year seems to be stacking water up that we really begin to wonder if that water really would have been used, had not storage program not been in place.

Mr. Thomson: We'll cross that later this year, I think that it is better to stack it up than to waste it and maybe our waste is your benefit.

Mr. Pope: You may have a point there.

Mr. Thomson: I am going to the Colorado River meeting next week and I _____ between Arizona and California and Utah and Colorado. No, I think that is much better to have it and identify it and be able to use it. Water still flows downstream by gravity and will sometimes flow upstream to money, but, I don't know what we are going to have this year. Who can say — I have seen all kinds of different reports as to when the wet cycle is going to end, we get back into our 5 years of dry cycle and things like that. But there has never been any secret as to how these accounts have been carried forward and you folks are on the mailing list you get it and so on. I just think that it's great. Now that our big problem, Mr. Pope, and for the Bureau, when we got hit with this in Leadville if our buckets are full why bring more Colorado River water through the mountains. And this year fortunately California wants us to bring it through because they still have some flooding conditions on the Colorado. I think that we would be derelict, and our district would be derelict, in not bringing every drop that we can bring through the mountain and that is going to add to it and the people in Colorado Springs, believe me — the reason they have so much in this because the pipeline has not been operating the last two years but they will start taking it through the pipeline come about early July. So we will get that into balance, but, right now, based upon the actual experiences and also with the Homestake water which takes up some space in Turquoise, I just wish Turquoise and Pueblo were twice the size they are. That would not make good economics on the cost/benefit ratio but these last few years they would have paid for themselves — really just to be able to store that amount of water.

Mr. Pope: We certainly understand the explanation you are giving Tom, and we appreciate that and I hope you don't misinterpret our comments, but if an analysis that can determine possible injury to Kansas isn't something that we feel that we have role in actually approving, as compared to just being on the receiving end of information and the mailing list, I think there is quite a bit different between those two scenarios. And I think that is the purpose of asking for the item to be on the agenda is to truly try to get ourselves better informed so that again maybe we won't be raising questions where they are not needed. But in the same light, I think we are entitled to know for sure that Kansas will not be injured by the program. I fully acknowledge that winter storage makes a lot of sense and there can be tremendous benefits from it in terms of the efficiency of water use, but, as you alluded to earlier, sometimes what is efficient for one person may not be the best for someone else down below.

Mr. Thompson: We are fully convinced, and welcome the study that

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you're having done. We are convinced that the winter storage program has not hurt downstream, as a matter of fact, we think that it benefited. We will work with you on that and then having all of this other water — Colorado River water — that never would have been in this valley — you know ultimately the return flow ends up in Kansas and I think the USGS Study shows that the groundwater table is pretty well stabilized.

Mr. Thomson: We brought a lot of water through the mountains — Colorado Springs brought a lot of Blue River and Homestake water through and it ends up in this bathtub so, I think that it is great that we had these two years because we had five very dry years — I mean, hell we didn't have a 100,000 in the whole system two years ago. So I think that we are getting some good figures that we can compare and then definitely work out some management programs.

Mr. Pope: It certainly benefits all of us whenever we have a good water year in terms of the snowpack.

Mr. Thomson: You've got two of them now.

Mr. Bentrup: I still have a question. On winter water carryover, we get the idea that this is water you could use so you carry it over another year. Before Pueblo was built that would not be possible. So then that water would have a chance to be released to the river instead of carried over to another year. That water would have had a chance to get to John Martin, some of it. I know that you would divert a lot of it but even before Pueblo, that is where we got our winter storage from the water which you could not use, that couldn't be diverted or passed diversions. For example, in your precompact years say Pueblo gave to the main — Pueblo was the main source of the water in the Arkansas River stored in the winter time, at the Pueblo gage but then Pueblo gages showed a 100,000. The diversions would show in excess of 200,000. So then it was cycled on back when it gets that last ditch that is going to John Martin. So we question whether the winter water carryover is depriving John Martin of water that would have got there.

Mr. Thomson: Well, Carl, you can get on that carryover a year ago, that was the first time we did that. And we did it out of compassion. We just did not want to see these entities have to waste water — I hate to use that term, but, they had paid $3.00 —

Mr. Bentrup: It had come to John Martin_____

Mr. Thompson: You see we believe what you say and therefore and looking at column two, because just in this last week, and I am looking at some of the owners and their tears are not dry today. That water is now either on its way or in John Martin or some of the entities did pick it up along the way. That was dumped, I mean physically dumped, by agreement, so there is no carryover water.

Mr. McDonald: All 31,815 a.f.?

Mr. Thomson: All 31,000 a.f.

Mr. Thomson: Now the other next time we will talk about carryover — see the 83-84 that can be, under the program, carried over till May 1, 1985 and that's understood so that you know you don't have to run from November, December and January just to get it out, but if they won't be able to carry that over. That's an agreement — separate contract with

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the Bureau. So, Carl, I don't think that you are going to have to worry about this carryover anymore.

Mr. McDonald: Tommy, could I, Carl, may I ask a couple of clarifying questions? What we end up with, Tommy is 82 project water which is Colorado River water not in question; 83 project water which is Colorado River water not in question; 82-83 winter water which is Arkansas River water has been dumped and in sizeable part has reached John Martin so you are down to nothing but 83-84 winter water that you have just come out of the winter storage season with.

Mr. Thomson: That ended on March 15, and that's water, as I say, if summer dries out, the agricultural entities, you will probably draw winter water let's say ? _____ draw winter water before you draw project water. So winter water will be drawn out.

Mr. Pope: But that is water that could stay in storage until May 1, 1985.

Mr. _____ (someone in audience): You may want to tell that the Avondale gage is a gage above Pueblo because there is just so much water coming in _____.

Mr. Thomson: I was going to ask that question because if you use the Pueblo gage you missed all of Ralph Atkins, CF&I water. That is the return flow plus the Fountain River.

Mr. _____: plus the Fountain River.

Mr. Thomson: and so the Avondale is really the contributing.

Mr. Bentrup: In winter months, the Fountain does not contribute too much we don't have very many measures on other inflows into the river outside of the Pueblo gage, the CF&I, the amount or rather Fountain.

Mr. Thomson: No, Fountain....

Mr. Bentrup: That was just —

Mr. Thomson: I saw that 100 cfs Bob, was that an average in the winter time on Fountain?

Mr. Jesse: It will run over a hundred. It is running a couple hundred now.

Mr. Thomson: See that is return flow from Colorado Springs, that is the water that they brought through the Air Force Academy from the Blue River and the Homestake water that they run out of Turquoise during the winter months and that is return flow from there. They do have a secondary treatment plant and in the summer months they take quite a bit of that out and put in on golf courses and cemeteries, and parkways, and so on like that. In the winter time it comes down. So no it comes to quite contributary.

Mr. Bentrup: That was just — naturally you are going to divert more water — diversions are going to be greater than the inflow because of the reuse. Correct? I don't have any other questions do you, Dave?

Mr. Pope: Other than the fact that this table does reflect all of the reservoirs, not just Pueblo.

Mr. McDonald: This is all of the reservoirs, total count as of April 30.

Mr. Thomson: Right, and Tom is the only one who can say whether it is in Twin Lakes or Turquoise or Pueblo or what. Yeah. And the only other thing that I would like to say is the winter storage that we mentioned

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earlier we don't think that it is hurting as you all know the companies are only taking very small percentage of the water that they are legally entitled to take. In other words, if we didn't have winter storage programs — so it is all a part of a whole but they take a minimal amount of what they are could take if the law of the river is still in effect.

Mr. Corrigan: Carl, on the Bureau of Reclamation report when was that joint use pool initially approved, what year? Was it 77 or 82 or something like that?

Mr. Gibbens: The joint use pool would have been in a flood control report by the Corps of Engineers did for us. The preliminary report was put out in 1967 and the final report was in 1969 and immediately after authorization of the Fry-Ark project we did do some computer model studies — that kind of thing — to optimize the sizing of the reservoirs and it was generated in coordination with the Corps of Engineers during that time frame about 62-67. That was when it was initially developed and made a part of the project. What that allowed us to do was to decrease the size of the Pueblo Dam and Reservoir. One other thing I didn't allude to before is Pueblo is designed for 400,000 a.f. and it only had a minimum pool of 10,000 a.f., so the active capacity at that time was 390,000 a.f. in Pueblo. Now our Pueblo reservoir is 357,000 a.f. and the minimum pool is 30,000 a.f. so we really only have an active pool now of 327 compared to 390 when it was authorized.

Mr. Corrigan: You've got an active pool 300 and some thousand and you have a conservation pool of 265 and then you've got, what 60 some thousand in the joint use pool —

Mr. Gibbens: 66 in the joint use

Mr. Corrigan: that makes you 300 or so

Mr. Gibbens: 265 is not all active, there is only 234 active, we have 30,000 dead and inactive pool. We put a big minimum pool in there for fisheries so the active conservation pool is only 234 plus the 66,000 from November 1 to April 15.

Mr. Genova: Mr. Chairman, given a certain amount of water at Pueblo and going down to John Martin I don't think that you should underestimate the effect of the intervening ditches between Pueblo and John Martin in both direct flow there and also storage, all ahead of John Martin.

Mr. Bentrup: I realize that John Martin gets — is not entitled to the waters from Pueblo to the last ditch in the district 14 and 17, but we have always gotten some water. In the winter storage before Pueblo we have always gotten a certain amount. I think one year it reached a high of 80,000 feet and then a low of 17,000. So it varies a lot. Everytime the _____ there is not any way of diverting a hundred percent of the water there is no completely efficient headgate — a little of that will trickle on down to John Martin.

Mr. Genova: After the compact and before Pueblo storage by the river most of the time ended at the Fort Lyon headgate.

Mr. McDonald: That must have been when you irrigated under Fort Lyons.

Mr. Bentrup: No, I am in favor of winter storage programs. I think it

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is better to keep it in the mainstream of the river rather than having it in the Great Plains or other-running it on irrigating when you really don't need to irrigate but just to the right. So I am not against it, I just want to be sure that we are getting the water we would have gotten had Pueblo not been built, I think that maybe if it is a benefit then we should be getting, I don't see anything wrong with John Martin getting more than it used to get. We should also be receiving some of the benefits and I think we will as we keep more water in the _____

Mr. Thomson: You mentioned 17,000 — John Martin _____ the people down in 67. Remember how many times on April 15, John Martin reservoir was dry.

Mr. Bentrup: If it wasn't, it would be dry a few days later.

Mr. Thomson: The last few years with the operating plan in John Martin winter storage ends — Mother Nature — John Martin, as you know, has quite a bit of water in it and I think that it is an excellent winter water storage program.

Mr. Bentrup: Does anyone else in the audience have any questions?

Mr. Cliff Verhoeff(?): Yes, Carl, I have a question, I think that this falls under the operation of the Pueblo Reservoir. I know that we have had quite a discussion in District 67 and the upstream ditches and when I asked them why they don't operate Pueblo Reservoir the way District 67 has to operate their water in John Martin they tell me that they are not under the Compact and that they don't have to do it that way in Pueblo Reservoir. Am I right or am I wrong thinking that they ought to operate the same that we do in Pueblo.

Mr. Bentrup: We have the difference of opinion with Pueblo on _____

Mr. Cliff Verhoff(?): We have to run all our storage water out before we can get on the river except these last few years, we're storing the direct flow of water the same as we did in John Martin. I believe that they should have to pay the price the same as we do. We should have to run that water out before they can get back on the river the same as these ditches do below John Martin.

Mr. (?): We are doing exactly the same thing in Pueblo, as we're doing in John Martin Reservoir. In fact we give up these water right services in the winter time that they are storing in Pueblo Reservoir now.

Mr. Bentrup: I am kind of inclined to agree with you there, with your point.

Mr. (?): I think that it is something that ought to be looked at in the future.

Mr. Bentrup: Any other questions?

Mr. Pope: Lee had one. Carl, Lee has one.

Mr. Bentrup: Oh, pardon me.

Mr. Leland Rolfs: Just one question, maybe I missed it back there. On this carrying over this 5,000 a.f. extra acre/feet for another 45 days. What exactly was the authority and the reason that that was done?

Mr. Thomson: It is under our contract — we maintain a contract with the Bureau and there is a section in there that winter stored water not used becomes project water and we don't agree with that and the idea

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was to get it out and the idea is conservation. Now I know that you are a lawyer and the law is the law is the law is the law but a lot of people can go broke trying to abide by the law and we just felt that 45 days would help these people out. They understand that it will not be, cannot be extended. It is written into the agreement. There are only two entities took advantage of that so it is instead of May 1, it is June 15 and that is a very. But it is a funny thing we are fighting over too much water, I could understand that if we were sitting down here in the middle of a drought arguing about a half of an acre-foot but you know that it is up there and you know when it is going to be released, so _____

Mr. _____: That's right here.

Mr. Pope: Tommy what is the status of the

Mr. Thomson: Satellite.

Mr. Pope: No, you might comment on that also, but the specific, I understand based on the news articles, and what not, that the ditches are trying to agree to instead of a voluntary program getting into a decree. What is the status of that?

Mr. Thomson: You should have gotten your notice of that meeting. I called a meeting of the Board of Trustees and Cliff has already put me on notice, I guess, with his last comment. On the 18th of May, in La Junta, and that is when we will have all the entities together, you have all received drafts of the proposed decrees which will be identical to the program that we have had so we will see how that flies and I am going to be in the hot seat on that one. But we will know better on the 18th just where we go. But we are all optimistic that having worked the program eight years making adjustments and so on that we can work it out.

Mr. Pope: That does include basically the same provisions as the voluntary programs of the last several years.

Mr. Thomson: Yes Sir, including this last year the request that Amity made which was adopted by that and that is the transit loss between Las Animas gage and John Martin. But you will be kept fully informed on that and I apologize. We want your input, I mean, that is the reason that you are on the mailing list and of course you are invited to the meetings I acknowledge that it is pretty difficult to get to La Junta from Kansas for some of those meetings but anytime that you have a question, Carl has been very good about this working on that basis

[Mr. Thomson concluded this item with a discussion of the satellite program.]

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RECOMMENDATIONS OF THE OPERATIONS COMMITTEE TO THE ARKANSAS RIVER COMPACT ADMINISTRATION

July 2, 1984

Fort Lyon Resolution

The Fort Lyon Canal Board of Directors has requested the right to store in John Martin Reservoir water they have stored in Blue Lake (aka Adobe Creek Reservoir). On June 1, 1984, Blue Lake Dam was found to be incapable of safely storing the entire amount of water impounded therein and the State Engineer ordered the water to be drawn down to a safe level in the lake.

The Operations Committee, after investigating the facts of this matter, recommends that the Arkansas River Compact Administration allow the Fort Lyon Canal Company to store water released from Blue Lake Dam in the account in John Martin Reservoir established for them pursuant to Article III B of the Resolution Concerning the Operation of John Martin Reservoir subject to the following conditions:

1. The total amount of water stored in said account from all sources shall not exceed 20,000 AF.
2. The amount of water delivered to said account from water released from Blue Lake shall be determined by the Operations Secretary of the Administration, Robert W. Jesse, Division Engineer, Water Division No. 2, State of Colorado.
3. The only waters which can be stored in said account must be waters of the Arkansas River.
4. The water delivered from Blue Lake to said account shall be subject to a 35 percent storage charge, which storage charge shall be credited directly to conservation storage and shall be released into the Kansas and Colorado accounts pursuant to Article II D of the Resolution Concerning the Operation of John Martin Reservoir dated April 24, 1980.
5. Storage of said water in John Martin Reservoir shall be carried out in compliance with state law.
6. This authorization is made solely because of the unique situation that now exists at Blue Lake Dam and the authorization shall expire on November 1, 1984, or when a cummulative total of 20,000 AF, exclusive of storage charges, shall have been stored in said account, whichever occurs first; provided, however, that such authorization shall not constitute a waiver of any rights which the states of Kansas and Colorado have under the terms of the Kansas-Colorado Arkansas River Compact nor set any precedent for future action.
7. This authorization is retroactive to the first day upon which the Fort Lyon Canal released water from storage for dam safety purposes and shall be limited to releases which were made for that purpose and which resulted in water being stored in John Martin Reservoir that would not have otherwise reached John Martin Reservoir.
8. This authorization shall entitle the Fort Lyon Canal Company to store no more water in the aggregate (inclusive of storage charges) than

could have been stored in Blue Lake during compact year 1984 pursuant to the company's storage decree for Blue Lake had storage in Blue Lake not been restricted by the State Engineer for dam safety purposes.

This recommendation is intended only to authorize the storage of water in John Martin Reservoir and does not superseded, abrograte or otherwise eliminate or modify any provisions of the laws of the State of Colorado pertaining to the use or administration of water rights.

APPENDIX "C-4"

MINUTES OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

SPECIAL TELEPHONIC MEETING

July 2, 1984

A special telephonic meeting of the Arkansas River Compact Administration was called to order at 12:15 p.m. (MDT) by Mr. Frank Cooley, Chairman and federal member. Other members participating in the telephonic conference call were:

For Colorado:
Carl Genova, Pueblo
Leo Idler, Lamar
J. William McDonald, Denver

For Kansas:
Carl Bentrup, Deerfield
Ron Olomon, Garden City
David Pope, Topeka

Becaue of a poor telephone connection, Mr. Bentrup, in his capacity as vice-chairman, chaired the conference call.

The purpose of the meeting was to consider recommendations of the Operations Committee concerning authorization for the Ft. Lyon Canal Company to store water released from Blue Lake Dam in the company's account in John Martin Reservoir established pursuant to Article III B of the resolution concerning the operation of John Martin Reservoir, which water had been released at the order of the Colorado State Engineer for dam safety purposes. After discussion of and changes to draft recommendations of the Operations Committee, which draft had been forwarded to the members of the Administration in advance of the telephonic conference call, Mr. McDonald moved, seconded by Mr. Olomon, that the recommendations of the Operations Committee attached hereto as Attachment A be approved by the Administration subject to Mr. Pope and Mr. McDonald reaching agreement on language for item numbered 8 and subject to the typed version of the recommendations of the Operations Committee being mailed out for final approval. The motion was passed upon the unanimous vote of both states.

(Mr. Pope and Mr. McDonald agreed to language for item numbered 8 in subsequent telephone conversations, whereupon the typed recommen-

dations of the Operations Committee were circulated for review. Those recommendations, as attached to these minutes, were approved.)

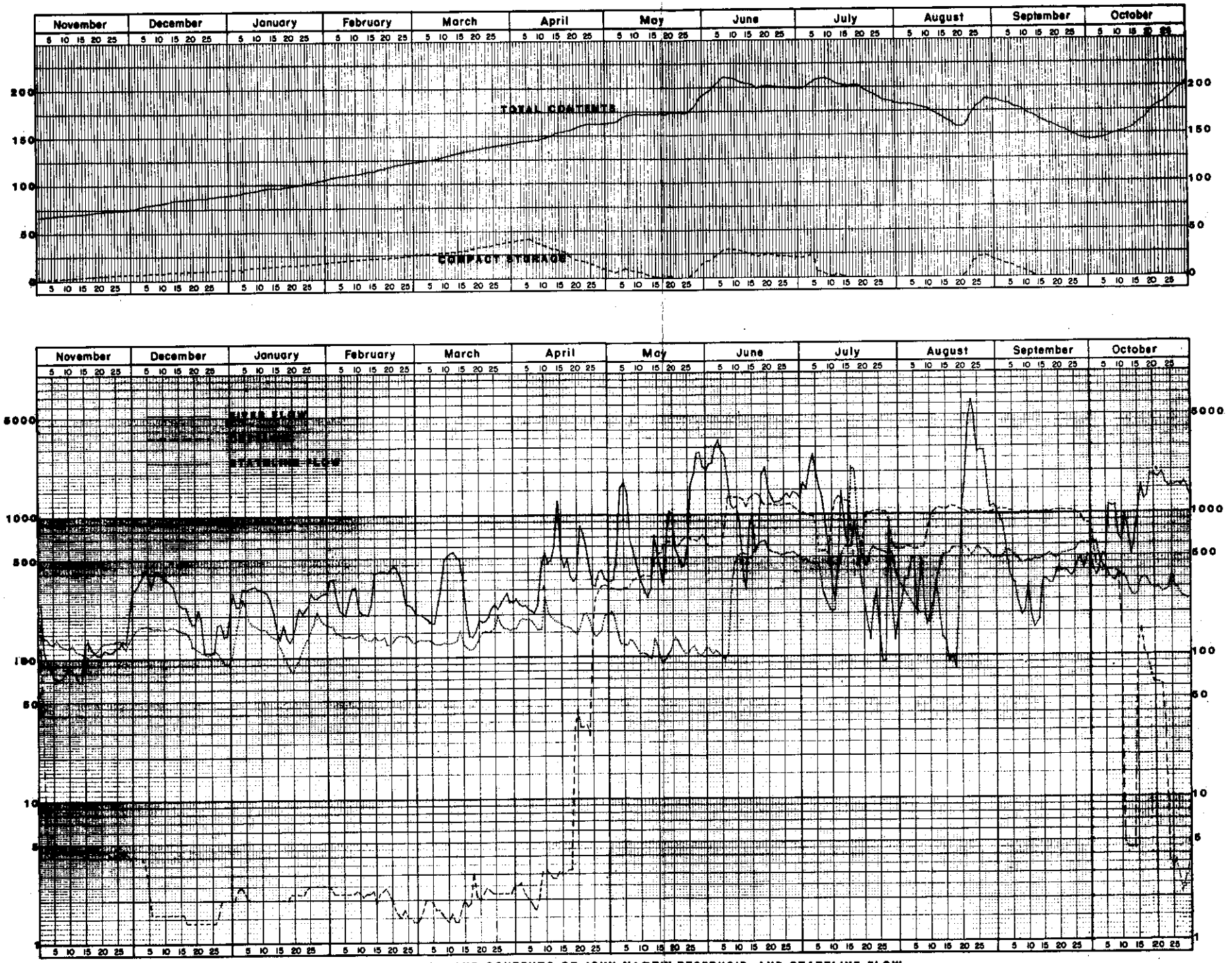
During the course of the telephonic conference call, Mr. McDonald advised that the Amity Canal Company wished to store Great Plains water in its account in John Martin Reservoir. Mr. McDonald observed that the Administration had already granted an account for this purpose, and no further action was required. He noted that the State Engineer would not, however, permit Amity to store in its account in John Martin unless the objectors in the Colorado water court proceeding concerning the transfer of the Great Plains storage decree to John Martin Reservoir agreed by stipulation to such storage this summer. Mr. McDonald indicated that he would keep Kansas advised of this matter.

There being no further business to come before the Administration, the special telephonic meeting was adjourned at 12:45 p.m. (MDT).

The foregoing minutes were approved by the Administration at its regular annual meeting held in Lamar, Colorado, on December 11, 1984.

/s/ Leo Idler,
Recording Secretary

/s/ Frank Cooley,
Chairman



INFLOW, OUTFLOW AND CONTENTS OF JOHN MARTIN RESERVOIR, AND STATELINE FLOW

COMPACT YEAR 1984

NOVEMBER 1, 1983 TO OCTOBER 31, 1984