

Thirty-Seventh Annual Report

**Arkansas River
Compact
Administration
(1985)**

MAR 15 1988

**For The Report-Year
November 1, 1984 to October 31, 1985**

**1000 South Main Street
Lamar, Colorado 81052**

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, CARLE 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
1985

Report-Year November 1, 1984 to October 31, 1985

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, 1984 through October 31, 1985, 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 and Treasurer:

Leo Idler

Operations Secretary:

Robert Jesse

3. Standing Committees:

Administrative and Legal Committee:

Carl E. Bentrup (Chairman)
J. William McDonald

Engineering Committee:

David Pope (Chairman)
Carl G. Genova

Operations Committee:

Ronald Olomon (Chairman)
Leo Idler

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

4. Meetings:

December 11, 1984	Annual Meeting, Lamar, Colorado
March 28, 1985	Special Meeting, Garden City, Kansas
July 12, 1985	Special Meeting, Lamar, Colorado
October 8, 1985	Special Meeting, Garden City, Kansas

The minutes of the December 11, 1984 Annual Meeting are included as Appendix "C-1."

The minutes of the other meetings are not included because transcripts of these minutes have been provided to the Compact Administration and to the Administration members.

5. Fiscal

TREASURER'S REPORT

July 1, 1984 thru June 30, 1985

ARKANSAS RIVER COMPACT ADMINISTRATION

CASH BALANCE JULY 1, 1984.....\$45,232

RECEIPTS:

Revenue from Assessments:

Colorado.....	\$16,825
Kansas.....	11,216
Interest.....	5,838

TOTAL RECEIPTS.....\$33,879

DISBURSEMENTS:

Insurance.....	100
Geological Survey.....	12,042
Equipment.....	420
Professional Fees.....	350

Office Supplies.....	117
Printing.....	2,289
Secretary's Salary.....	3,347
Payroll Taxes.....	416
Telephone.....	2,143
Typing, Mailing & Miscellaneous.....	248
Travel & Meetings.....	207
TOTAL DISBURSEMENTS.....	21,679
EXCESS OF RECEIPTS OVER DISBURSEMENTS.....	12,200
CASH BALANCE, JUNE 30, 1985.....	\$57,432

REVISED ADOPTED BUDGET AND ASSESSMENTS
Fiscal Year July 1, 1986-June 30, 1987

BUDGET ITEMS	
A. SALARIES:.....	\$12,950
1. Recording Secretary.....	\$ 3,600
2. Operations Secretary.....	6,100
3. Payroll Taxes.....	250
4. Court Reporter.....	3,000
B. GAGING STATIONS.....	12,500
1. U.S. Geological Survey Cooperative Agreement.....	12,500
2. Telemark Telephone John Martin Dam Granada Gage.....	0
C. OPERATING EXPENSE.....	8,300
1. Treasurer's Bond.....	100
2. Annual Report.....	5,000
3. Office Expense.....	2,700
A. Telephone.....	\$2,000
B. Supplies.....	350
C. Printing.....	350
4. Travel and Meetings.....	100
5. Audit.....	400
D. CONTINGENCY.....	2,000
E. TOTAL BUDGET.....	35,750
ASSESSMENTS July 1, 1986-June 30, 1987.....	\$28,000
Colorado (60%).....	16,800
Kansas (40%).....	11,200
EXPENDITURE IN EXCESS OF ASSESSMENTS*.....	7,750
*From Surplus Funds	
Revised and adopted by the Arkansas River Compact Administration at the December 10, 1985, Annual Meeting.	
/s/ Leo Idler, Recording Sec., 12-10-85	

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 in the Arkansas River basin. The reservoir provides 270,375 acre-feet of storage capacity for flood control and protection of the fertile Arkansas River Valley below the dam. It also 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 downstream 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 water for irrigation. 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.

The release of stored flood waters in excess of the conservation and recreation pool or above elevation 3,851 feet are planned so that, when combined with flows originating downstream from the dam, the capacity of the channel will not be exceeded. Downstream flood damages prevented by John Martin dam already exceed the cost of the project and have surpassed 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, 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 marks this important site.

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 structures. 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 1985 Arkansas River Compact year and the winter storage season for John Martin Reservoir began at 0001 hour November 1, 1984 with 204,907 acre-feet in the reservoir distributed as follows:

Agreement Accounts	191,697 a.f.
Permanent Pool	13,210 a.f.
	<hr/>
	204,907 a.f.

Winter Storage ended at 2400 hour on March 31, 1985 with a total of 149,194.91 acre-feet of winter water stored during this period. This water was distributed to the accounts as follows:

Compact Water	116,119.62 a.f.
Amity Canal, Article III water	14,509.88 a.f.
Ft. Lyon Canal Article III water	15,102.12 a.f.
Las Animas Consolidated	
Article III water	3,463.29 a.f.
	<hr/>
	149,194.91 a.f.

Following the transfer of the stored winter 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 2400 hours March 31, 1985 were as follows:

Compact Water	115,762.82 a.f.
Amity Canal, Article III Water	81,004.17 a.f.
Ft. Lyon Canal, Article III water	14,425.74 a.f.
Las Animas Consolidated	
Article III water	3,463.29 a.f.
Golf Course Exchange Water	113.53 a.f.
Agreement Water	115,738.71 a.f.
Permanent Pool	12,814.74 a.f.
	<hr/>
	343,323.00 a.f.

The summer storage period began at 0001 hour April 1, 1985 with a total reservoir content of 343,323 a.f. On May 26, 1985 the top of the Conservation Pool at an elevation of 3851.85 was reached. Continued inflow made it necessary to spill water from the various agreement accounts in order to prevent invasion of the flood control pool. The spills were made in accordance with the spill criteria adopted by the Administration on December 11, 1984. A total of 87,166.13 a.f. was spilled from the various accounts.

During the summer season inflow to the Conservation Pool totalled 272,249.32 acre-feet. 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, 1985. The

summer operations of the Conservation Pool only 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
Apr. 1	115762.82	24166.32	1326.65	74458.11	64144.38
May 1	64144.38	91036.63	1102.67	76860.78	77217.56
June 1	77217.56	72315.62	1307.22	57025.74	91200.22
July 1	91200.22	49688.69	1461.17	76860.78	62566.96
Aug. 1	62566.96	21540.61	970.41	73796.24	9340.92
Sept. 1	9340.92	1377.73	23.88	10694.77	0
Oct. 1	0	12123.72	.01	12123.71	0

TOTALS 272249.32 6192.01 381820.13

During the summer storage season 2,432.42 acre-feet was spilled from the permanent pool to avoid encroachment into the flood control pool. Also, 45.72 acre-feet were stored in the permanent pool during July under the Colorado Division of Wildlife's Muddy Creek decree.

No Article III water was stored during the summer storage season. However, Article III water was released to the various ditches and spilled to prevent invasion of storage into the flood control pool. Total Article III releases, including spills to the river, were as follows:

Amity Canal	78,299.11 a.f.
Ft. Lyon Canal	14,090.59 a.f.
Las Animas Consolidated Canal	3,382.79 a.f.

The Golf Course Exchange Water account of 110.21 a.f. was also spilled as a result of the flood control operations and the account was thus cancelled out.

At the end of the compact year the Article III and the Golf Course accounts were all empty.

The operation of the Transit Loss Account during the compact year is shown below:

Transit Loss Account					
Month	Contents Beg. of Month A.F.	Inflow A.F.	Evaporation A.F.	Release A.F.	Contents End of Month A.F.
November		31745.60	0	177.81	10100.22* 21467.57
December		21467.57	0	117.61	0 21349.96
January		21349.96	0	87.88	0 21262.08
February		21262.08	0	3.77	0 21258.31
March		21258.31	0	263.17	0 20995.14**
Subtotals			0	650.24	10100.22
April		20995.14	11249.08	153.80	22334.01 9756.41
May		9756.41	0	181.72	0 9574.69
June		9574.69	0	138.63	0 9436.06
July		9436.06	0	205.00	36.16 9194.90
August		9194.90	0	220.51	198.35 8776.04
September		8776.04	0	149.86	99.17 8527.01
October		8527.01	0	95.79	0 8431.22
Subtotals			11249.08	1145.31	22667.69
TOTAL			11249.08	1795.55	32767.91

*Transferred 9977.19 A.F. (11/35 or 31/43%) to Kansas account.

Transferred 123.03 A.F. (Golf Course Exchange) to Conservation Pool.
Left remainder in account pending Arkansas River Compact Administration decision.

**Transferred to Colorado District No. 67 ditches on April 1, 1985, according to Article III of Operating Resolution of 1980.

At the close of the compact year on October 31, 1985 at 2400 hours the contents of John Martin Reservoir were allocated as follows:

Compact Water	0 a.f.
Article III Water	0 a.f.
Permanent Pool	9,159.73 a.f.
Agreement Water	271,792.27 a.f.
	<hr/>
	280,952.00 a.f.

The technical data for this section were 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 cooperative agreements with the U.S. Geological Survey for the fiscal year October 1, 1984, to September 30, 1985, in the amount of \$24,800 -- \$12,400 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 1985.

11. Investigations

In February, 1985, the State of Kansas requested that a special meeting of the Administration be held on March 28, 1985, to discuss alleged violations of the Arkansas River Compact.

On February 26, 1985, the Kansas Attorney General wrote to the Colorado Attorney General to advise him of the purpose of the special meeting, to outline concerns about the operation of Trinidad and Pueblo Reservoirs and the lack of groundwater regulation in Colorado, and to inquire whether any of the designated concerns were "within the purview

of the administration" and conducive to arbitration under Article VIII(D) of the Compact.

On March 26, 1985, the Colorado representatives notified the Administration of possible violations of various provisions of the Arkansas River Compact by the State of Kansas and Kansas water users.

At a special meeting of the Administration held on March 28, 1985, in Garden City, Kansas, Colorado voted against resolutions proposed by Kansas that certain issues related to the operation of Trinidad and Pueblo reservoirs were subject to and appropriate for arbitration pursuant to Article VIII(D).

The Administration then adopted a resolution authorizing an investigation pursuant to Article VIII(H) of the Compact of allegations of violations of provisions of the Compact in Colorado and Kansas. The resolution established a committee consisting of the Director of the Colorado Water Conservation Board, J. William McDonald, or his designee and the Chief Engineer of Kansas, David L. Pope, or his designee to conduct the investigation.

At a meeting on June 3, 1985, the Investigating Committee agreed to compile streamflow data and to prepare a series of mass curves as a first step in the investigation.

At a meeting of the committee on July 12, 1985, the Investigating Committee could not agree on the conclusions to be drawn from the mass curves and it was agreed that Mr. McDonald and Mr. Pope would each prepare a written report analyzing the mass curves. The reports were exchanged on September 6, 1985.

At a special meeting of the Administration on July 12, 1985, at the request of the Kansas representatives, the Administration agreed to amend the March 28, 1985, resolution to include an investigation of whether Colorado had complied with the provisions of Article V(F) of the Compact.

On September 17, 1985, the investigating committee met in Santa Fe, New Mexico, to discuss the reports analyzing the mass curves. At the meeting, Mr. McDonald and Mr. Pope were unable to agree on conclusions to be drawn from the mass curves and agreed to submit their reports to the Administration along with a separate statement explaining the reasons for the differences in their conclusions.

At a special meeting of the Administration on October 8, 1985, the Administration considered the separate reports and statements submitted by Mr. McDonald and Mr. Pope and adopted the following resolution regarding the status of the investigation:

"WHEREAS, pursuant to the Resolution of March 28th, 1985 an Investigating Committee was constituted to investigate alleged violations of the Arkansas River Compact; and

WHEREAS, in conjunction with the existing data and engineering studies the Committee agreed to prepare a series of single and double mass diagrams to analyze primarily the regimen of the Arkansas River; and

WHEREAS, the Colorado representative to the Investigating Committee has concluded that further investigation of whether the waters of the Arkansas River have been or are being materially depleted in usable quantity or availability should first examine: (1) reduced diversions by ditches in Colorado Water District 67; (2) the operating

plan for John Martin Reservoir; (3) decreased plains precipitation; and (4) soil conservation measures; and

WHEREAS, the Kansas representative to the Investigation Committee has concluded that further investigation of whether the waters of the Arkansas River have been or are being materially depleted in usable quantity or availability should examine: (1) development and use of alluvial wells in Colorado; (2) pre-compact use of the conservation pool of John Martin Reservoir; (3) transmountain return flows; (4) post-compact development and use of upstream storage reservoirs; (5) tributary inflows and precipitation records; (6) extreme flood events and their impact on stream flow data; (7) surface diversions in Colorado Water District 67, 17, and 14; (8) development of stock ponds in Colorado and their potential impacts on tributary inflow to the Arkansas River; (9) the impacts of the 1980 Storage Resolution for John Martin Reservoir on relationship of usable stateline flows to upstream flows; and (10) tributary inflows from the eastern plains of Colorado.

NOW, THEREFORE, Be it Resolved by the Arkansas River Compact Administration that the Investigation Committee constituted by the Resolution of March 28th, 1965, as amended on July 12, 1965, shall continue with its investigation of matters upon which the Committee has mutually agreed that further investigation should be undertaken."

APPENDICES FOR ANNUAL REPORT OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

For the Report-Year
November 1, 1984, to October 31, 1985

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APPENDIX "A-1"

Auditor's Report

ARKANSAS RIVER COMPACT ADMINISTRATION

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

To the Representatives
Arkansas River Compact Administration
Lamar, Colorado 81052

We have examined the Statement of Assets and Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of June 30, 1985, 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, 1985. 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, 1985, 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 14, 1985
Lamar, Colorado

**ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF ASSETS AND LIABILITIES
ARISING FROM CASH TRANSACTIONS
June 30, 1985**

ASSETS:

Cash & Savings.....	\$57,432
Equipment.....	16,313
Concrete Control.....	8,000
TOTAL ASSETS.....	\$81,745

LIABILITIES:

0

CASH BASIS EQUITY:

Expended:

Equipment.....	16,313
Concrete Control.....	8,000
Unexpended.....	57,432

TOTAL CASH BASIS EQUITY—NOTE 1a..... 81,745

TOTAL LIABILITIES & CASH BASIS EQUITY.....\$81,745

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, 1985**

CASH BALANCE, JULY 1, 1984.....\$45,232

RECEIPTS:

Revenue from Assessments:

Colorado.....	\$16,825
Kansas.....	11,216
Interest.....	5,838

TOTAL RECEIPTS..... 33,879

DISBURSEMENTS:

Insurance.....	100
Geological Survey.....	12,042
Equipment.....	420
Professional Fees.....	350
Office Supplies.....	117
Printing.....	2,289
Secretary's Salary.....	3,347
Payroll Taxes.....	416
Telephone.....	2,143
Typing, Mailing & Miscellaneous.....	248

Travel & Meetings.....	207
TOTAL DISBURSEMENTS.....	21,679
EXCESS OF RECEIPTS OVER DISBURSEMENTS.....	12,200
CASH BALANCE, JUNE 30, 1985.....	\$57,432

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, 1984 TO JUNE 30, 1985**

	BUDGET	ACTUAL	OVER/ UNDER
CASH BALANCE, JULY 1, 1984.....	\$ 0	\$45,232	\$45,232
RECEIPTS:			
Revenues from Assessments:			
Colorado—60%.....	16,825	16,825	0
Kansas—40%.....	11,216	11,216	0
Interest.....	0	5,838	5,838
TOTAL RECEIPTS.....	28,041	33,879	5,838
TOTAL TO ACCOUNT FOR.....	28,041	79,111	51,070
DISBURSEMENTS:			
U.S. Geological Survey.....	12,500	12,042	(458)
Secretary's Salary.....	3,600	3,347	(253)
Operations Secretary.....	6,100	0	(6,100)
Bond & Insurance.....	100	100	0
Telephone.....	2,500	2,143	(357)
Payroll Taxes.....	241	416	175
Typing & Mailing.....	5,000	248	(4,752)
Travel & Meeting.....	200	207	7
Professional Fees.....	350	350	0
Office Supplies.....	350	117	(233)
Printing.....	350	2,289	1,939
Equipment.....	0	420	420
Contingency.....	2,000	0	(2,000)
TOTAL DISBURSEMENTS.....	33,291	21,679	(11,612)
CASH BALANCE, JUNE 30, 1985.....	(5,250)	\$57,432	62,682

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

**ARKANSAS RIVER COMPACT ADMINISTRATION
NOTES TO CASH BASIS STATEMENTS
JUNE 30, 1985**

- 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 "A-2"

OPERATIONS COMMITTEE REPORT

On November 1, 1984 the Conservation Pool of the John Martin Reservoir was empty. The reservoir contained 204,907 acre feet in the various accounts.

On April 1, 1985, John Martin Reservoir contained 115,763 acre feet of water in the Conservation Pool, and water in the various accounts totaled 214,745 acre feet. The Permanent Recreation Pool contained 12,815 acre feet of water. The reservoir, at that time, contained a total of 343,323 acre feet of water.

On May 26, 1985 inflow to John Martin Reservoir was sufficient to cause the Conservation Pool to become full and the incoming water to begin to invade the Flood Pool. At that time, in accordance with the Operating Plan for John Martin Reservoir of 1980 and the December 1984 agreement of the Arkansas River Compact Administration, the United States Army Corps of Engineers assumed temporary control of the reservoir, and proceeded to spill the various accounts in their proper sequence.

The Golf Course, Amity Canal, Ft. Lyon Canal, and Las Animas Canal accounts were spilled in their entirety before the reservoir was lowered to the top of the Conservation Pool. In addition 2,432 acre feet of water was also spilled from the Permanent Recreation Pool. 1,761 acre feet of water was spilled from the Kansas accounts and 2,642.72 was from the Colorado account. No water was released from the Transit Loss Account during the forced release of the water from the reservoir.

During the irrigation season 51,530 acre feet of water was released from John Martin Reservoir on demand of the Kansas Ditches, and 151,918 acre feet of water was released to the Colorado ditches by request. The Frontier Ditch received 4,233 acre feet of water and 65,370 acre feet of water arrived at the Coolidge gauge. Transit Loss Account releases were 1,673 acre feet.

On October 31, 1985, John Martin Reservoir contents totaled 280,952 acre feet of water of which 271,792 acre feet was Agreement Water. The Permanent Pool contained 9,160 acre feet of water.

The foregoing information was obtained by the Operations Committee from the records of Mr. Robert W. Jesse, Operations Secretary of the Arkansas River Compact Administration.

Respectfully submitted,
/s/ Ron Olomon, Chairman

/s/ Jim Rogers, Member

APPENDIX "B-1" ARKANSAS RIVER ABOVE PUEBLO, COLORADO

Report Year ending October 31, 1985
CDWR Records
CDWR Gaging Station No. 07089400

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	1270	107	117	680	685	770	2140	3020	2100	1480	310	510
2	1170	110	162	680	710	800	1640	2480	2030	2030	296	475
3	980	112	296	680	710	1370	1700	2800	1800	1530	296	430
4	967	112	485	680	710	1760	1760	2860	1810	1670	334	406
5	1000	107	590	680	710	1510	1860	3150	1760	1350	338	465
6	1060	107	575	680	575	1590	2270	2840	1760	1120	374	470
7	1050	107	560	680	535	1680	2860	3670	1830	872	430	470
8	960	107	540	728	535	1710	2630	5200	1920	800	390	425
9	880	106	515	758	580	1740	2400	5390	1970	806	360	425
10	818	107	505	758	685	1970	2430	5340	1940	764	360	470
11	842	107	500	838	680	1860	2500	5380	1850	939	630	435
12	878	107	486	939	675	1560	2370	5470	1850	939	580	435
13	925	107	485	1020	600	2210	2100	5530	1720	1020	525	435
14	795	107	485	1040	580	2080	1970	5640	1600	1010	525	485
15	94	107	485	1010	580	1740	1830	5430	1590	1030	570	545
16	93	107	485	918	580	1260	1260	4170	1580	880	635	645
17	94	107	490	918	635	1200	904	4200	1540	722	716	734
18	96	107	490	918	746	1380	1060	4250	1540	625	716	690
19	96	107	490	918	753	1550	1660	4030	1750	716	716	600
20	96	107	485	967	704	1550	1890	3730	2590	872	665	510
21	97	107	485	985	854	1340	2080	3400	3540	853	530	450
22	99	107	485	988	904	1070	2450	3110	3770	960	452	425
23	99	107	665	988	918	872	2160	3160	3130	967	334	475
24	102	110	794	981	887	860	1940	3130	3810	985	440	535
25	101	110	854	884	860	818	2040	2970	2770	960	378	535
26	104	115	880	740	860	842	2160	2790	2480	918	346	535
27	104	115	880	685	806	866	2400	2720	2120	925	406	535
28	104	115	848	655	770	866	2620	2360	1940	836	440	455
29	104	117	716	--	770	1090	3200	2020	2050	770	440	370
30	105	117	685	--	770	1970	3520	2060	2380	390	500	450
31	--	117	685	--	770	--	3440	--	1850	346	--	500
TOTAL												
sec. ft.	15144	3388	17312	23447	22286	41864	67644	112300	66430	28615	14042	15325
ac. ft.	30038	6720	34338	46507	44165	82841	134172	222747	131764	58543	27862	30397

THE YEAR 849,844 acre-feet

APPENDIX "B-2" **ARKANSAS RIVER AT LAS ANIMAS, COLORADO**

Report Year ending October 31, 1985
USGS Records
USGS Gaging Station No. 07124000

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	983	216	151	700	407	284	561	2150	143	1000	46	75
2	982	196	126	650	391	221	663	1960	104	622	46	80
3	994	192	150	650	383	220	504	1540	96	887	50	82
4	885	188	160	650	441	182	500	872	84	963	52	81
5	679	216	200	700	407	243	440	931	62	519	49	74
6	614	216	206	700	428	392	383	1020	61	483	47	73
7	603	234	170	700	425	205	604	972	66	191	48	69
8	609	246	188	700	406	189	1300	686	60	124	53	70
9	558	234	194	750	390	192	1040	1870	50	184	52	74
10	472	222	184	800	211	143	1090	2430	46	182	48	78
11	418	230	250	850	166	337	946	2830	43	96	47	106
12	335	228	300	850	164	422	790	2810	44	79	51	138
13	305	228	400	900	180	472	1190	2660	42	63	55	145
14	312	228	500	900	162	302	1500	2960	50	70	55	116
15	370	201	550	900	146	772	887	2890	65	73	54	81
16	654	194	592	950	170	857	615	2850	71	82	59	81
17	383	189	610	950	114	662	627	2060	72	59	64	92
18	237	177	650	950	106	291	581	1520	67	59	60	99
19	195	176	650	900	115	107	315	1580	96	61	54	105
20	186	173	600	908	164	164	696	1590	136	60	55	127
21	172	171	600	828	188	74	858	986	308	55	59	103
22	252	166	600	835	185	61	1750	726	2260	55	60	109
23	298	163	600	751	194	84	3100	488	2000	55	57	96
24	312	159	600	689	262	86	2840	447	2110	52	54	96
25	291	147	700	727	295	80	2750	367	2720	48	56	92
26	277	152	700	594	296	88	2550	385	2360	47	57	92
27	252	153	658	421	244	83	2650	302	1060	50	63	90
28	196	158	663	409	247	102	2270	247	1030	51	63	88
29	206	155	693	---	260	142	2490	307	1330	49	59	82
30	210	145	700	---	258	138	2360	289	2000	49	62	82
31	---	155	700	---	330	---	2320	---	1340	50	---	87
TOTAL												
sec. ft.	13240	5911	14047	21312	8118	7597	41122	42725	19987	6440	1635	2865
ac. ft.	26262	11724	27862	42272	16102	15069	81565	84745	39644	12774	3243	5683

THE YEAR 366,946 acre-feet

APPENDIX "B-3" PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

Report Year ending October 31, 1965
USGS Records
USGS Gaging Station No. 07128500

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	42	23	23	25	42	40	40	45	9.1	27	3.2	38
2	55	26	22	36	42	47	50	17	5.0	25	3.1	50
3	62	34	24	38	40	44	43	30	5.3	20	3.0	54
4	58	21	30	40	38	44	19	33	5.3	45	3.4	56
5	53	31	33	36	38	30	13	35	4.4	31	3.5	57
6	53	32	35	36	39	31	43	41	3.8	28	3.5	56
7	47	36	36	37	38	36	41	46	3.3	23	3.5	58
8	39	37	36	37	38	31	40	42	3.1	26	3.4	52
9	41	37	40	34	38	27	24	38	3.1	21	3.6	52
10	42	38	35	34	38	35	35	33	4.0	21	3.2	55
11	44	44	30	39	37	28	15	18	3.7	25	3.2	55
12	39	38	30	36	37	14	42	23	3.8	24	3.8	111
13	40	42	30	35	38	9.4	74	23	3.7	23	3.9	210
14	34	30	30	40	52	9.2	66	14	2.9	20	18	105
15	34	30	35	42	49	9.2	53	19	9.5	26	17	125
16	35	30	40	45	48	8.9	42	11	14	17	10	174
17	43	30	45	45	90	8.5	48	21	21	13	7.2	111
18	37	30	43	45	87	7.0	42	19	20	10	7.1	92
19	34	28	30	45	77	8.8	34	26	24	15	9.7	87
20	35	32	30	50	52	18	34	27	31	62	7.0	92
21	36	34	27	53	69	11	55	20	12	17	8.8	93
22	36	34	30	46	69	8.1	112	13	14	7.6	10	85
23	41	34	33	46	64	10	519	9.1	78	6.6	13	85
24	39	28	37	46	36	13	707	8.1	79	5.6	14	79
25	35	21	34	45	45	18	207	10	94	5.9	16	71
26	62	28	36	44	45	22	99	12	36	6.7	24	63
27	74	48	42	44	40	27	120	9.5	21	4.3	28	58
28	55	35	41	39	35	29	101	8.6	8.5	4.1	36	55
29	61	30	41	---	38	48	71	11	17	7.4	28	58
30	37	30	31	---	32	56	49	6.6	22	6.4	30	59
31	---	25	21	---	21	---	52	---	14	4.1	---	60
TOTAL												
sec. ft.	1343	997	1030	1138	1452	728.1	2890	666.9	575.5	577.7	328.1	2456
ac. ft.	2664	1978	2043	2257	2880	1444	5732	1327	1142	1146	651	4871

THE YEAR 28,135 acre-feet

APPENDIX "B-4"

RIVER FLOW INTO

JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1965
USGS Records

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	1025	239	174	725	449	324	801	2195	152.1	1067	49.2	113
2	1037	222	150	688	423	268	713	1977	109	847	49.1	130
3	1056	225	174	688	423	264	547	1570	103.3	907	53	136
4	943	209	180	690	749	226	519	905	89.3	1008	55.4	137
5	732	247	233	736	445	273	453	966	73.4	550	52.5	131
6	687	248	241	736	467	423	436	1061	64.8	491	50.5	129
7	650	270	206	737	463	241	645	1018	69.3	214	51.5	127
8	648	286	224	737	444	220	1340	728	83.1	150	56.4	122
9	599	271	224	784	418	219	1064	1908	53.1	205	55.6	126
10	514	280	219	834	249	178	1065	2463	50	203	51.2	133
11	462	274	280	889	205	365	983	2848	46.7	123	50.2	161
12	374	266	330	886	201	436	832	2833	47.8	103	54.8	249
13	345	270	430	935	218	481.4	1264	2883	45.7	86	58.9	335
14	346	258	530	940	214	311.2	1566	2994	52.9	90	73	221
15	404	231	585	942	195	781.2	940	2949	74.5	99	71	206
16	688	224	632	965	216	865.9	657	2861	85	79	69	255
17	426	219	655	955	204	670.5	675	2081	83	72	71.2	203
18	274	207	683	965	193	296	623	1539	86	69	67.1	191
19	229	204	680	945	192	115.8	349	1606	120	76	63.7	192
20	221	205	630	958	216	182	730	1607	167	122	62	219
21	208	205	627	881	257	85	913	956	321	72	67.8	196
22	288	200	630	881	254	68.1	1862	739	2274	62.6	70	194
23	339	187	633	797	258	94	3619	497.1	2078	61.6	70	183
24	351	187	637	735	298	101	3547	455.1	2189	57.6	68	175
25	326	168	734	772	331	98	2957	577	2814	53.9	72	163
26	339	180	736	638	343	110	2849	397	2396	53.7	81	155
27	328	202	700	465	294	110	2770	311.5	1081	54.3	91	148
28	251	183	704	448	282	131	2371	255.6	1038.5	55.1	99	143
29	267	185	734	---	298	190	2561	318	1347	56.4	87	140
30	247	175	731	---	290	194	2409	285.6	2022	55.4	92	141
31	---	180	721	---	351	---	2372	---	1354	54.1	---	147
TOTAL	14583	6908	15077	22450	9670	8325.1	44012	43393.9	20562.5	7017.7	1963.1	5321
sec. ft.	28925	13702	29605	44539	18982	16513	87298	86072	40786	13920	3894	10554

THE YEAR 395,081 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, 1985
Corps of Engineers Records
(Midnight contents in acre-feet from capacity table based on April/June 1980 hydrographic surveys and November 1980 aerial photographs used since August 12, 1981.)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	206696	231703	245723	277972	329563	343667	313659	355576	350306	335648	303875	277281
2	206694	232057	246095	278861	330234	343896	314206	354873	349487	335877	302377	277182
3	210704	232765	246374	279861	331129	344125	314752	356396	348316	337709	301082	277281
4	212378	233123	247211	280243	331464	344583	315190	355576	347027	336313	299938	276985
5	213635	233657	248141	281766	332135	344698	315518	355224	345271	340000	298891	276898
6	214891	234392	248513	282885	333031	345156	316174	355693	342750	340230	297425	276787
7	215994	234755	248885	284004	334387	345388	316383	355576	340688	338542	296378	276392
8	217115	235208	249442	285428	335075	345388	317814	354405	338168	338855	294807	276195
9	218148	235660	250279	286954	335991	345398	319127	355576	336106	337022	293655	276195
10	219097	236204	250851	288192	336679	344927	320439	356894	333702	335490	291352	275997
11	219659	236658	250830	290514	336907	344698	321205	356747	331688	333031	289802	275886
12	220821	237020	251587	294493	337366	343552	322406	356630	329339	331129	289192	275886
13	221339	238017	252062	297844	337709	342177	324065	356747	328990	328668	288276	274749
14	221942	238470	253012	300776	338053	340573	327326	356864	325089	327596	287259	274749
15	222373	239014	253963	303447	338282	339084	328779	356747	322963	325759	286649	274749
16	223494	239467	255387	305802	338740	337824	329898	358176	320677	323970	285936	274749
17	224362	239739	256431	308307	338869	337022	330682	361762	319883	321533	284919	274881
18	224883	240191	257951	312565	339427	335533	331576	361523	317486	319833	284207	279157
19	225336	240554	259566	315090	339542	333366	331912	358372	315299	318252	283393	279157
20	225689	240917	260611	317158	339542	331576	332685	357578	313878	317596	282982	279454
21	226308	241370	261284	318906	339898	329898	334158	356395	312237	316611	282173	279947
22	226750	241823	262058	320986	340115	328108	336679	356161	313659	315627	281766	280243
23	227812	242283	263025	322518	340344	325983	341376	355469	315518	314752	280952	280243
24	227989	242562	263991	324083	340573	323746	347613	354756	313222	313222	280243	280444
25	228784	242934	264958	325759	341032	321424	352882	354639	320986	312128	279552	280447
26	229227	243306	266698	326878	341376	320002	355459	354171	324305	310833	278960	280850
27	229846	243678	268727	327996	341490	317814	355576	353702	324753	309870	278565	280952
28	230377	244143	270764	328779	341719	316284	355459	352882	325983	308800	278288	281054
29	230908	244514	272640	---	342177	315190	355576	352180	327437	307622	277972	281054
30	231261	244879	274517	---	342864	314206	355107	351360	331576	306445	277577	280952
31	---	245351	276688	---	343323	---	355576	---	334158	305053	---	280952

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, 1985
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	2846	27767	39425	60799	101142	113883	62310	78543	89119	63316	7651	0	1
2	4950	27990	38711	61490	101908	111906	61506	81818	87229	60797	5722	0	2
3	7025	28582	38823	62077	102888	109891	60591	81788	85082	60873	3907	0	3
4	8784	28828	38564	62525	103327	106357	59836	82083	82823	60735	2198	0	4
5	10082	29245	40238	63875	104083	108306	58347	82004	86857	59758	741	0	5
6	11410	29843	40587	64540	105083	104485	57506	81593	78238	58506	0	0	6
7	12902	30081	40645	65405	106535	102554	56195	81555	76403	58558	0	0	7
8	13816	30383	41108	66504	107316	100708	56133	81591	74099	54775	0	0	8
9	14901	30706	41837	67680	108100	99038	55983	80812	72077	53667	0	0	9
10	15901	31114	42104	68394	108908	97036	55839	81778	68828	50759	0	0	10
11	16818	31483	42281	71147	108770	95308	55167	85011	68833	49049	0	33	11
12	17737	31678	42783	73559	109183	87753	54627	88617	68333	47180	0	0	12
13	18356	32546	43108	76223	109486	92525	55791	92108	63576	44780	0	0	13
14	19019	32873	43758	78573	109785	90980	56543	96832	61745	43739	0	0	14
15	19487	33282	44405	80507	109981	88638	56065	98388	59811	41960	0	0	15
16	20854	33635	45337	82254	110421	86666	55306	101584	57532	39086	0	0	16
17	21569	33803	46016	84470	110744	88100	54279	101584	55452	36597	0	0	17
18	22150	34153	47026	87083	111395	86731	53323	101584	54058	34506	0	0	18
19	22815	34417	48098	88949	111780	84602	51802	101584	51864	32383	0	0	19
20	23028	34683	48785	90657	112050	82812	50894	101584	50399	30615	0	0	20
21	23688	35041	49237	91867	112684	81132	50084	101584	48715	29488	0	0	21
22	24172	35396	49752	93710	113162	79288	50448	101584	49783	28478	0	0	22
23	24608	35761	50397	94809	113681	77181	50882	101584	51128	24358	0	0	23
24	25125	35948	51035	96203	114159	74829	51723	100808	53487	21815	0	0	24
25	25730	36231	51686	97645	114887	72583	50578	98247	55718	19891	0	0	25
26	26388	36530	52805	98500	115488	71186	62547	97797	58504	17798	0	0	26
27	26432	36806	54104	99466	116032	68851	65655	98343	58349	16384	0	0	27
28	26808	37186	55409	100283	116543	67277	69188	94594	58854	14634	0	0	28
29	27223	37471	56825	x	117198	65979	72365	92851	59227	12836	0	0	29
30	27456	37850	58242	x	118061	64144	74881	91200	61882	11394	0	0	30
31	x	38139	59847	x	115763	x	77318	x	62567	9341	x	0	31

APPENDIX "B-6" **OUTFLOW FROM JOHN MARTIN RESERVOIR** **ARKANSAS RIVER BELOW** **JOHN MARTIN RESERVOIR**

Report-Year ending October 31, 1965
USGS Records
USGS Gaging Station No. 07130500

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	1.6	2.2	.95	3.0	2.6	93	524	2230	694	393	722	200
2	1.6	2.5	1.4	3.2	2.3	92	491	2220	653	388	691	180
3	1.6	2.5	1.4	3.2	2.9	135	401	1160	639	354	662	168
4	1.6	2.2	1.3	3.2	3.7	114	357	1230	642	346	646	163
5	1.6	.95	1.2	3.2	3.2	122	353	1160	672	401	629	167
6	1.6	.95	1.2	3.3	3.0	122	378	978	1250	502	632	172
7	1.6	.95	1.4	3.2	3.1	122	365	1120	1240	552	615	172
8	1.6	.95	1.4	3.2	3.2	268	374	1150	1230	576	614	170
9	1.6	1.0	1.2	3.2	3.2	371	380	744	1210	931	627	163
10	1.6	.96	1.2	3.2	3.0	411	381	1550	1180	1170	942	169
11	1.6	.95	1.2	2.8	2.8	462	388	2670	1180	1160	1050	166
12	1.6	1.2	1.2	2.8	3.2	994	389	2600	1170	1180	883	165
13	1.6	1.2	1.2	3.2	3.5	1250	327	2680	1160	1150	908	165
14	1.6	1.2	1.2	2.7	3.3	1230	242	2880	1150	1010	912	166
15	1.4	1.2	1.2	2.8	3.5	1260	210	2900	1140	956	907	131
16	1.4	.95	1.2	2.8	3.7	1280	246	2230	1140	1060	872	118
17	1.4	.95	1.4	2.8	3.6	1290	227	556	1130	1120	636	125
18	1.4	.95	1.6	2.8	43	1230	201	1600	1120	1100	377	126
19	1.4	1.0	1.6	2.8	75	1170	204	2610	1160	810	380	134
20	1.9	.95	1.6	2.6	75	1150	205	2740	1150	578	377	136
21	1.8	1.2	1.6	2.8	81	1140	171	1640	1150	565	377	124
22	1.7	.95	1.6	2.6	88	1180	143	851	942	589	377	114
23	1.7	.95	1.6	2.5	91	1180	127	840	844	588	350	109
24	1.9	.95	1.8	2.5	92	1180	116	668	946	598	320	94
25	1.9	.95	2.2	2.5	92	1190	114	619	950	606	303	94
26	1.6	.95	2.2	2.6	92	1180	1020	633	920	639	301	94
27	1.4	.95	2.2	2.8	92	1170	2710	634	918	650	259	94
28	1.5	.73	2.2	2.7	92	1160	2790	661	930	619	239	125
29	1.7	.95	2.2	--	91	1060	2630	706	705	619	237	150
30	1.7	.95	2.2	--	91	742	2460	708	471	673	220	149
31	--	.95	2.3	--	92	--	2240	--	371	718	--	146
TOTAL												
sec. ft.	48.2	36.19	48.15	81.0	1240.8	24368	21164	45527	30267	22811	17097	4457
ac. ft.	96	72	95	161	2461	48334	41979	90303	60034	44949	33912	8940

THE YEAR 331,136 acre-feet

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

Report-Year ending October 31, 1965
USGS Records
USGS Gaging Station No. 07133000

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	12	33	30	25	31	42	112	1850	81	72	20	50
2	12	34	30	25	32	43	62	1770	71	60	20	47
3	11	35	30	25	30	60	45	1400	62	55	20	50
4	11	37	30	25	25	43	19	473	48	48	20	47
5	12	35	30	25	27	48	19	1020	38	21	20	50
6	13	30	29	28	26	45	18	532	451	19	21	53
7	12	35	35	32	25	44	20	563	533	25	21	46
8	12	34	32	36	26	33	16	611	568	42	19	47
9	12	34	29	39	28	36	14	478	584	72	19	51
10	12	34	27	38	30	14	14	260	579	462	43	51
11	12	33	28	39	30	30	14	1550	569	530	60	69
12	11	33	26	35	30	151	16	1980	550	534	30	82
13	11	35	26	37	31	723	142	1970	544	555	25	82
14	11	36	26	33	30	707	163	1930	535	491	21	88
15	13	37	28	33	30	781	41	1970	546	360	20	96
16	14	36	33	33	29	724	35	1970	515	380	20	78
17	13	35	33	32	29	677	33	494	520	380	20	72
18	13	35	35	32	29	607	38	243	512	500	20	69
19	13	34	33	31	19	666	41	1470	552	500	20	66
20	13	33	26	32	12	597	51	1570	558	220	20	64
21	15	34	34	33	28	590	44	1500	549	95	20	63
22	15	35	28	29	29	611	39	342	563	40	22	62
23	17	33	35	32	73	632	46	164	334	30	22	37
24	18	30	36	32	75	610	29	137	367	30	22	23
25	18	26	31	31	54	645	21	93	423	30	22	21
26	18	33	32	32	62	653	44	78	405	30	20	21
27	18	31	30	29	77	624	1410	62	411	30	20	23
28	26	31	29	29	34	604	1920	45	420	25	20	22
29	36	29	29	---	19	649	1920	63	450	20	20	21
30	34	26	26	---	37	482	2090	71	620	20	20	20
31	---	29	25	---	41	---	1890	---	147	20	---	20
TOTAL												
sec. ft.	460	1027	933	882	1124	12174	10366	26669	13085	5696	687	1591
ac. ft.	912	2037	1831	1749	2229	24147	20561	52988	25854	11298	1363	3156

THE YEAR 143,156 acre-feet

APPENDIX "B-8" ARKANSAS RIVER NEAR GRANADA, COLORADO

Report-Year ending October 31, 1985
USGS Records
USGS Gaging Station No. 07134180

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	121	130	124	87	100	166	346	1960	166	254	91	111
2	115	128	113	86	99	147	217	1810	166	202	83	134
3	123	128	120	96	100	123	179	1650	157	175	96	112
4	137	129	134	99	94	129	145	1000	153	166	86	112
5	134	130	131	91	93	123	122	935	140	157	86	106
6	134	127	129	99	93	105	140	746	222	146	80	110
7	135	128	125	101	91	85	114	628	447	121	85	108
8	134	131	128	106	89	62	88	619	481	96	81	97
9	145	132	126	111	92	59	71	587	482	97	77	95
10	145	130	106	111	111	53	61	345	485	211	76	97
11	143	133	109	105	95	30	64	679	480	383	230	128
12	138	133	112	106	95	25	74	1250	472	420	310	167
13	142	135	115	116	94	342	144	1820	455	432	169	163
14	133	127	116	116	90	608	273	1730	434	444	129	161
15	135	130	119	118	90	618	167	1760	429	379	110	174
16	134	136	132	123	90	613	136	1840	420	351	95	176
17	132	137	130	124	89	584	127	1600	403	410	98	164
18	129	132	135	122	90	586	123	445	402	460	96	162
19	124	127	140	115	90	566	124	796	414	483	93	159
20	124	128	129	110	107	516	126	1430	468	307	89	153
21	126	133	120	109	85	486	124	1540	437	184	94	149
22	124	129	125	104	57	494	115	1080	466	164	97	147
23	124	128	126	104	87	514	109	438	384	149	103	144
24	125	126	125	104	106	496	99	339	336	143	113	127
25	137	123	127	103	91	502	72	254	357	144	112	120
26	140	129	128	104	117	548	69	212	359	142	111	117
27	131	131	128	101	135	546	485	183	379	139	109	110
28	134	134	128	101	167	534	1280	170	374	137	102	107
29	132	131	127	--	155	588	1740	166	421	125	108	106
30	133	126	118	--	126	590	1820	163	488	95	104	105
31	--	124	100	--	175	--	1860	--	555	84	--	101
TOTAL												
sec. ft.	3963	4025	3827	2874	3157	10850	10634	27875	11834	7200	3325	4022
ac. ft.	7960	7966	7591	5899	6362	21521	21063	55488	23473	14281	6595	7978

THE YEAR 198,027 acre-feet

APPENDIX "B-9" ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

Report-Year ending October 31, 1965
USGS Records

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	220	185	162	132	149	261	555	1783	284	617.01	209	243
2	213	181	159	133	151	231	362	1707	288	474	219	252
3	221	171	160	130	152	213	318	1657	281	402	214	280
4	220	173	167	125	142	195	294	1565	284	374	210	272
5	209	177	169	115	133	200	247	865	251	324	209	259
6	215	180	169	120	138	188	283	1034	236	274.2	200	240
7	217	184	165	130	132	174	270	738	395	243	185	253
8	218	188	165	150	135	174	233	694	499	226	199	232
9	212	188	163	160	139	176	210	655	525	227	196	238
10	210	185	150	154	141	168	191	597	531	237	202	245
11	214	182	147	148	141	157	191	468	542	411	230	273
12	217	180	146	144	140	145	185	961	535	494	425	317
13	218	186	150	152	139	155	398	1357	516	519	321	317
14	217	185	157	157	138	431	503.3	1646	512	572	281	302
15	207	180	153	165	133	537	434	1734	516	559	267	257
16	200	189	157	172	133	567	349	1805	533	476	260	248
17	197	184	160	172	134	569	327	1896	485	490	245.9	251
18	192	179	165	169	135	565	312	1222	492	553	244.7	238
19	186	175	169	169	131	554	297	644	598	647	237	239
20	186	175	164	165	138	534	297	1174	603	557	206	255
21	192	178	160	161	151	499	321	1481	585	385	215.5	250
22	186	173	162	157	152	488	274	1598	602	329	221.4	226
23	181	168	163	155	151	503	276	827	619	292	226.6	221
24	183	169	159	152	168	497	238	540	473	273	232.1	220
25	190	166	162	149	182	499	216	445	454	274	260	210.7
26	194	171	167	147	198	542	217	395	474	268	231.9	198.1
27	189	178	170	148	192	563	229	334	474	257	228.3	181.4
28	186	184	171	150	206	545	741	393	473	251	234	176
29	188	180	170	--	211	598	1288.7	281	1423	242	262	175
30	183	175	165	--	221	675	1611	279	832.87	234	241.3	179
31	--	171	150	--	241	--	1733	--	909.05	207	--	191
TOTAL												
sec. ft.	6081	5540	4996	4181	4936	11593	13357	30053	16214.92	11878.21	7151.7	7439.2
ac. ft.	12022	10989	9910	8283	9592	22965	26494	60900	32163	23164	14185	14756

THE YEAR 245,381 acre feet

The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas, USGS Gaging Station No. 07137500 and the Frontier Ditch, USGS Gaging Station No. 0713706.

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, 1966
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	2479.38	2479.38	2479.38	2479.38	2479.38	1983.50	0	1
2	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	1983.50	0	2
3	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	1983.50	0	3
4	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	1983.50	0	4
5	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	1983.50	0	5
6	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	777.27	0	6
7	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	0	7
8	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	0	8
9	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	0	9
10	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	0	10
11	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	1239.69	11
12	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	415.20	12
13	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	974.76	13
14	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	594.76	14
15	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	418.85	15
16	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	664.15	16
17	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	1069.47	17
18	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	576.45	18
19	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	276.72	19
20	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	572.72	20
21	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	765.72	21
22	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	770.71	22
23	0	0	0	0	0	2479.38	2479.38	0	2479.38	2479.38	0	303.70	23
24	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2479.38	0	559.70	24
25	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	2390.12	0	523.20	25
26	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	1983.50	0	521.69	26
27	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	1983.50	0	420.69	27
28	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	1983.50	0	445.13	28
29	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	1983.50	0	392.80	29
30	0	0	0	0	0	2479.38	2479.38	2479.38	2479.38	1983.50	0	273.80	30
31	x	0	0	x	0	x	2479.38	x	2479.38	1983.50	x	363.80	31
TOTAL	0	0	0	0	0	74381.40	76860.78	57025.74	76860.78	73796.24	10694.77	12123.71	

THE YEAR 381,743.42 acre-feet
1 / All conservation pool water was apportioned as follows in Colorado and Kansas Accounts:
40% to Kansas and 60% to Colorado, as described in the 1960 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, 1985
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	175.92	1091.78	0	1351.74	578.03	1232.57	201.58	1
2	0	0	0	0	0	175.92	980.37	0	1303.13	515.61	1238.79	75.94	2
3	0	0	0	0	0	175.92	861.98	0	1280.23	500.63	1273.63	0	3
4	0	0	0	0	0	200.40	818.22	0	1280.23	514.12	1278.27	0	4
5	0	0	0	0	0	211.61	818.24	0	1328.77	646.43	1275.32	0	5
6	0	0	0	0	0	207.85	824.84	0	1438.70	794.33	1286.15	0	6
7	0	0	0	0	0	207.85	821.06	0	1462.43	954.83	1154.82	0	7
8	0	0	0	0	0	534.23	834.26	0	1462.43	1090.94	1092.50	0	8
9	0	0	0	0	0	730.01	833.76	0	1424.38	1330.39	1092.50	0	9
10	0	0	0	0	0	799.70	822.04	0	1413.60	1441.29	1140.54	0	10
11	0	0	0	0	0	869.40	819.05	0	1433.25	1406.72	1053.08	117.35	11
12	0	0	0	0	0	1041.93	819.05	0	1394.31	1341.86	900.82	283.76	12
13	0	0	0	0	0	1135.41	731.29	0	1356.28	1226.33	643.62	283.76	13
14	0	0	0	0	0	1135.41	568.97	0	1315.39	1045.54	598.53	283.76	14
15	0	0	0	0	0	1251.39	503.17	0	1297.57	932.41	598.53	244.85	15
16	0	0	0	0	0	1381.43	503.17	0	1255.74	1085.11	576.91	253.15	16
17	0	0	0	0	0	1419.17	430.88	0	1270.97	1110.24	559.58	252.47	17
18	0	0	0	0	0	98.95	1419.67	0	1291.33	1110.24	562.90	234.45	18
19	0	0	0	0	0	175.92	1355.92	0	1291.33	1147.36	550.94	230.72	19
20	0	0	0	0	0	175.92	1317.66	0	1291.33	1187.24	550.94	230.72	20
21	0	0	0	0	0	175.92	1317.66	0	1291.33	1133.10	488.37	230.72	21
22	0	0	0	0	0	175.92	1354.20	0	1016.71	1141.33	450.83	225.71	22
23	0	0	0	0	0	175.92	1388.76	0	756.03	1160.30	477.75	222.70	23
24	0	0	0	0	0	175.92	1408.77	0	881.22	1160.30	501.18	222.70	24
25	0	0	0	0	0	175.92	1416.23	0	1007.00	1160.30	537.03	210.20	25
26	0	0	0	0	0	175.92	1397.06	0	987.35	1191.71	587.83	202.69	26
27	0	0	0	0	0	175.92	1363.99	0	919.32	1179.95	483.40	202.69	27
28	0	0	0	0	0	175.92	1344.59	0	886.52	1161.60	352.79	287.13	28
29	0	0	0	0	0	175.92	1257.88	0	745.61	1155.54	258.28	305.80	29
30	0	0	0	0	0	175.92	1171.78	0	691.22	1170.86	201.58	305.80	30
31	x	0	0	0	0	175.92	x	0	589.24	1213.75	x	305.80	31
TOTAL	0	0	0	0	0	2385.91	29167.74	13804.44	36706.69	32708.39	22870.08	5454.45	

THE YEAR 152,742.15 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 transit loss releases)
Report Year ending October 31, 1985
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	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	3
4	0	0	0	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	351.24	0	0	0	5
6	0	0	0	0	0	0	0	0	991.75	0	0	0	6
7	0	0	0	0	0	0	0	0	991.75	0	0	0	7
8	0	0	0	0	0	0	0	0	991.75	0	0	0	8
9	0	0	0	0	0	0	0	0	991.75	475.21	0	0	9
10	0	0	0	0	0	0	0	0	991.75	991.75	516.54	0	10
11	0	0	0	0	0	0	0	0	991.75	991.75	475.21	0	11
12	0	0	0	0	0	619.84	0	0	991.75	991.75	0	0	12
13	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	13
14	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	14
15	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	15
16	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	16
17	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	17
18	0	0	0	0	0	991.75	0	0	991.75	991.75	0	0	18
19	0	0	0	0	0	991.75	0	0	991.75	371.91	0	0	19
20	0	0	0	0	0	991.75	0	0	991.75	0	0	0	20
21	0	0	0	0	0	991.75	0	0	991.75	0	0	0	21
22	0	0	0	0	0	991.75	0	0	991.75	0	0	0	22
23	0	0	0	0	0	991.75	0	0	991.75	0	0	0	23
24	0	0	0	0	0	991.75	0	0	991.75	0	0	0	24
25	0	0	0	0	0	991.75	0	0	876.05	0	0	0	25
26	0	0	0	0	0	991.75	0	0	793.40	0	0	0	26
27	0	0	0	0	0	991.75	0	0	793.40	0	0	0	27
28	0	0	0	0	0	991.75	0	0	793.40	0	0	0	28
29	0	0	0	x	0	991.75	0	0	462.82	0	0	0	29
30	0	0	0	x	0	371.91	0	0	0	0	0	0	30
31	x	0	0	x	0	x	0	x	0	0	x	0	31
TOTAL	0	0	0	0	0	17851.50	0	0	22913.56	9772.87	991.75	0	

THE YEAR 51,529.68 acre-feet

APPENDIX "B-13" **STATELINE FLOWS ON DAYS OF KANSAS DEMANDS**

Arkansas River at the State Line
State Line Flows on Days of Kansas Demands
Report: Year ending October 31, 1965
(cubic feet per second)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT. Day
1	—	—	—	—	—	—	555	—	—	617	—	1
2	—	—	—	—	—	—	382	—	—	474	—	2
3	—	—	—	—	—	—	318	—	—	402	—	3
4	—	—	—	—	—	—	284	—	—	374	—	4
5	—	—	—	—	—	—	247	—	251	324	—	5
6	—	—	—	—	—	—	283	—	236	—	—	6
7	—	—	—	—	—	—	270	—	395	—	—	7
8	—	—	—	—	—	—	—	—	489	—	—	8
9	—	—	—	—	—	—	—	—	525	227	—	9
10	—	—	—	—	—	—	—	—	531	237	202	10
11	—	—	—	—	—	—	—	—	542	411	230	11
12	—	—	—	—	—	145	—	—	535	494	425	12
13	—	—	—	—	—	155	—	—	516	519	321	13
14	—	—	—	—	—	431	—	—	512	572	281	14
15	—	—	—	—	—	537	—	—	516	559	267	15
16	—	—	—	—	—	567	—	—	523	476	260	16
17	—	—	—	—	—	569	—	—	495	490	245.9	17
18	—	—	—	—	—	565	—	—	492	553	244.7	18
19	—	—	—	—	—	554	—	—	588	647	—	19
20	—	—	—	—	—	534	—	—	603	557	—	20
21	—	—	—	—	—	499	—	—	595	395	—	21
22	—	—	—	—	—	488	—	—	602	329	—	22
23	—	—	—	—	—	503	—	—	619	292	—	23
24	—	—	—	—	—	497	—	—	473	273	—	24
25	—	—	—	—	—	499	—	—	454	274	—	25
26	—	—	—	—	—	542	—	—	474	268	—	26
27	—	—	—	—	—	563	—	—	474	—	—	27
28	—	—	—	—	—	545	—	—	473	—	—	28
29	—	—	—	x	—	596	—	—	1423	—	—	29
30	—	—	—	x	—	675	—	—	832.87	—	—	30
31	x	—	—	x	—	x	—	x	909.05	—	x	31
TOTAL	—	—	—	—	—	—	—	—	—	—	—	—
sec. ft.	—	—	—	—	—	9456	2339	—	15067.92	9754	2476.6	—
ac. ft.	—	—	—	—	—	18756	4639	—	29946	18347	4912	—

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

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

Diversion by Ditches in Colorado
 Water District 14
 Report-Year ending October 31, 1985
 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)	0	0	0	0	1277	8986	12306	12617	15174	9980	5220	6303	71865
Res. or Imported	0	0	0	0	0	238	0	0	0	1832	838	0	2908
Total Bessemer	0	0	0	0	1277	9226	12306	12617	15174	11812	6058	6303	74773
Minnequa-Ft. Union	1760	2003	810	1357	3474	1272	2344	3565	2975	3637	3661	3759	30617
West Pueblo (River)	0	0	0	0	0	135	377	101	27.6	0	0	0	640.60
Excelsior (River)	139	0	0	0	0	0	0	0	208	216	123	59.5	745.50
Collier	0	0	0	0	0	0	0	0	125	47.6	0	0	172.60
Colorado Canal (River)	0	0	0	0	0	575	8619	23171	12060	1270	161	4302	50148
Res. or Imported	0	0	0	0	0	14899	0	0	9903	14579	7519	2199	49099
Total Colo. Canal	0	0	0	0	0	15474	8619	23171	21963	15849	7680	6501	99247
Highline (River)	3019	0	0	0	1171	10978	11994	21370	20701	13107	7035	8126	97501
Res. or Imported	0	0	3603	0	4191	2364	0	0	0	2260	57	0	12475
Total Highline	3019	0	3603	0	5362	13342	11994	21370	20701	15367	7092	8126	109976
Oxford Farmer's (River)	666	0	0	0	0	5007	5829	6740	5300	5027	3220	3185	34974
Res. or Imported	0	0	0	0	1095	875	0	0	0	495	360	0	2825
Total Oxford Farmers	666	0	0	0	1095	5882	5829	6740	5300	5522	3580	3185	37799
River District #14	5594	2003	810	1357	5922	26965	41469	67564	56560.6	33264.6	19420	25734.5	286663.7
Res. or Import Dist. #14	0	0	3603	0	5286	18376	0	0	9903	19166	8774	2199	67307
Total District #14	5594	2003	4413	1357	11208	45331	41469	67564	66463.6	52450.6	28194	27833.5	353970.7

APPENDIX "B-14b" **DIVERSION BY DITCHES** **IN COLORADO WATER DISTRICT 17**

Diversion by Ditches in Colorado
 Water District 17
 Report-Year ending October 31, 1985
 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	920	0	0	0	598	1418	2488	2618	1360	691	485	0	10578
Res. or Imported	0	0	0	0	178	378	0	0	0	0	0	0	556
Total: Otero	920	0	0	0	776	1796	2488	2618	1360	691	485	0	11134
Catlin Canal (River)	2980	0	0	0	218	11890	8954	14500	17559	15964	11771	8982	92788
Res. or Imported	0	0	0	0	6212	1523	0	2152	0	0	0	0	9887
Total: Catlin	2980	0	0	0	6430	13393	8954	16652	17559	15964	11771	8982	102675
Holbrook (River)	440	396	1442	0	2833	3454	15795	12131	4137	0	161	8948	47737
Res. or Imported	0	0	0	0	75	8849	0	0	0	1350	35	558	10687
Total: Holbrook	440	396	1442	0	2908	12303	15795	12131	4137	1350	196	7506	58804
Rocky Ford	2071	0	0	0	2224	5175	4159	5563	6124	5841	5487	3672	40316
Ft. Lyon (storage)	8037	25528	21602	1788	1182	0	28763	9104	21263	1449	0	0	116728
Ft. Lyon (Riv.)	39554	0	0	20838	54430	47902	86533	82431	59463	47061	20415	34748	462375
Res. or Imported	0	0	0	0	0	0	0	0	0	0	0	0	0
Kicking Bird*	32265	0	0	13989	17611	4584	28649	24379	2167	2952	0	12185	138781
Total: Ft. Lyon-K. B.	47591	25528	21602	22626	55622	47902	113286	91535	79726	48510	20415	34748	608101
Las Animas Consol.	2441	574	0	0	887	2914	4639	5694	5822	5628	3794	3424	35727
Native-District #17	56443	26498	23044	22626	62382	72723	148331	132041	114728	76534	42113	57774	838247
Res. or Imported #17	0	0	0	0	6465	10750	0	2152	0	1350	35	558	21310
Total: District #17	56443	26498	23044	22626	68857	83473	148331	134193	114728	77884	42148	58332	857557
Native Dist. #14-#17	62027	28501	23854	23983	68314	99678	190800	196005	171288	610818.6	61533	83506.5	1122910.7
Res. or Imported Dist. #14-#17	0	0	3603	0	11751	29126	0	20157	9903	20516	8909	2757	88617
Total Dist. #14-#17	62027	28501	27457	23983	80065	128804	190800	181191.6	130334.6		70342	86265.5	1211527.7

*Bifurcation from Fort Lyon

APPENDIX "B-15" **DIVERSIONS BY DITCHES IN** **COLORADO WATER DISTRICT 67**

Diveration by Ditches in Colorado Water District 67
Report-Year ending October 31, 1965
Source: Water Commissioners Monthly Reports
(Acre-Feet)

NAME OF CANAL	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Fort Bent	220	42	0	0	0	0	2861	1404	4923	4992	4949	3374	970 23,855
Kessee Ditch	0	0	0	0	0	0	649	510	1285	1170	1131	982	0 5,677
Amity	0	0	0	0	0	0	13736	13829	18183	19252	17227	15981	5780 103,988
Lamar	1599	0	0	0	0	1226	10906	4671	14586	11896	6735	7655	2162 63,566
Hyde	0	0	0	0	0	0	456	369	375	359	307	298	397 2,491
Manvel	-	-	-	-	-	-	-	-	-	-	-	-	-
X. Y. & Graham	0	0	0	0	0	0	1168	772	2819	2694	2345	1281	904 11,983
Buffalo	0	0	0	0	0	0	3898	2753	3882	2343	1517	2339	0 16,692
TOTAL: District 67	1809	42	0	0	0	1226	33694	24308	45683	42396	38511	31780	10103 227,232
Trans. Mtn. Diversions	0	0	0	0	0	0	0	0	0	0	0	0	0 0
GRAND TOTAL	1809	42	0	0	0	1226	33694	24308	45683	42396	38511	31780	10103 227,232

APPENDIX "B-16" DIVERSIONS BY DITCHES IN KANSASSTATELINE TO GARDEN CITY

Divisions by Ditches in Kansas
Stateline to Garden City
Report Year ending October 31, 1965
(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	0	0	992	912	1329	2094	1415	1217	770 8729*
Ft. Aubrey Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Stateline to Syracuse	0	0	0	0	0	0	992	912	1329	2094	1415	1217	770 8729
Amazon Canal	0	0	0	0	0	0	3193	5617	9096	8359	6279	1939	0 34490
Great Eastern Canal	0	0	0	0	0	3142	4500	0	5236	6000	4947	2473	0 28298
South Side Ditch	0	0	0	0	0	0	2368	1900	6396	5988	3658	0	0 20210
Farmers Ditch	0	0	0	0	0	0	3614	1295	3963	4369	1823	1153	0 16245
Garden City Canal	0	0	0	0	0	0	411	117	272	567	115	321	0 1823
Total Syracuse To Garden City	0	0	0	0	0	3142	14086	8929	24893	25301	16821	5994	0 99056
Total Stateline To Garden City	0	0	0	0	0	3142	15978	9941	26222	27395	18236	7101	770 107795

* 4059 acre-feet returned directly to the river.

APPENDIX "B-17"

TRANSMOUNTAIN DIVERSIONS

Transmountain Diversions
Report-Year ending October 31, 1965
Source: Division Engineer
Colorado Water Division #2
(acre-feet)

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	TOTAL
Twin Lake Tunnel	94	101	49	32	41	55	7315	1163	2831	1416	1035	1009	14941
Homestead Tunnel	136	1091	0	0	2417	873	0	1319	2377	1767	145	0	10125
Wurtz Ditch	0	0	0	0	0	0	1061	1924	470	110	25	0	3590
Larkspur Ditch	0	0	0	0	0	0	92	281	123	62	14	0	572
Ewing Ditch	0	0	0	0	0	0	389	671	218	123	79	0	1490
Columbine Ditch	0	0	0	0	0	0	394	1313	370	86	32	0	2195
Bousted Tunnel	0	416	0	0	0	0	95	33757	15362	1714	0	0	68284
Busk-Ivanhoe Tunnel	0	0	0	0	0	0	814	4007	739	302	137	211	6210
Blue River Project	0	0	0	0	0	0	1743	4657	1404	1063	1388	358	10613
TOTAL	230	1608	49	32	2453	1023	28745	49092	23694	6643	2855	1378	118010

APPENDIX "B-18"

SUMMARY TABULATION

Summary Tabulation Report Year 1985 November 1, 1984 to October 31, 1985													
	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Arkansas River at Las Animas, Colorado - cfs - a.f.	13240	5911	14047	21312	8118	7597	41122	42725	19987	6440	1635	2865	366946
Purgatoire River near Las Animas, Colorado - cfs - a.f.	26262	11724	27862	42272	16102	15069	81565	84745	39644	12774	3243	5683	
River Flow Into John Martin Reservoir - cfs - a.f.	1343	997	1030	1138	1452	728.1	2890	668.9	575.5	577.7	328.1	2456	28135
Contents of John Martin Reservoir - a.f.	2664	1978	2043	2257	2880	1444	5732	1327	1142	1146	651	4871	395081
Net Change in Reservoir contents - a.f.	14583	6908	15077	22450	9570	8325.1	44012	43393.9	20562.5	7017.7	1963.1	5321	280952
Outflow from John Martin Reservoir - cfs - a.f.	28925	13702	29905	44530	18982	16513	87298	86072	40786	13920	3894	10554	
Diversion in District 57, Colorado - a.f.	231241	245351	276688	328779	343323	314206	355576	351360	334158	305053	272577	280952	
Arkansas River at Colorado- Kansas Stateline - cfs - a.f.	48.2	36.19	48.15	81.0	1240.8	24368	21164	45527	30287	22611	17097	4457	331136
Diversion by Ditches in Kansas Stateline to Garden City - a.f.	96	72	95	161	2461	48334	41979	90303	60034	44849	33912	8840	
	1809	42	0	0	1226	33694	24308	45663	42396	36211	31780	10103	227232
	6061	5540	4996	4181	4836	11593	13357	30653	16214.92	11678.21	7151.7	7439.2	
	12022	10889	9910	8293	9592	22995	26494	60800	32162	23164	14185	14756	245361
	0	0	0	0	3142	15078	9841	26222	27395	18236	7101	770	107785

APPENDIX "C-1"

ARKANSAS RIVER COMPACT ADMINISTRATION REGULAR ANNUAL MEETING

MINUTES OF THE ARKANSAS RIVER COMPACT ADMINISTRATION REGULAR ANNUAL MEETING

December 11, 1984
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 11, 1984. The meeting was called to order at 10 a.m. by Mr. Frank Cooley, Chairman and United States representative. 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. Pope introduced the Kansas members of the Administration, members of his staff, and others from Kansas. Mr. McDonald introduced the Colorado members of the Administration, members of his staff, members of the Attorney General's staff, and members of the Division Engineer's staff.

Mr. Cooley stated that he had just received a request from the Ft. Lyon Canal Company for storage space in John Martin Reservoir and that this request would be added to the tentative agenda (see Attachment A) as item 12g. With this change, the agenda was agreed to without further discussion.

The first item on the agenda was approval of the minutes of the May 10, 1984, special meeting. Mr. Pope expressed concern that the discussions regarding the Pueblo winter storage program should be more fully reported in the minutes. Discussion and approval of these minutes was thus deferred.

Mr. McDonald then moved for the adoption of the minutes of the July 2, 1984, special telephonic meeting. Mr. Pope seconded the motion, which was then unanimously approved.

The approval of the 1983 Annual Report was next on the agenda. Mr. McDonald moved that the report be approved as distributed, subject to

the changes agreed to by Mr. Jerry Hilmes and Mr. Gene Jencsok. Mr. Olomon seconded the motion, which was then unanimously approved.

The next agenda item was the report of officers. The Chairman stated that he had no report to make.

Mr. Idler presented the Recording Secretary's report, which is included as Attachment B. There followed a brief discussion of straightening the Arkansas River channel between John Martin Reservoir and the stateline. Mr. Mike Mocek, Corps of Engineers (COE), reminded the Administration that a study done by the COE two years ago at the request of the Administration showed that such a project was not economically justified.

The Treasurer's report (Attachment C) was then presented by Mr. Idler, which report consisted of balance sheets as of June 30, 1984, and December 10, 1984, and a list of checks written since July 1, 1984. Mr. Cooley declared the report received.

Mr. Cooley then asked Mr. Jesse to present his Operations Secretary's report. Mr. Jesse indicated that he had given copies of his annual report to the Operations Committee and the members of the Administration and that he would not repeat the numbers in the report. He briefly summarized river operations for the preceding compact year and noted that the agreement with Howard Corrigan on the computation of stateline deliveries seemed to work well.

Mr. McDonald then moved that all reports be accepted and the reports of the Recording Secretary and Treasurer included in the minutes of the meeting. Mr. Olomon seconded the motion, which was unanimously approved.

The next item was the auditor's report for FY 1983-84 (Attachment D). Mr. Cooley noted that this report had been distributed earlier. There was brief discussion of the December 10, 1984, letter from the auditor (included with Attachment D) with regard to the computer item listed in the auditor's report. Mr. Idler explained that there was an item in the Administration's budget of \$6,100 for the Operations Secretary. Mr. Jesse, as Operations Secretary, purchased some computer equipment pursuant to that item but sent the bill directly to the Administration for payment. The bill was paid by the Administration and was recorded by the auditor as an equipment purchase rather than as a debit against the line item for the Operations Secretary. Mr. McDonald then moved that the Administration accept the auditor's report, including the December 10th letter of clarification, and that the minutes reflect that the direct payment for the computer equipment by the Administration was made pursuant to the budget item for the Operations Secretary for FY 1983-84. Mr. Pope seconded the motion, which was then passed unanimously.

Mr. Cooley stated that the committee reports were to be discussed next. Mr. McDonald advised that the Administrative and Legal Committee had no report. Mr. Genova reported for the Engineering Committee that the revisions to the John Martin Reservoir operating plan concerning the Kansas transit loss account proposed at the May 10, 1984, special meeting would be taken up later in this meeting. The Operations Committee's written report is included as Attachment E.

The next item on the agenda was the election of officers for compact

year 1985. Mr. McDonald moved, and Mr. Pope seconded, the re-election of existing officers as follows:

Mr. Carl Bentrup — Vice Chairman

Mr. Leo Idler — Recording Secretary and Treasurer

Mr. Bob Jesse — Operations Secretary

The motion was unanimously approved.

The next item was the appointment of committee members for compact year 1985. Mr. McDonald moved the reappointment of the members now serving (Carl Bentrup and Bill McDonald on the Administrative and Legal Committee, Ron Olomon and Leo Idler on the Operations Committee, and David Pope and Carl Genova on the Engineering Committee), with the Kansas members of each committee to serve as chairmen for the compact year. The motion was seconded by Mr. Pope and unanimously approved.

The next item on the agenda was the reports of the federal agencies. Mr. Mocek briefly reported on the Corps of Engineers' activities. He stated that reservoir operations at both Trinidad and John Martin Reservoirs for the past water year had been routine and that there had been no flood control operations at either reservoir. Mr. Mocek summarized the requests that had been received for technical services and section 404 permits and described design activities on local flood protection projects at Pueblo and La Junta. There was a brief discussion on the possibility of temporarily using the flood control pool in John Martin Reservoir for conservation storage in 1985. Mr. Mocek indicated that approval of the use of flood control space for conservation storage by the COE would be highly unlikely and would probably require Congressional authorization anyhow.

Mr. Cooley then introduced Mr. Ray Wilms, who presented the report for the Bureau of Reclamation. Mr. Wilms reported that Pueblo Reservoir had reached 283,210 a.f. of storage with about 19,000 a.f. encroaching into the joint use pool in 1984. Following April 1 the joint use pool was evacuated by releasing about 16,000 a.f. of temporary contract storage. In May and June, 1982-83 winter water was also spilled. On August 21, a small flood control operation reduced the outflow from 5600 cfs to 540 cfs for a few hours. By August 23, all the floodwater stored during the flood operation had been released.

Mr. Wilms noted that 110,000 a.f. had been imported from the west slope during the summer and held in storage and that at the present time the Fryingpan-Arkansas Project reservoirs were virtually full, with Pueblo Reservoir containing 268,900 a.f. He reported that the Bureau had made a tentative decision to allow storage in Pueblo Reservoir to reach 290,000 a.f. to 300,000 a.f. in 1985, with approximately 30,000 a.f. in the joint use pool. It was anticipated that that level would be reached in January. Starting about February 1, the Bureau will start releasing water from the upstream reservoirs to make room for the water to be imported in 1985. This means that 70,000-100,000 a.f. may be spilled out of Pueblo Reservoir through April 15, 1985, to bring that reservoir's water level down and to get the water out of the joint use pool.

Mr. Pope asked several questions of Mr. Wilms on the operation of Pueblo Reservoir, use of the joint use pool, temporary storage contracts, and the winter storage program. He concluded by indicating that Kansas continues to have concerns about the use of the joint use pool. He stated

that he hoped the Bureau would take those concerns into consideration in the operation of the reservoir in 1985.

The report for the U.S. Geological Survey (USGS) was made by Mr. Livingston for the Colorado District and Mr. Stulken for the Kansas District. Mr. Livingston reported on the status of various special studies that the USGS is conducting in the Arkansas River Basin. He also indicated that studies proposed for next year would be on the water quality of Pueblo Reservoir and on travel time down the Arkansas River. Mr. Stulken reported briefly on the operation of the gaging stations and flow measurements in Colorado and Kansas.

The next agenda item discussed pertained to various budget matters. The previously adopted FY 1984-85 budget was reviewed first. After discussion, Mr. McDonald moved that the following budget items be increased to the amounts indicated, with budgeted expenditures in excess of assessments to come out of surplus funds:

Annual Report	\$ 5,000
Telephone	\$ 2,500
USGS Coop Agreement	\$12,000

Mr. Pope seconded the motion, which was unanimously adopted. The revised budget for FY 1984-85 is included as Attachment F.

The previously adopted FY 1985-86 budget was reviewed next. The annual report and telephone items were increased to \$2,500 each. Mr. McDonald moved the adoption of the revised budget with assessments to remain at \$28,000 and budgeted expenditures in excess of assessments to come out of surplus. Mr. Pope seconded the motion, whereupon the revised budget was unanimously adopted (see Attachment G).

The proposed budget for FY 1986-87 was reviewed next. After some discussion, Mr. McDonald moved, seconded by Mr. Pope, the adoption of the proposed budget with the annual report and the office telephone items increased to \$3,000 each and the contingency item increased to \$2,000, with the total assessments set at \$28,000, and with budgeted expenditures in excess of assessments to come out of surplus. The proposed budget, as revised, was unanimously adopted and is included as Attachment H.

At this time the chairman recessed the meeting, during which recess the U.S. Geological Survey presented a program to the audience on its quality/quantity model of the Arkansas River Basin (agenda item 13). The meeting was reconvened following the lunch hour.

Upon re-convening, the Administration took up agenda item 12a, the proposed storage account for the Highland Irrigation Company and the Ninemile Ditch Company in John Martin Reservoir. Mr. McDonald briefly reviewed the events surrounding the Highland-Ninemile request and stated that Colorado and Kansas had been unable to agree on the means by which to compute how much water would be available for storage by the ditch companies. Mr. McDonald stated that the Colorado ditches wanted this matter presented for the record, whereupon he moved the adoption of Colorado's revised draft resolution of December 10, 1984, said resolution to be included in the minutes. Mr. Genova seconded the motion. Mr. Pope responded that Kansas had worked diligently with Colorado on this matter and that he wished to have included in the minutes a proposal made by Kansas that was presented to the companies' consulting engineer, Mr. Duane Helton. The motion failed, with Colorado voting yes and Kansas voting no.

Mr. Cooley directed that the minutes include the two above items. The Colorado resolution is included as Attachment I and the Kansas proposal as Attachment J.

The next agenda item taken up was 12e, the five year review of Trinidad Reservoir operations. Mr. McDonald stated that he thought the issue was resolved since the Bureau had already agreed to prepare the review. Mr. Bentrup stated that it was Kansas' position that a representative of the Colorado State Engineer and the Kansas Division of Water Resources should make a study of the past five years of operation and present a report to the Administration. Mr. McDonald responded that while he was sure that Kansas, Colorado, and the Purgatoire Water Conservancy District would participate, it was the Bureau of Reclamation's responsibility to prepare the review. Mr. Cooley then asked Mr. Wilms to comment on how the Bureau planned to proceed.

Mr. Wilms stated that the Bureau would indeed conduct the five year review. He indicated that the Bureau would hold a number of public scoping meetings to determine the extent of the review that needs to be conducted. There followed a discussion on the responsibilities of Kansas, Colorado, the District, and the Bureau with respect to the review. It was Kansas' view that the review should be conducted by the Administration. Colorado was of the opinion that since the Bureau and the District were the signatories to the operating principles, the review should be carried out by the Bureau.

Mr. Cooley called a brief recess at this time.

After the recess, Mr. Pope moved, seconded by Mr. Olomon, that: The engineering committee of the Administration conduct a five-year review of the operations of the Trinidad project, as originally contemplated by one of the five Kansas conditions, that the review be done with the aid, assistance, and cooperation of the Bureau of Reclamation, and that the committee report back to the Administration prior to April 1, 1985 with findings and recommendations as to the results of its review.

Mr. McDonald indicated that Colorado disagreed that such a procedure was appropriate for the Administration to take under the compact. The question being called, Colorado voted no and Kansas voted yes, whereupon the motion was declared lost.

After further discussion, Mr. McDonald moved that:

The Administration ask the Bureau of Reclamation to conduct a five year review of Trinidad Reservoir operations with participation of both states and other interested parties and with the results of that review to be made available to the administration by April 1, 1985, or as expeditiously thereafter as possible.

Mr. Genova seconded the motion. Mr. Pope restated Kansas' position that the motion he had made was appropriate and that the Administration had the authority under the Compact to make such studies. He noted that while Kansas would vote in favor of this motion, it reserved the right to conduct its own independent review and to fully participate in the review conducted by the Bureau. The Chairman then called for the question, whereupon Colorado voted yes, and Kansas voted yes. The motion was declared passed.

The next item discussed was Colorado's proposal for amending the

1980 Operating Plan for John Martin Reservoir as it relates to the transit loss account for Kansas. Mr. McDonald stated that this matter did not need to be resolved at this meeting. A long discussion ensued, with no specific decisions being reached. It was agreed to take up the matter again at a special meeting in March.

Mr. Cooley stated that the next item of discussion would be a request for an engineering report from the Keesee Ditch on its proposed transfer of water rights from District 67 to above John Martin Reservoir, said report to be submitted to the Administration. Mr. Pope stated that Kansas was in agreement with the draft letter proposed by Colorado. Mr. McDonald then moved that the Administration direct the chairman to send the letter. Mr. Pope seconded the motion and added that a copy should go to the Water Court and all the parties to the litigation. Mr. McDonald said he concurred. The motion was unanimously adopted. The letter was subsequently sent by the Vice-Chairman (due to Mr. Cooley's illness) and is included as Attachment K.

The next item on the agenda was the proposed storage account for the Las Animas-Bent County Golf Course, Inc., in John Martin Reservoir. Mr. McDonald briefly outlined the history of the Las Animas Golf Course account. He stated that the Administration, through the Operations Committee, had made arrangements for a temporary account for the past summer for 175 a.f. in John Martin Reservoir, the source of water being the purchase of transmountain water. The "Decision of the Operations Committee" with respect to this matter is included as Attachment L. The purpose of the account was to permit the golf course to pump sewage effluent from the Town of Las Animas' wastewater treatment plant up to a new golf course for lawn irrigation purposes and then replace those out-of-priority diversions using the water in the account.

After a brief discussion on whether the golf course should have a permanent account in John Martin Reservoir, Mr. McDonald moved that the Administration grant a continuation of the temporary account with the existing water therein through October 31, 1985, with the temporary account to cease as of that date and any water remaining in the account after that date to go into conservation storage. Mr. Genova seconded the motion, which was subsequently passed unanimously.

The next item on the agenda was a status report on the proposed permanent winter storage program. Mr. McDonald stated that Kansas had requested that this item be on the agenda and that he had asked that Mr. Kevin Pratt, attorney for the Southeast Colorado Water Conservancy District, to make the presentation. Mr. Pratt stated that an application for the winter storage program had not yet been filed, but that there had been meetings all summer and fall with interested parties in the hopes of putting together a proposed decree and an application. He indicated that it was hoped that an application would be filed by the end of the year.

Mr. Pope asked a series of questions regarding the priority of the proposed decree, the nature of the agreement being discussed by the parties, and what information would be necessary to support such a filing in terms of engineering reports and data to substantiate the effect of the proposed decree on the river. Mr. Pratt responded that Colorado statutes require that copies of the decrees for the involved ditches and diversion records for the last 10 years be submitted to the courts. He added that this

is a consensual program which all the affected entities have determined is to their advantage.

Mr. Pope stated that the essence of his concern was that he wanted to know what is in place or will be in place to satisfy Colorado or Kansas interests that are not party to the potential agreement that the program does not have detrimental effects on other users. Mr. Pratt responded that the water court will review the question of injury and will look to the objectors in the case to raise such concerns. He noted that some entities have already indicated that they have certain problems with the proposed decree.

Mr. Pope then made the following statement for the record:

I think the members of the Administration and others are aware of Kansas' concerns regarding the Administration's approval of the Pueblo winter storage program. I think there is considerable difference between knowing that it is on-going and being furnished with copies of various materials, as compared to actually formally reviewing it. So I would simply state for the record that we continue our previously stated position as to the matter and would like to, at this time, formally object for the record to this program proceeding without operating principles for the Pueblo winter storage program, whether voluntary or as a permanent decree, being submitted for review by the Arkansas River Compact Administration as per the intent of the 1951 resolution of this body.

After further discussion, Mr. Pope indicated that rather than just stating the objections of Kansas, he would like to make a motion. He then moved that:

The Administration request that the Southeast Colorado Water Conservancy District and other parties to the proposed decree for a Pueblo winter storage program in Colorado Water Division 2 submit an operations plan and other pertinent engineering and hydrologic data to support such a plan to the Administration for review and approval by the Administration pursuant to the Administration's 1951 resolution.

Mr. Benstrup seconded the motion. Mr. McDonald responded that he wanted the record to reflect that Colorado had no objections to the Administration discussing, reviewing, and commenting on any such plan or anything similar to it. But, he stated that it is Colorado's position that the Administration does not have the authority to require prior approval of such plans or prevent their implementation if the Administration does not agree with a plan. Mr. Cooley then called for a vote on Mr. Pope's motion. Colorado voted no and Kansas yes, whereupon the motion was declared lost.

The next agenda item was Mr. Wayne Schroeder's request on behalf of the Ft. Lyon Canal Company for 80,000 a.f. storage space in John Martin Reservoir. Mr. Cooley stated that discussion on this matter would be deferred since the request had just been received the day before.

Mr. McDonald then asked that the Administration turn its attention to the fact that the reservoir system was currently very full. He noted that that might result in spills at the upstream reservoirs, which in turn might result in a spill at John Martin Reservoir in the spring of 1985. Since the 1980 Operating Plan was unclear with respect to the sequence of spills, Mr. McDonald said he thought that it would be desirable to amend the

appropriate section of the Operating Plan. Mr. McDonald then moved to amend Section II. G to read as follows:

In the event that runoff conditions occur in the Arkansas River basin upstream from John Martin Reservoir that cause water to spill physically over the project's spillway, then water stored in the permanent pool in excess of 10,000 a.f. shall spill before the accounts granted in Subsection III A, B, and C, which shall spill before the accounts granted in Section II, which shall spill before the Kansas Transit Loss Account, all of which shall spill before the conservation pool water. The amount of spill from the accounts shall be prorated amongst them according to the amounts in them at the beginning of spill. During times of spill, the permanent pool shall occupy flood control space as provided in the Administration's Resolution of August 14, 1976, and Public Law 89-298.

He further moved that in the event of a spill in 1985, the temporary account granted to the Las Animas Golf Course be the first account to spill. Mr. Bentrup seconded the motion, which was unanimously adopted.

There being no further business to come before the Administration, the Chairman adjourned the meeting at 4:45 p.m.

The foregoing minutes were approved by the Administration at a meeting held in Pueblo, Colo., on December 10, 1985.

/s/ Leo Idler,
Recording Secretary

/s/ Frank Cooley,
Chairman

ATTACHMENT A

ANNUAL MEETING ARKANSAS RIVER COMPACT ADMINISTRATION

Notice and Agenda

Notice is hereby given that the annual meeting of the Arkansas River Compact Administration will be held on Tuesday, December 11, 1984, at the Cow Palace Inn, Lamar, Colorado, starting at 10 a.m. (MST). The meeting is expected to last all day.

The tentative agenda for the meeting is as follows:

- 1) Call to Order and Introductions
- 2) Approval of Agenda
- 3) Approval of Minutes
 - May 10, 1984 (Special)
 - July 2, 1984 (Special Telephonic)
- 4) Approval of 1983 Annual Report
- 5) Report of Officers
 - a) Chairman
 - b) Recording Secretary
 - c) Treasurer
 - d) Operations Secretary
- 6) Auditor's Report for F.Y. 83-84

- 7) Committee Reports
 - a) Administrative and Legal
 - b) Engineering
 - c) Operations
- 8) Election of Officers for Compact Year 1985
(November 1, 1984-October 31, 1985)
 - a) Vice Chairman
 - b) Recording Secretary
 - c) Operations Secretary
 - d) Treasurer
- 9) Appointment of Committee Members for Compact Year 1985
(November 1, 1984-October 31, 1985)
 - a) Administrative and Legal
 - b) Engineering
 - c) Operations
- 10) Reports of Federal Agencies
 - a) Corps of Engineers
 - b) Bureau of Reclamation
 - c) Geological Survey
- 11) Budget Matters
 - a) Review F.Y. 84-85 expenditures
 - b) Review previously adopted F.Y. 85-86 budget
 - c) Prepare and adopt F.Y. 86-87 budget
- 12) Other Matters
 - a) Proposed storage account for Ninemile-Highland in John Martin Reservoir
 - b) Proposed amendment to John Martin Reservoir operating plan concerning the Kansas transit loss account
 - c) Request for an engineering report from the Keese Ditch
 - d) Proposed storage account for Las Animas Golf Course Association in John Martin Reservoir
 - e) Trinidad Reservoir (five-year review of operations)
 - f) Status report on proposed permanent winter storage program
- 13) Presentation by the U.S. Geological Survey on its special Arkansas River study
- 14) Adjournment

/bvm

ATTACHMENT B

SECRETARY'S REPORT FOR DEC. 11, 1984

Our weather cycle seems to have changed the last three years causing more water to be available for storage in John Martin reservoir. There also is more water coming into the system from the west slope diversions to the east slope of the Rocky Mountains.

We are also continuing to improve our ability to store water and have it for later use in the drier times. We may see John Martin Reservoir

close to spilling or even spill in the spring of 1985.

It will be a challenge for us to see how we can handle an extra large supply of irrigation water. I hope we can look forward to an increased ability to manage our water in wet times as we have in dry times.

We have been able to have our money supply out on interest at our bank, resulting in more than enough money to pay the secretary's salary.

The new satellite system for measuring water on the river will result in better records for keeping track of the water after it becomes available.

I have been interested in straightening out the various big S curves in the river below John Martin Reservoir. This would result in shortening the time that is needed to get the water down to the state line. It would also allow the channel to deepen which would drop the water table along both sides of the river lessening the alkali problem on the farmland along the river. It would also decrease the shrubs using as much water as they do now. It would also decrease the evaporation on the shallower pot holes and swamp areas.

It is imperative that the channel of the river needs to be deepened and straightened so that water to Kansas may be delivered more efficiently and effectively.

Respectfully submitted
/s/ Leo Idler
Recording Secretary

ATTACHMENT C

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

CASH BALANCE, JULY 1, 1982.....\$36,354

RECEIPTS:

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:

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.....	\$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 Fees.....	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

CHECKS WRITTEN SINCE JULY 1, 1984

Date	Number	To — For	Amount
July 5	641	Bell Telephone — Telephone.....	\$ 232.14
July 5	642	Federal Reserve — Payroll Taxes.....	21.00
July 5	643	Gobins — Copies.....	6.00
July 5	644	AT&T — Telephone.....	7.68
July 5	645	Leo Idler Salary-Supplies — Salary-Postage-Supplies.....	294.59
July 5	646	Federal Reserve — Payroll Taxes.....	21.00
Aug. 6	647	Gobins — Supplies.....	16.43
Aug. 6	648	Mountain Bell — Telephone.....	134.52

Aug. 6	649	Federal Reserve — Payroll Taxes.....	21.00
Aug. 6	650	Leo Idler — Salary-Postage.....	286.84
Aug. 6	651	AT&T — Telephone.....	7.95
Aug. 16	652	Federal Reserve — Payroll Taxes.....	21.00
Sept. 5	653	Mountain Bell — Telephone.....	193.52
Sept. 5	654	Federal Reserve — Payroll Taxes.....	21.00
Sept. 5	655	Guaranty Abstract Co. — Treasurer's Bond.....	100.00
Sept. 5	656	Leo Idler — Salary-Postage.....	284.91
Sept. 15	657	Federal Reserve — Payroll Taxes.....	21.00
Oct. 5	658	Mountain Bell — Telephone.....	303.97
Oct. 5	659	Gobins — Large Envelopes.....	23.83
Oct. 5	660	AT&T — Telephone-Service.....	39.28
Oct. 5	661	Crimond, Farmer & Co. — Audit & Xerox Copies.....	446.82
Oct. 5	662	USGS — Joint Funding Agreement.....	8,250.00
Nov. 5	663	Gobins — Supplies.....	13.27
Nov. 5	664	Leo Idler — Salary-Supplies.....	290.31
Nov. 5	665	Mountain Bell — Telephone.....	230.26
Nov. 5	666	Federal Reserve — Payroll Taxes.....	40.20
Nov. 5	667	Leo Idler — Salary-Postage.....	293.70
Nov. 15	668	USGS — Joint Funding Agreement.....	3,750.00
Dec. 5	669	AT&T — Telephone.....	9.00
Dec. 5	670	Mountain Bell — Telephone.....	159.04
Dec. 5	671	Leo Idler — Salary-Supplies	
		Salary-Expenses.....	300.15
Dec. 5	672	Lamar Daily News — Annual.....	2,289.14
Dec. 5	673	Federal Reserve — Payroll Taxes.....	40.20
		Bank Charges — Withdrawal from Savings.....	10.00
		TOTAL.....	\$18,169.75

ATTACHMENT D

The Auditor's Report has been furnished to the members of the Administration and is therefore not included in this review draft. The complete report will be included in the approved minutes.

ATTACHMENT E

OPERATIONS COMMITTEE REPORT FOR 1984

The irrigation season was very successful as to the amount of water that was available to the irrigated farms along the Arkansas River. There was water available at all times during the irrigation season from April 1, 1984, to November 1, 1984.

Our account system we have been using since it was adopted April 24, 1980, continues to be studied by the Compact Administration, as to improvements needed.

The accounts, which pay a 35% charge of water stored, for the privilege of storing in John Martin Reservoir were used by the Amity Canal, Fort Lyon Canal, Las Animas Consolidated Canal and a new one

that was being used for the first time, the Las Animas Golf Course Account.

The Fort Lyon Canal used their account in John Martin Reservoir as an emergency place to store water that they were forced to evacuate from their Blue Lake north of Las Animas, Colorado. Their dam, there, started to leak and they were forced to seek a different place of storage.

There is a very good supply of water stored on November 1, 1984, to be carried forward into the 1985 irrigation season. We had a large snow storm along the foothills of the Rocky Mountains early in the fall which immediately started to melt giving a large boost to the contents of John Martin Reservoir. There was rain all along the valley before this came so not much more water was needed to finish the irrigation season.

Operations Committee

Chairman
/s/ Leo Idler

Member
/s/ Ron Olomon

ATTACHMENT F

ARKANSAS RIVER COMPACT ADMINISTRATION

REVISED BUDGET AND ASSESSMENTS

Fiscal Year July 1, 1984-June 30, 1985

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:		12,500
1. U.S. Geological Survey		
Cooperative Agreement.....	12,000	
2. Telemark Telephone John Martin		
Dam Granada Gage.....	500	
C. OPERATING EXPENSE:		8,850
1. Treasurer's Bond.....	100	
2. Annual Report.....	5,000	
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.....		33,291.20
ASSESSMENTS July 1, 1984-June 30, 1985.....		28,041.20
COLORADO (60%).....	16,824.72	
KANSAS (40%).....	11,216.48	
EXPENDITURE IN EXCESS OF ASSESSMENTS*		5,250.00

*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

ATTACHMENT G

ARKANSAS RIVER COMPACT ADMINISTRATION

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

ATTACHMENT H

ARKANSAS RIVER COMPACT ADMINISTRATION

ADOPTED BUDGET AND ASSESSMENTS

Fiscal Year July 1, 1986-June 30, 1987

BUDGET ITEMS

A. SALARIES:		\$ 9,950
1. Recording Secretary	\$ 3,600	
2. Operations Secretary	6,100	

3. Payroll Taxes.....	250	
B. GAGING STATIONS:.....		12,500
1. U.S. Geological Survey		
Cooperative Agreement.....	12,500	
2. Telemark Telephone John Martin		
Dam Granada Gage.....	0	
C. OPERATING EXPENSE:.....		7,300
1. Treasurer's Bond.....	100	
2. Annual Report.....	3,000	
3. Office Expense.....	3,700	
A. Telephone.....	3,000	
B. Supplies.....	350	
C. Printing.....	350	
4. Travel and Meetings.....	100	
5. Audit.....	400	
D. CONTINGENCY:.....		2,000
E. TOTAL BUDGET.....		31,750
ASSESSMENTS July 1, 1986-June 30, 1987.....		28,000
COLORADO (60%).....	16,800	
KANSAS (40%).....	11,200	
EXPENDITURE IN EXCESS OF ASSESSMENTS*.....		3,750
*From Surplus Funds		

Adopted by the Arkansas River Compact Administration at the
December 11, 1984, Annual Meeting.

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

ATTACHMENT I

RESOLUTION CONCERNING A WINTER STORAGE ACCOUNT FOR THE HIGHLAND IRRIGATION COMPANY AND NINEMILE DITCH COMPANY IN JOHN MARTIN RESERVOIR

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

WHEREAS, said resolution provides for accounts for Colorado ditches
for the storage of winter irrigation water in John Martin Reservoir; and

WHEREAS, the Highland Irrigation Company (Highland) and
Ninemile Ditch Company (Ninemile), Colorado, wish to establish a
similar account in John Martin Reservoir for the storage of winter
irrigation water from the Purgatoire River.

NOW, THEREFORE, BE IT RESOLVED that the Administration
hereby grants a single account for Highland and Ninemile in John Martin
Reservoir subject to the following terms and conditions:

1. The companies may deliver water into the said account subject to

the limitation that the total quantity in the account at any time cannot exceed 4,500 acre-feet and that the delivery cannot include water that otherwise would have accumulated in conservation storage. This account shall be used for agricultural purposes only and shall not be used in any manner to increase the permanent recreation pool either by exchange, transfer, change of use, or otherwise.

2. This account shall become effective on December 12, 1984, and remain in full force and effect through March 15, 1985, and from year to year thereafter for the period November 15 through March 15 unless terminated pursuant to condition 6 below. During the winter storage season, Highland and Ninemile may divert at their headgates until they go into storage, after which they must stay in storage through March 15. Highland and Ninemile must both be in storage simultaneously.
3. The winter storage water in the Ninemile and Highland account will be available for the use of the Ninemile and Highland by exchange between March 16 and October 31. The winter storage water can be exchanged when water diversions into one or both of these ditches are being regulated to satisfy senior water rights downstream in Water District 67. An exchange can be implemented by either of the two companies by having water released from the account to compensate for increased water diversions at its headgate. Releases will be made on a one-for-one basis with out-of-priority diversions by the ditches. Water in the Ninemile and Highland winter storage account shall only be exchanged from the John Martin Reservoir to either the Ninemile headgate or Highland headgate for direct irrigation use. Under no circumstances shall this water be exchanged or used in any other fashion.
4. This winter storage plan will be administered on a daily basis by the Colorado Division Engineer acting in both of his capacities as the Division Engineer and the Operations Secretary for the Administration. The program will be administered by the following terms:
 - a. Ninemile and Highland may store flows on a daily basis subject to the following two limitations:
 - i. The storable quantity will be computed as the lesser of: (1) the quantity of daily streamflow in the Purgatoire River at the Ninemile gaging station multiplied by the factor of 0.75, or (2) the quantity of daily streamflow in the Purgatoire River at the Las Animas gaging station minus one-half of the flows at the Ninemile gaging station.
 - ii. The daily rate of delivering winter storage water to John Martin Reservoir shall not exceed the decreed diversion capacities of the two ditches. The decreed diversion capacities are 62.5 cfs for the Highland and 75 cfs for the Ninemile and will be used as the upper limit for this season. Storage may occur until March 15 or until the 4500 acre-foot account is filled, whichever occurs first.
 - b. Winter storage water delivered to the account of Ninemile and Highland will be treated as "other water" under Sub-Section II. G and Section III of the Operating Plan and shall be subject

to a 35 percent storage charge pursuant to sub-section III. D of the Operating Plan.

- c. Evaporation will be charged against the winter storage water in the Highland and Ninemile account for the time it actually is in storage. The same formulas and procedures will be used for these calculations as are used for the other accounts in John Martin Reservoir.
5. In the event that water accumulated in this account has not been completely exchanged by the end of a compact year, then the water so remaining shall become conservation storage controlled by Subsection II. A of the Operating Plan.
6. In the event that the Operating Plan is terminated by either Colorado or Kansas pursuant to Subsection VII A, then this account shall also be terminated. This account can also be terminated on March 15 by either Kansas or Colorado, or by either Highland or Ninemile, by written notice given to the other state or the other entity, respectively, and to the Administration by February 1 of the same compact year. Upon such termination, the water in the account shall be available for use by Highland and Ninemile through the following October 31. If not used by that date, any remaining water shall revert to conservation storage.

BE IT FURTHER RESOLVED that approval of this plan does not impair the jurisdiction of the State of Colorado over waters of the Arkansas River in Colorado and does not and is not intended to supersede, abrogate, or otherwise modify the laws of the State of Colorado concerning administration, distribution, and use of water. It shall be the responsibility of Highland and Ninemile to comply with all applicable provisions of state law necessary to permit the use of water as contemplated by this plan. Approval of this plan by the Administration does not constitute a waiver by either Colorado or Kansas of any rights which each has under the Arkansas River Compact.

Entered this 11th day of December, 1984, at Lamar, Colorado.

Frank G. Cooley
Chairman

Leo Idler
Secretary

ATTACHMENT J

KANSAS STATE BOARD OF AGRICULTURE

October 30, 1984

Mr. Duane D. Helton
Tipton and Kalmbach, Inc.
17th and Market Plaza, Suite 700
1331 Seventeenth Street
Denver, Colorado 80202

Re: Highland and Ninemile
Winter Storage Plan

Dear Mr. Helton:

In reply to your letter and accompanying proposal dated August 6, 1984, there is enclosed a proposed Compact Administration resolution for

submittal to Highland and Ninemile as a counter offer for their proposed winter storage program in John Martin Reservoir.

The resolution has been structured to include a condition to maintain historic levels of compact flows in the Purgatoire River at Las Animas, Colorado. It is believed this proposed storage program would prevent further depletion of Arkansas River flows and of conservation storage in John Martin Reservoir.

If you have any questions, please contact this office.

Sincerely,

/s/ David L. Pope, P.E.
Chief Engineer-Director

DLP:GEH:bs

Encl.

CC: Mr. Carl Bentrup
Mr. Ronald Olloman
Mr. Carl Genova
Mr. Leo Idler
Mr. J. William McDonald
Mr. Howard Corrigan
Mr. Frank Cooley
Mr. John W. Campbell
Mr. Jeris A. Danielson
Mr. Robert W. Jesse
Mr. Kirk Wagner
Mr. Lee Rolfs
Mr. Wayland Anderson

RESOLUTION

CONCERNING A WINTER STORAGE PLAN FOR HIGHLAND IRRIGATION AND NINEMILE DITCH COMPANIES

December, 1984

WHEREAS, the Arkansas River Compact Administration, hereinafter referred to as the Administration, has been requested by the Ninemile Ditch Company (hereinafter referred to as Ninemile) and the Highland Irrigation Company (hereinafter referred to as Highland), to consider a winter storage plan which includes their storage of certain waters in John Martin Reservoir;

WHEREAS, the Administration is concerned that such a winter storage plan might, without proper limitations, materially deplete in usable quantity or availability the waters of the Arkansas River for use to the water users in Colorado and Kansas;

WHEREAS, the Administration wants to cooperate with all water users in efficient utilization of water under its control;

WHEREAS, the Administration has reviewed Ninemile and Highland's request and has developed certain criteria and limitations

contained herein to allow Ninemile and Highland to operate a winter storage program on a one year trial basis;

WHEREAS, the Administration finds that the provisions of this temporary winter storage plan are in compliance with the Arkansas River Compact and the Rules and Regulations and By-laws adopted by the Administration;

NOW THEREFORE, be it resolved that the Administration approves and adopts the following temporary winter storage program for Ninemile and Highland:

1. A winter storage account, not to exceed 4500 acre-feet in volume, will be established in John Martin Reservoir for Ninemile and Highland. This account will be available for the 1985 compact year.
2. The winter storage period will begin on November 16, 1984, and end on March 15, 1985. The Highland and Ninemile will accrue winter storage water in their account during this period as determined by conditions set forth below. Ninemile and Highland will not divert water at their headgates during the specified period. Diversions at the Ninemile and Highland headgates may resume on March 16, 1984.
3. The winter storage water in the Ninemile and Highland account will be available for the use of the Ninemile and Highland by exchange during the 1985 irrigation season. The winter storage water can be exchanged when water diversions into one or both of these ditches are being regulated to satisfy senior water rights downstream in Water District 67. An exchange can be implemented by either of the two companies by having water released from the account to compensate for increased water diversions at its headgate. Releases will be made on a one-for-one basis with out-of-priority diversions by the ditches. No transit loss 'credit' will be allowed. Water in the Ninemile and Highland winter storage account shall only be exchanged from the John Martin Reservoir to either the Ninemile headgate or Highland headgate for direct irrigation use. Under no circumstances shall this water be exchanged or used in any other fashion. At the end of the compact year, any water left in the Ninemile and Highland winter storage account will accrue to conservation storage.
4. The winter storage plan will be administered on a daily basis by the Division Engineer acting in both of his capacities as the Division Engineer and the Operations Secretary for the Compact Administration. The program will be administered by the following terms:
 - a. Ninemile and Highland may store flows on a daily basis in excess of the compact flows of the Purgatoire River at the Las Animas gaging station, subject to the following two limitations:
 - i. The storable quantity will be computed by multiplying the quantity of daily streamflow in the Purgatoire River at the Ninemile gaging station by 0.75.
 - ii. The daily rate of delivering winter storage water to John Martin Reservoir shall not exceed the decreed diversion capacities of the two ditches. The decreed diversion capacities are 62.5 cfs for the Highland and 75 cfs for the Ninemile and will be used as the upper limit for this season.

Storage may occur until March 15 or until the 4500 acre-foot account is filled, whichever occurs first.

- b. The compact flow in the Purgatoire River at the Las Animas gaging station will be determined by multiplying the quantity of the daily streamflow in the Purgatoire River at the Ninemile gaging station by 1.1. In the case that flows at the Las Animas gaging station are less than 1.1 times the flows at the Ninemile gaging station, all flows at Las Animas will be considered compact flow. Ninemile and Highland may store on a daily basis flows which exceed the compact flow at Las Animas, subject to condition 4.a. above.
 - c. Winter storage water delivered to the account of Ninemile and Highland will be treated as "other water" under Section III of the 1980 Resolution Concerning an Operating Plan for John Martin Reservoir and subject to a 35 percent storage charge. The storage charge will be allocated to the Kansas transit loss account on April 1.
 - d. Evaporation will be charged against the winter storage water in the Highland and Ninemile account for the time it actually is in storage. The same formulas and procedures will be used for these calculations as are used for the other accounts in John Martin Reservoir.
5. The winter water remaining in the Ninemile and Highland account will revert to the conservation pool on November 1, 1985.
 6. This winter storage plan will be in effect for one year only.
 7. Prior to considering the approval of any time extension of the Ninemile-Highland winter storage plan, Ninemile and Highland must submit the following information to the Administration for its review:
 - a. Documentation of the area irrigated by Ninemile and by Highland. This documentation should include information which quantifies both the present irrigated acreage and the acreage irrigated prior to 1948.
 - b. Documentation of the past and present capacities of the Ninemile and Highland ditches.
 8. Participation in this winter storage program is not intended to affect the water rights owned by the Highland and Ninemile in any way. The approval of this plan by the Administration does not constitute a waiver by either Kansas or Colorado of any rights it has under the terms of the Arkansas River Compact.

Entered this ____ day of December, 1984, at the regular annual meeting of the Administration held in Lamar, Colorado.

Frank G. Cooley, Chairman

Arkansas River Compact Administration

Leo Idler, Secretary

Arkansas River Compact Administration

ATTACHMENT K

ARKANSAS RIVER COMPACT ADMINISTRATION

March 20, 1985

Louis Johnson, Esq.
Horn Anderson & Johnson
Attorneys at Law
Suite 840, Holly Sugar Building
Colorado Springs, CO 80903
RE: Application of Jake D. Broyles, 82CW130
District Court, Colorado Water Division 2
AG Alpha No. LW SC AVLI
AG File No. DNR8404253/1MT

Dear Mr. Johnson:

In the above referenced case, we note that Mr. Broyles seeks to transfer his direct flow water right in Keesee Ditch, in former Water District 67, upstream for storage in John Martin Reservoir. He further proposes that part of this water be exchanged upstream to the Pueblo Reservoir, beyond the boundaries of former Water District 67, for possible sale.

Article V.H. of the Arkansas River Compact provides:

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 be thereby materially depleted or adversely affected, (1) priority rights now decreed to the 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 affect will result from such proposed transfer. ... Notice of legal proceedings for any such proposed transfer or increase shall be given to the administration in the manner and within the time provided by the laws of Colorado or Kansas in such cases.

The Arkansas River Compact Administration has received notice of Mr. Broyles' proposal. Mr. Broyles cannot proceed further with his plan until the Administration has made findings of fact that his proposed transfer will result in no adverse effect to District 67 or Kansas water users. The Administration can make such findings only after a detailed review of Mr. Broyles' proposal.

We therefore ask that Mr. Broyles provide the Administration with a detailed engineering report and operating plan, covering all aspects of his proposal, for review by the Administration. After reviewing the report and plan, the Administration may want to hold a special meeting to discuss the matter with Mr. Broyles or his representative.

Sincerely yours,
/s/ Carl E. Bentrup, Vice Chairman
Arkansas River Compact

Administration
CEB/gl

cc: Compact Members
Judge John R. Tracy

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ATTACHMENT L

ARKANSAS RIVER COMPACT ADMINISTRATION

DECISION OF THE OPERATIONS COMMITTEE

May 28, 1984

W. W. Wheeler and Associates, Inc. sent a communication to the Operations Committee about the need for irrigation water for the Las Animas Golf Course.

After conferring with the other members of the Arkansas River Compact the Operations Committee voted to grant Mr. Richard Jorgansen permission for a temporary storage right in the Las Animas Consolidated Canal Account in John Martin Reservoir.

Mr. Jorgansen is the president of the Las Animas Golf Course members. The Las Animas Consolidated Canal account will hold 175 acre feet of water that the golf course members will purchase from the Colorado Canal. This water is presently stored in Lake Meredith. The water will be charged transit and evaporation losses. Transit will be via the Arkansas River. Evaporation losses will be charged in proportion to other accounts in John Martin Reservoir.

The water in the lagoon of the Las Animas Sewer Works will be pumped to the golf course. It will be replaced by water from the Las Animas Consolidated Canal account. Accurate records will be sent to William Howland, Las Animas, Colorado. He will thereby control the release of water from the Las Animas Consolidated account to the river.

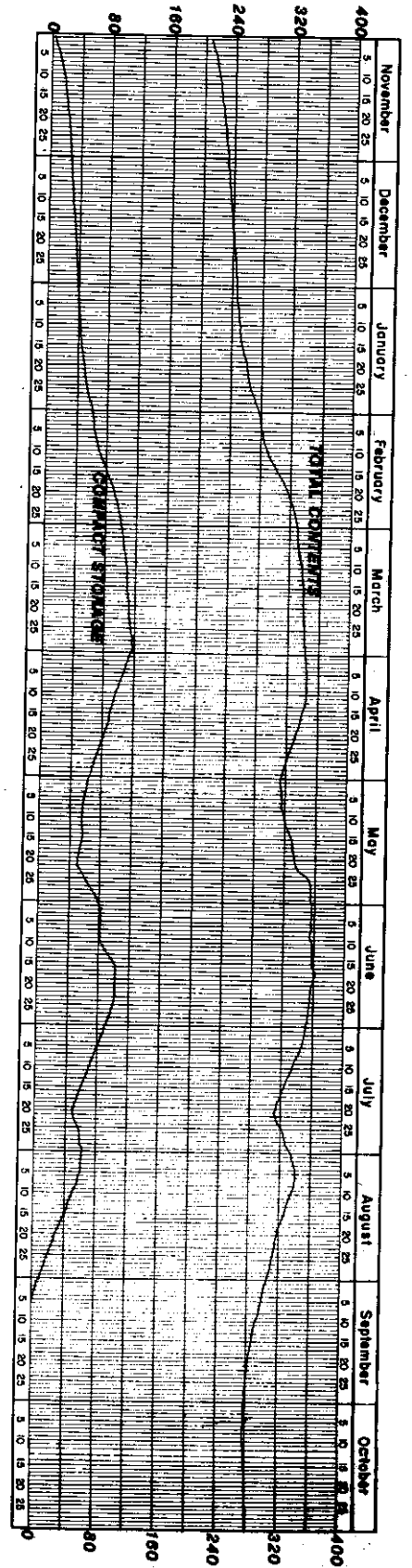
It is agreed that this account is for temporary purposes only and will be reviewed at the next compact meeting.

OPERATIONS COMMITTEE

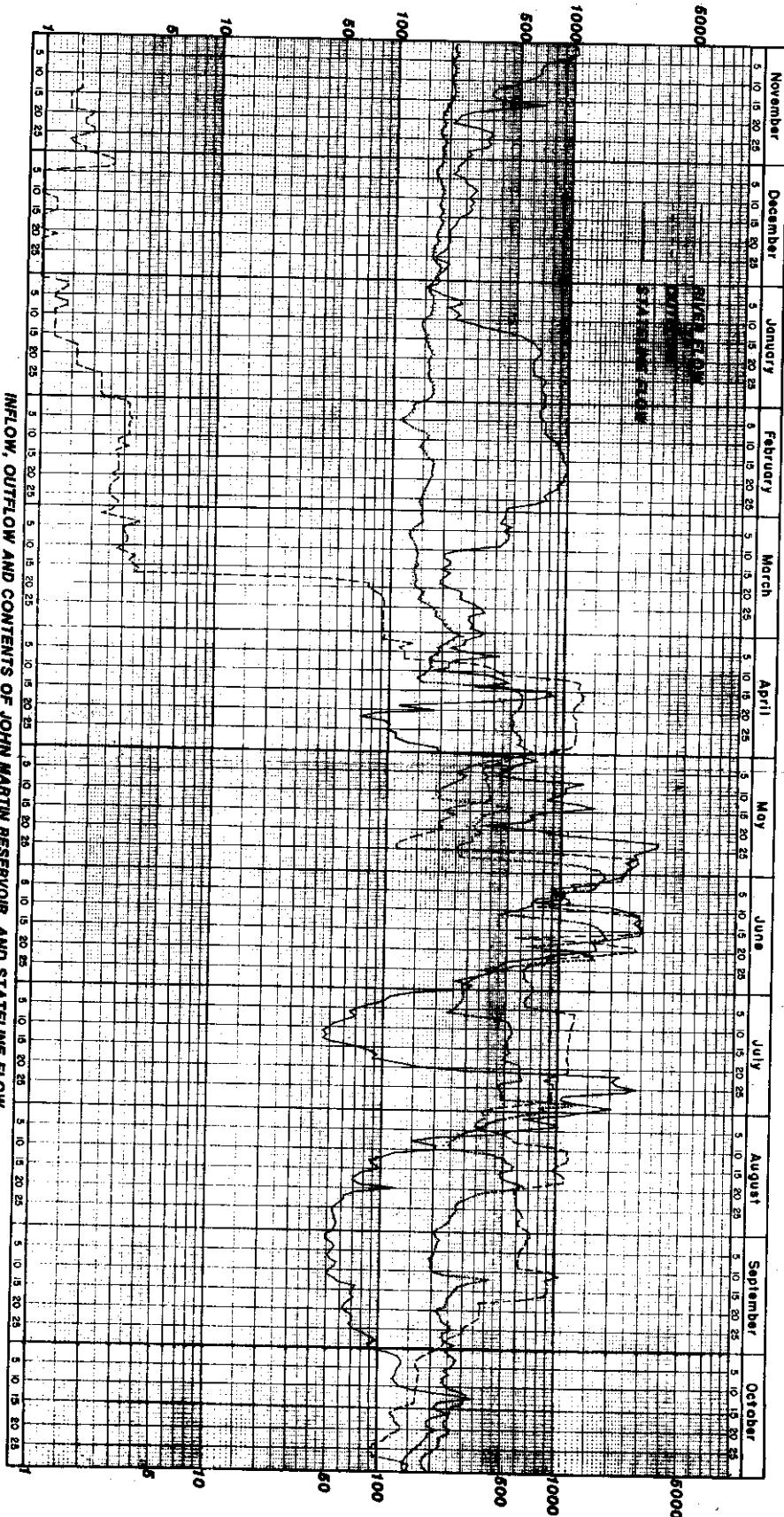
/s/ Leo Idler,
Chairman

/s/ Ron Olomon,
Member

THOUSANDS OF ACRE FEET



SECOND FEET



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

COMPACT YEAR 1985

NOVEMBER 1, 1984 TO OCTOBER 31, 1985