

Twenty-Seventh Annual Report

Arkansas River

Compact

Administration

(1975)

For the Report-Year

November 1, 1974 to October 31, 1975

LAMAR, COLORADO

December 9, 1975

THE ADMINISTRATION

APPOINTMENT PENDING

Chairman and Representative of the United States

ROBERT TEMPEL, HARRY BATES, JR., and FELIX L. SPARKS
for Colorado

CARL E. BENTRUP, M. P. REEVE, and GUY E. GIBSON
for Kansas

800 South Eighth Street
Lamar, Colorado 81052

TABLE OF CONTENTS

1. Members of the Administration	3
2. Officers of the Administration	3
3. Standing Committees	4
4. Meetings	4
5. Fiscal	4
6. Facts about John Martin Reservoir Project	6
7. Cooperative Studies and Activities	8
8. Water Supply, Reservoir Operation, and Hydrologic Data	8
9. Gaging Stations	9
10. Findings of Fact by the Administration	10

Appendices:

Appendix "A" Auditor's Report	12
Appendix "B-1" Daily Discharges; Arkansas River near Pueblo, Colorado	16
Appendix "B-2" Daily Discharges; Arkansas River at Las Animas, Colorado	17
Appendix "B-3" Daily Discharges; Purgatoire River near Las Animas, Colorado	18
Appendix "B-4" River Flow into John Martin Reservoir	19
Appendix "B-5" Daily Contents, John Martin Reservoir	20
Appendix "B-6" Outflow from John Martin Reservoir	21
Appendix "B-7" Daily Discharges; Arkansas River at Lamar, Colorado	22
Appendix "B-8" Daily Discharges; Arkansas River at Colorado-Kansas Stateline	23
Appendix "B-9" Demands by Colorado for Reservoir Water	24
Appendix "B-10" Demands by Colorado for River Flow	25
Appendix "B-11" Demands by Kansas for Reservoir Water	26
Appendix "B-12" Stateline Flows on Days of Kansas Demands	27
Appendix "B-13" Diversions by Ditches in Colorado Water Districts 14 and 17	28
Appendix "B-14" Diversions by Ditches in Colorado Water District 67	29
Appendix "B-15" Diversions by Ditches in Kansas, Stateline to Garden City	30
Appendix "B-16" Summary Tabulation	31

PLATE 1 River Flow, Outflow, and Contents of John
Martin Reservoir and Stateline Flow.

Annual Report Of
ARKANSAS RIVER COMPACT
ADMINISTRATION
(1975)

Report-Year November 1, 1974 to October 31, 1975

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

Sirs:

Pursuant to Article VII of the Arkansas River Compact, the Arkansas River Compact Administration submits its report for the Report-year November 1, 1974 through October 31, 1975, as follows:

1. Members of the Administration

Representative of the United States:

Appointment Pending

Colorado Representatives:

Harry Bates, Jr., Holly, Colorado
Robert Tempel, Wiley, Colorado
Felix L. Sparks, Denver, Colorado

Kansas Representatives:

Carl E. Bentrup, Deerfield, Kansas
M. P. Reeve, Garden City, Kansas
Guy E. Gibson, Topeka, Kansas

2. Officers of the Administration

Chairman:

Appointment Pending

Vice Chairman:

Carl E. Bentrup

Secretary:

Lane L. Hackett

Treasurer:

Harry Bates, Jr.

3. Standing Committee

Administrative and Legal Committee:

Felix L. Sparks (Chairman)
M. P. Reeve

Engineering Committee:

Guy E. Gibson (Chairman)
Robert Tempel

Operations Committee:

Harry Bates, Jr. (Chairman)
Carl E. Bentrup

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

4. Meetings

December 10, 1974

April 9, 1975

April 29-30, 1975

Annual Meeting
Telephonic Meeting
Colorado Lower
Arkansas River Tour

5. Fiscal

(a) Balance on hand November 1, 1974	\$19,421.00
(b) Receipts:	
State of Colorado	5,034.00
State of Kansas	3,348.00
(c) Total funds available	\$27,811.00
(d) Disbursements by the Administration:	

Voucher			
Date	No.	Payee	Purpose
12/ 9/74	222	Joetta Hackett-Typing	\$ 30.00
12/ 9/74	223	Mountain Bell-Nov. service	20.50

12/26/74	224	Lane Hackett-Salary	\$ 423.68	
		Travel	158.88	
		Postage	20.00	602.56
12/26/74	225	Crimond, Schemahorn & Co.-Audit		125.00
12/26/74	226	Federal Reserve Bank-FICA		52.65
12/26/74	227	Mountain Bell-Dec. service		63.54
1/31/75	228	Mountain Bell-Jan. service		18.50
1/31/75	229	Ruth Dresie-Certified reporter		100.00
2/27/75	230	Lane Hackett-Salary	\$ 423.68	
		Travel	160.92	
		Postage	25.00	
		Office supplies	12.35	621.95
2/27/75	231	Mountain-Bell-Feb. service		22.37
3/27/75	232	Federal Reserve Bank-FICA		52.65
3/27/75	233	Lamar Daily News-Printing		556.66
3/27/75	234	Mountain Bell-March service		30.07
4/30/75	235	Town House Motel-Travel		114.73
4/30/75	236	National Car Rental-Travel		100.82
4/30/75	237	Mountain Bell-April service		46.34
5/30/75	238	Mountain Bell-May service		17.96
5/30/75	239	U.S.G.S.-Operation agreement	\$4,000.00	
		-Artificial control	8,000.00	12,000.00
5/30/75	240	Lane Hackett-Salary	\$ 423.68	
		Travel	165.00	
		Postage	20.00	608.68
6/28/75	241	Federal Reserve Bank-FICA		52.65
6/28/75	242	Milne Agents-Treasurers Bond		17.50
6/28/75	243	Mountain Bell-June service		28.41
7/31/75	244	Milne Agents-Treasurer's bond		7.50
7/31/75	245	Lane Hackett-Salary	\$ 423.68	
		Travel	163.32	
		Postage	20.00	607.00
7/31/75	246	Mountain Bell-July service		31.45
8/31/75	247	Mountain Bell-August service		27.64
9/28/75	248	Federal Reserve Bank-FICA		52.65
9/28/75	249	Mountain Bell-September service		27.05
10/31/75	250	Mountain Bell-October service		21.82

TOTAL DISBURSEMENTS.....\$16,059.00

(e) Balance on hand, October 31, 1975\$11,752.00

(f) At the annual meeting on December 10, 1974 the Administration adopted the following budget for the fiscal year, July 1, 1976 to June 30, 1977.

PROPOSED BUDGET

Fiscal Year July 1, 1976 — June 30, 1977

Personal Services		\$2,250.00
Secretary's Salary	\$1,800.00	
Social Security	210.00	
Professional Services (Audit)	140.00	
Court Reporter	100.00	
U. S. Geological Survey		4,000.00
Cooperative Services	4,000.00	
Capital Outlay		100.00
Office Equipment	100.00	
Maintenance and Operation		2,050.00
Bond (Treasurer)	25.00	
Printing	600.00	
Official Publications	100.00	
Travel Expense	600.00	
Typing and Mailing	150.00	
Investigation and Inspection	100.00	
Telephone and Telegraph	375.00	
Office Supplies	100.00	
Total Budget 1976-1977		8,400.00
Estimated Carryover June 30, 1976		100.00
To Be Appropriated		8,300.00
Colorado (60%)	4,980.00	
Kansas (40%)	3,320.00	

(g) Pursuant to provisions of the Compact (Article VIII-E(3)) and of the By-Laws of the Administration (Article VII (5)), the receipts and disbursements of the Administration during the compact year have been audited, and the report of the audit is hereto attached as Appendix "A"

6. Facts about 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. William L. Lindsey has been the resident superintendent of the project since April 1, 1968.

The John Martin Reservoir Project is part of the comprehensive plan for the control of floods and the development of the water

resources of the entire Arkansas River basin. The reservoir provides 270,375 acre-feet of storage capacity for flood control. It protects the fertile Arkansas River valley below the dam from floods originating in the 18,915 square miles of the Arkansas River basin above the dam. It provides 350,951 acre-feet of storage space for conservation and recreation. John Martin Reservoir supplies water to the irrigated lands below the dam as far as Garden City, Kansas. The top of the conservation pool is 3,851 feet above mean sea level, which provides 350,951 acre-feet of storage for irrigation. The release of stored flood waters in excess of the conservation and recreation pools and above elevation 3,851 feet is planned so that, when combined with flows originating downstream from the dam, the capacity of the channel will not be exceeded. Upon request of the Arkansas River Compact Administration, irrigation water for downstream water users is released through the outlet works in the base of the dam. Downstream flood damages prevented by John Martin Dam already exceed the cost of the project. Benefits have already passed the \$92 million mark.

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

John Martin Dam consists of a concrete gravity structure 1,644 feet long and 120 feet high, and an earthfill structure 2,600 feet long. The concrete gravity structure contains a gated spillway provided with sixteen 30 feet by 64 feet tainter gates with their operating machinery. There are earthen wing dams on either side of the main dam. The north wing dam is 3,880 feet long, connecting to the earthfill structure of the main dam at the north abutment. The south wing dam is 5,807 feet long and connects to the south end of the concrete structure of the main dam. A bituminous-surfaced roadway, 21 feet wide, extends along the crest of the north wing dam, main dam, and south wing 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 area, square miles	18,915

A 1/2-mile of the historic Santa Fe Trail north of the reservoir has been enclosed by a fence. An appropriate sign perpetuates this bit of Americana for posterity.

7. Cooperative Studies and Activities

(a) Article VIII G (1) of Arkansas River Compact requires the Administration to cooperate with the Chief Official of each of the states of Colorado and Kansas charged with the administration of water rights in their respective States, and with the Federal agencies in systematically determining and correlating the facts pertaining to the flow and diversion of the water of the Arkansas River and to the operation and siltation of John Martin Reservoir and other related 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 the Engineers, United States Army, to cooperate and collaborate with the Administration and with appropriate State officials in such determinations and correlations of stream flow 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 and compilation of the hydrologic data presented in this report and used in the administration of the Compact. 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.

8. Water Supply, Reservoir Operation, and Hydrologic Data.

The winter storage season for John Martin Reservoir began on November 1, 1974 at 12:01 a.m., with the reservoir empty.

A demand for river flow was made by Colorado and released November 1, 1974 at 12:01 a.m., Colorado river flow demands were altered frequently during the months of November and December due to inclement weather and to accomodate construction work on the new concrete control being built below the dam. Colorado river flow releases averaged about 19 cfs during November and about 10 cfs during December on days of Colorado demand. The gates were closed on December 26, 1974 and remained closed until February 25, 1975 when they were again opened to satisfy a Colorado river flow demand of 12 cfs. This river flow was maintained until April 13, 1975.

Conservation storage on April 1, 1975 was 8,555 acre feet. The first demands for reservoir water during the summer storage period were made on April 8, 1975 at 8:30 a.m., when conservation storage had reached 8,758 acre feet. A reservoir release of 1,000 cfs was made to satisfy the Kansas demand of 400 cfs and the Colorado demand of 600 cfs. In addition a river flow of 12 cfs was continued to satisfy the Colorado demand for river flow. The reservoir release of 1,000 cfs plus river flow was maintained until the reservoir was emptied at 9:00 p.m. on April 12, 1975. The gate remained open and the river was then administered according to the Colorado priority system until winter storage began at midnight on October 31, 1975.

For the second year in a row, irrigators in the Arkansas Valley encountered severe water shortages. A few localized rain storms occurred during June, July and August in Colorado Water District 67 causing damage to several irrigation canals.

The river flow into John Martin Reservoir during the 1975 compact year totaled 94,500 acre feet which exceeded the 1974 compact year total of 77,550 acre feet, but still fell far below the 1949-74 yearly average of 171,022 acre feet. Ditch diversions during the 1975 compact year in Colorado Water District 67 were 109,729 acre feet. Ditch diversions in Kansas from the stateline to Garden City during the same period were 25,111 acre feet.

9. GAGING STATIONS

In general, streamflow records of satisfactory accuracy were obtained at the Compact stations. Emphasis was continued on performing additional field work to increase the accuracy of the records and on providing current streamflow data to the Administration and State officials as required. Because of travel limitations imposed on the U. S. G. S., extra travel was cut to a minimum.

There are differences in the releases from the reservoir, as measured at the gaging station, and the daily demands by Colorado and Kansas. To minimize these differences the gaging station below John Martin Reservoir was relocated just downstream from the dam, and a concrete control was built and put into operation April 9, 1975. The old gage 1.5 miles downstream was continued in operation until July 2, 1975, to get an overlap of the records. The telemark was moved to the new gage, but the cableway for measuring high flows is still located at the old site. High stage measurements can be made at the bridge just downstream until funds are available to move the cable.

Some vandalism was experienced during the year at the station Purgatoire River at Las Animas by motorcyclists running up and down the riverbed.

The radio stations at the four gages continue to give trouble because of their age. Plans are being made to try to replace these prior to the 1976 irrigation season.

The Administration approved a cooperative agreement with the Geological Survey for the fiscal year July 1, 1975 to June 1, 1976, in the amount of \$ 8,000; \$ 4,000 for each party. These funds are for the operation of the Compact Station at Lamar, the additional field work at other compact stations, the providing of current streamflow data, maintenance of radio equipment, and the preparation of records for the Annual Report.

10. Findings of fact by the Administration

SPECIAL TELEPHONIC MEETING

April 9, 1975

A special telephonic meeting was held April 9, 1975 in accordance with Article VF of the Compact, for the purpose of declaring that the reservoir would become empty April 12, 1975. Mr. C. J. Kuiper, Colorado State Engineer, and Mr. Robert Jesse, Division Engineer, were notified of this action and administration of decreed water rights for Colorado would commence on April 12, 1975, unless a change of conditions justified cancellation or modification of this notice.

The reservoir became empty at 09:00 P.M. April 12, 1975.

Participating members:

Colorado — Mr. Bates and Mr. Tempel

Kansas — Mr. Bentrup and Mr. Reeve.

APPENDICES

ANNUAL REPORT OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

For the Report-Year
November 1, 1974, to October 31, 1975

Appendices:	
Appendix "A"	Auditor's Report 12
Appendix "B-1"	Daily Discharges; Arkansas River near Pueblo, Colorado 16
Appendix "B-2"	Daily Discharges; Arkansas River at Las Animas, Colorado 17
Appendix "B-3"	Daily Discharges; Purgatoire River near Las Animas, Colorado 18
Appendix "B-4"	River Flow into John Martin Reservoir 19
Appendix "B-5"	Daily Contents, John Martin Reservoir 20
Appendix "B-6"	Outflow from John Martin Reservoir 21
Appendix "B-7"	Daily Discharges; Arkansas River at Lamar, Colorado 22
Appendix "B-8"	Daily Discharges; Arkansas River at Colorado-Kansas Stateline 23
Appendix "B-9"	Demands by Colorado for Reservoir Water 24
Appendix "B-10"	Demands by Colorado for River Flow 25
Appendix "B-11"	Demands by Kansas for Reservoir Water 26
Appendix "B-12"	Stateline Flows on Days of Kansas Demands 27
Appendix "B-13"	Diversions by Ditches in Colorado Water Districts 14 and 17 28
Appendix "B-14"	Diversions by Ditches in Colorado Water District 67 29
Appendix "B-15"	Diversions by Ditches in Kansas, Stateline to Garden City 30
Appendix "B-16"	Summary Tabulation 31
PLATE 1	River Flow, Outflow, and Contents of John Martin Reservoir and Stateline Flow.

APPENDIX "A"

AUDITOR'S REPORT

Crimond, Schemahorn & Co.

CERTIFIED PUBLIC ACCOUNTANTS

Johnson-Strait Building
Lamar, Colorado 81052

To the Representatives
Arkansas River Compact Administration
Lamar, Colorado 81052

Gentlemen:

We have examined the Statement of Assets & Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of October 31, 1975, and the Statement of Cash Receipts and Disbursements and Changes in Cash Balance for the fiscal year then ended. We have also examined the Statement of Cash Receipts and Disbursements with Budget Comparison for the budget year ended June 30, 1975. Our examination was conducted in accordance with generally accepted auditing standards, and included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, Exhibits A & B, present fairly the Assets & Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration at October 31, 1975, and the results of Cash Transactions of the fiscal year then ended, and Exhibit C present fairly the cash transactions of the budget year ended June 30, 1975, on a basis consistent with that of the previous year.

Respectfully submitted,
Crimond, Schemahorn & Co.

Lamar, Colorado
November 20, 1975

EXHIBIT A

ARKANSAS RIVER COMPACT ADMINISTRATION STATEMENT OF ASSETS AND LIABILITIES ARISING FROM CASH TRANSACTIONS OCTOBER 31, 1975

ASSETS:

Cash	\$ 11,752
Equipment	1,635
Concrete Control	8,000
TOTAL ASSETS	21,387

LIABILITIES:

CASH BASIS EQUITY:

Expended:		
Equipment	\$1,635	
Concrete Control	8,000	\$ 9,635
Unexpended:	11,752	
TOTAL CASH BASIS EQUITY		21,387
TOTAL LIABILITIES & CASH BASIS EQUITY		21,387

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

EXHIBIT B

ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS AND
CHANGES IN CASH BALANCE
FOR THE FISCAL YEAR ENDED OCTOBER 31, 1975

CASH IN BANK, NOVEMBER 1, 1974 \$19,421

RECEIPTS:

Revenue from Assessments:

Colorado	5,034
Kansas	3,356

TOTAL RECEIPTS 8,390

DISBURSEMENTS:

U. S. Geological Survey — Cooperative Services	4,000
U. S. Geological Survey —	
Concrete Control — Note 2	8,000
Insurance	25
Professional Fees	125
Office Supplies	12
Printing	557
Secretary's Salary — Net	1,695
Payroll Taxes	210
Telephone	356
Typing & Mailing	115
Travel	864
Certified Reporter	100

TOTAL DISBURSEMENTS 16,059

EXCESS OF DISBURSEMENTS OVER RECEIPTS ... (7,669)

CASH BALANCE, OCTOBER 31, 1975 \$11,752

EXHIBIT C

ARKANSAS RIVER COMPACT ADMINISTRATION STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS WITH BUDGET COMPARISON FOR THE BUDGET YEAR JULY 1, 1974 TO JUNE 30, 1975

	ACTUAL	BUDGET
CASH IN BANK, JULY 1, 1974	\$11,793	\$ 100
RECEIPTS:		
Revenue from Assessments:		
Colorado — 60%	5,022	5,022
Kansas — 40%	3,348	3,348
TOTAL RECEIPTS	8,370	8,370
TOTAL TO ACCOUNT FOR	20,163	8,470
DISBURSEMENTS:		
U. S. Geological Survey — Gauging	4,000	4,400
U. S. Geological Survey — Concrete Control — Note 2	8,000	---
Secretary's Salary	1,800	1,800
Insurance	43	25
Telephone	316	375
Payroll Taxes	105	105
Typing & Mailing	115	125
Travel	853	600
Professional Fees	125	140
Office Supplies	12	100
Printing	557	500
Certified Reporter	100	---
Office Equipment	---	100
Official Publications	---	100
Investigation & Inspection	---	100
TOTAL DISBURSEMENTS	16,026	8,470
CASH IN BANK, JUNE 30, 1974	\$ 4,137	\$ ---

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

ARKANSAS RIVER COMPACT ADMINISTRATION
NOTES TO CASH BASIS STATEMENTS
OCTOBER 31, 1975

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.

Note 2 — The restricted fund balance of the previous year arising from a special payment of the State of Colorado was expended during the fiscal year.

While the \$8,000 disbursement for the Concrete Control was not budgeted for the fiscal year ended June 30, 1975, it was the representatives intent that this expenditure be made in the manner and at the time it was.

APPENDIX B-1

Arkansas River Near Pueblo, Colorado

ARKANSAS RIVER NEAR PUEBLO, COLORADO
Report-Year ending October 31, 1975
USGS Records—Provisional, Subject to Revision
(Colorado State Engineer)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	236	184	208	204	128	122	394	670	3080	1470	762	236
2	230	184	208	245	93	122	438	632	3080	1400	750	237
3	224	184	189	227	120	151	439	548	3040	1330	727	232
4	224	195	167	190	243	143	447	670	3300	1390	686	243
5	241	200	167	179	228	122	456	1040	3370	812	675	188
6	267	197	167	184	183	118	481	1330	3470	758	675	146
7	261	196	187	169	177	192	491	1950	3540	777	470	120
8	262	192	181	160	183	319	482	1870	3480	787	471	107
9	255	187	236	184	183	297	485	2199	3406	877	479	108
10	248	179	230	250	182	145	439	2350	4080	1149	570	98
11	246	144	201	262	182	140	463	2350	4080	1119	570	98
12	242	127	200	233	187	148	473	2180	3320	1218	331	90
13	214	123	167	215	182	140	518	1670	2950	1376	242	86
14	208	127	111	215	182	145	536	1530	2790	1648	230	110
15	201	130	96	228	182	146	518	1660	3420	1318	243	128
16	196	130	136	251	182	119	480	2680	3400	1253	322	121
17	190	130	208	251	165	278	667	3140	2770	1408	282	97
18	190	130	224	239	127	598	713	9480	1880	1469	235	139
19	190	125	225	227	128	470	463	2680	2360	1010	183	125
20	190	125	289	179	108	270	612	2348	2120	982	164	132
21	207	125	403	154	119	368	721	2160	2830	782	167	131
22	225	125	446	168	140	282	806	1890	1800	684	202	110
23	231	141	283	168	152	289	885	1640	1090	707	268	146
24	225	203	190	188	152	255	768	1670	1270	653	268	132
25	213	208	184	209	140	146	652	1730	1680	588	273	202
26	185	176	210	250	98	118	613	2160	1770	577	268	202
27	185	138	246	281	111	286	585	2480	1650	550	213	232
28	185	129	280	226	177	656	641	2680	1630	547	182	235
29	185	129	256	177	588	588	669	2630	1650	586	177	196
30	184	145	215	177	436	436	1000	2610	1400	683	202	232
31	181	181	204	157	157		682		1400	658		212
TOTAL												
sec.ft.	6542	4889	6776	5395	4941	7621	18502	59100	79440	31984	11170	4974
ac.ft.	12880	9700	13440	11810	9800	14920	36790	117200	157800	63440	22160	9870
a) ac.ft.	0	0	0	0	0	0	16070	706	14921	23976	7354	0
b) ac.ft.	12880	9700	13440	11810	9800	14920	20630	116300	141000	39460	14940	9870

THE YEAR 479,000 acre-feet
CORRECTED 414,900 acre-feet

a) Less upstream reservoir and transmountain water.
b) Corrected total ac. ft.

APPENDIX V-2

Arkansas River At Las Animas, Colorado

ARKANSAS RIVER AT LAS ANIMAS, COLORADO

Report Year ending October 31, 1975

USGS Records - Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	7.2	3.7	10	16	8.5	11	12	482	448	474	20	20
2	6.4	6.4	10	17	8.5	11	12	388	446	474	18	14
3	5.3	6.4	10	18	8.5	12	12	304	446	438	15	13
4	5.3	8.5	11	20	8.5	12	12	168	446	462	16	12
5	5.3	11	11	18	8.5	11	11	100	524	366	13	11
6	4.0	12	13	14	8.9	11	11	49	580	386	14	11
7	6.0	7.6	15	16	8.5	11	11	177	636	396	14	12
8	6.8	6.0	15	17	8.5	12	12	612	510	270	12	12
9	7.6	5.3	15	77	8.5	12	10	594	446	165	12	12
10	6.8	6.0	15	83	8.5	12	10	582	780	129	14	12
11	6.0	6.0	10	63	8.9	12	10	1310	710	112	17	12
12	6.4	11	8	19	8.5	11	8.9	612	1160	87	16	12
13	6.8	15	10	18	8.5	11	9.4	438	1390	48	28	12
14	5.6	18	11	16	8.5	12	8.5	350	688	67	55	12
15	6.4	18	13	16	8.5	11	8.0	644	818	215	48	12
16	5.8	16	13	16	8.9	11	7.6	474	572	310	21	12
17	5.6	18	20	16	9.4	11	7.2	612	676	456	12	12
18	6.4	18	26	14	9.3	10	6.4	516	546	426	12	12
19	6.4	16	29	14	9.8	10	6.4	488	572	372	11	12
20	4.9	14	33	13	9.8	20	6.4	660	740	246	11	12
21	5.6	14	44	12	10	90	7.2	488	638	184	12	12
22	6.4	14	33	12	10	100	9.4	482	700	135	12	12
23	6.4	12	33	11	10	30	8.9	800	580	129	11	11
24	6.0	12	49	11	11	14	45	386	636	102	11	12
25	7.6	12	29	10	10	14	123	355	678	106	11	12
26	7.2	12	21	8.4	11	14	115	486	644	71	22	12
27	6.4	10	17	9.4	11	14	50	604	620	40	52	12
28	5.6	10	16	8.5	11	13	22	516	636	31	59	11
29	4.5	10	14	11	11	12	16	305	558	21	61	11
30	3.0	9.0	16	11	11	12	129	335	544	22	55	11
31	10	10	16	11	11	11	300	572	572	22	22	11
TOTAL	181.5	345.9	586.0	594.3	292.5	547	1017.3	14254	19764	6773	684	383
sec.ft.	360	686	1160	1180	580	1080	2020	22270	39200	13430	1360	760
ac.ft.												

THE YEAR 90,100 acre-feet

APPENDIX 'B-3'

Purgatoire River Near Las Animas, Colorado

PURGATOIRE RIVER NEAR LAS ANIMAS, COLO.
Report Year ending October 31, 1975
USGS Records—Provisional, Subject to Revision

DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1	0.80	5.2	8.5	14	4.4	2.2	1.5	2.2	2.2	19	80	80
2	1.5	6.8	9.0	15	5.2	2.8	1.5	2.2	2.2	121	90	90
3	2.8	12	9.0	15	2.8	2.2	2.2	1.5	2.2	40	90	90
4	1.5	16	9.0	15	3.6	2.2	1.5	1.5	1.5	4.8	90	90
5	1.5	17	9.5	12	2.2	1.5	1.5	1.5	1.5	101	90	70
6	1.5	16	10	5.0	6.8	1.5	1.5	2.2	2.2	34	90	70
7	1.5	12	12	6.0	15	1.5	1.5	1.5	2.8	4.4	90	60
8	1.5	12	12	10	3.6	1.5	1.5	1.5	3.6	2.2	90	60
9	1.5	11	11	12	2.8	1.5	1.5	2.8	3.6	0.6	90	70
10	1.5	12	9.0	16	2.8	2.2	2.8	2.2	12	2.8	90	70
11	1.5	11	8.0	17	2.2	2.8	1.5	3.0	12	1.5	90	80
12	1.5	12	8.0	18	2.2	4.4	2.2	2.2	26	1.5	90	90
13	1.5	12	7.0	17	2.8	4.4	2.8	17	8.2	1.5	1.5	1.0
14	2.2	12	10	15	2.8	3.6	2.8	7.6	2.2	2.2	1.5	1.0
15	1.5	11	17	13	5.2	2.8	2.2	1.5	2.2	2.2	1.5	1.2
16	5.2	12	16	11	7.8	2.2	2.2	2.2	4.8	101	1.5	1.5
17	2.2	15	15	7.6	4.4	1.5	2.2	2.2	16	33	1.5	1.5
18	1.5	15	12	7.8	3.6	2.2	1.5	4.3	3.6	9.2	90	2.2
19	1.5	17	12	6.8	3.6	1.5	1.5	2.8	2.2	2.8	90	1.5
20	1.5	16	12	6.0	3.6	2.2	1.5	12	1.5	1.5	90	1.5
21	2.2	12	13	6.8	3.6	2.2	2.8	6.0	1.5	1.5	90	1.5
22	2.2	14	12	6.8	3.6	2.2	1.5	2.8	2.2	1.2	90	1.6
23	2.2	13	11	6.0	2.8	2.2	1.5	2.8	2.2	1.1	90	1.5
24	4.4	14	15	11	2.8	2.2	1.5	2.8	2.2	1.1	90	2.2
25	3.6	14	15	8.0	2.8	1.5	1.5	2.8	7.6	1.1	90	1.5
26	3.6	13	15	4.4	3.6	3.0	1.5	1.5	3.2	1.0	90	1.5
27	2.2	11	13	2.2	6.0	90	2.2	2.2	3.6	1.0	90	1.5
28	2.2	10	16	4.4	3.6	90	2.8	1.5	2.2	1.0	90	1.5
29	7.6	7.0	14		2.8	90	3.6	1.5	2.2	1.0	90	1.5
30	10	7.0	14		2.2	2.2	3.6	1.5	1.5	1.9	90	90
31		8.0	14		1.5		2.2		2.2	90	2.8	
TOTAL	76.0	576.0	567.0	288.4	125.5	49.20	61.90	143.7	145.40	568.90	30.00	56.40
ac.ft.	151	746	726	408	248	123	123	285	288	1190	80	76

THE YEAR 4570 acre-feet

River Flow Into John Martin Reservoir

-19-

APPENDIX 'B-5'

Contents Of John Martin Reservoir

CONTENTS OF JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1975
Corps of Engineers records—Provisional. Subject to Revision
Midnight contents in acre-feet from capacity table dated Nov. 1, 1972

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	0	296	1618	4921	7885	8633	0	0	0	0	0	0
2	0	297	1675	5028	7915	8617	0	0	0	0	0	0
3	0	408	1698	5124	7990	8664	0	0	0	0	0	0
4	0	555	1845	5246	8020	8695	0	0	0	0	0	0
5	0	632	1873	5320	8051	8711	0	0	0	0	0	0
6	0	664	1982	5303	8005	8680	0	0	0	0	0	0
7	0	683	2044	5444	7975	8758	0	0	0	0	0	0
8	0	722	2139	5494	8066	7429	0	0	0	0	0	0
9	0	753	2234	5698	8172	5444	0	0	0	0	0	0
10	0	771	2292	6125	8172	3803	0	0	0	0	0	0
11	0	795	2353	6527	8217	1805	0	0	0	0	0	0
12	36	823	2414	6788	8232	0	0	0	0	0	0	0
13	64	847	2477	6970	8248	0	0	0	0	0	0	0
14	101	885	2558	7088	8276	0	0	0	0	0	0	0
15	134	921	2640	7197	8370	0	0	0	0	0	0	0
16	175	958	2718	7284	8431	0	0	0	0	0	0	0
17	215	995	2813	7356	8431	0	0	0	0	0	0	0
18	255	1040	2912	7443	8462	0	0	0	0	0	0	0
19	295	1087	3013	7501	8478	0	0	0	0	0	0	0
20	339	1129	3013	7589	8509	0	0	0	0	0	0	0
21	383	1154	3280	7618	8493	0	0	0	0	0	0	0
22	385	1178	3410	7677	8509	0	0	0	0	0	0	0
23	394	1191	3525	7721	8555	0	0	0	0	0	0	0
24	406	1197	3823	7781	8524	0	0	0	0	0	0	0
25	404	1200	4128	7825	8493	0	0	0	0	0	0	0
26	385	1242	4314	7855	8602	0	0	0	0	0	0	0
27	387	1285	4470	7870	8540	0	0	0	0	0	0	0
28	359	1335	4572	7870	8540	0	0	0	0	0	0	0
29	343	1390	4687		8586	0	0	0	0	0	0	0
30	319	1459	4756		8602	0	0	0	0	0	0	0
31		1556	4803		8555		0	0	0	0	0	0

APPENDIX 'B-6'

Outflow From John Martin Reservoir

OUTFLOW FROM JOHN MARTIN RESERVOIR
Report Year ending October 31, 1975
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	13	20	2.0	2.0	13	13	30	280	368	550	29	60
2	14	19	2.0	2.0	13	12	30	348	380	448	26	37
3	14	11	2.0	2.0	13	12	29	356	356	480	25	28
4	14	5.2	2.0	2.3	13	12	30	186	444	448	23	24
5	18	12	2.0	2.3	13	11	29	158	428	420	23	22
6	20	14	2.0	2.3	14	11	26	105	470	416	23	22
7	18	14	2.0	2.3	12	11	26	135	575	388	23	21
8	17	14	2.0	2.2	12	663	28	261	480	340	22	19
9	16	14	2.0	2.2	12	948	26	413	458	232	18	18
10	16	14	2.0	2.2	13	918	25	416	535	166	17	20
11	6.6	14	2.0	2.1	12	824	25	1030	605	138	17	21
12	3.3	13	2.3	2.1	12	838	23	1060	826	124	24	20
13	3.0	13	2.3	2.1	12	62	22	485	1200	99	29	16
14	3.3	13	2.6	2.1	13	51	24	400	690	76	37	17
15	3.3	12	2.6	2.0	13	35	24	488	485	98	58	20
16	4.8	12	2.6	2.0	13	35	23	485	535	362	49	21
17	13	11	2.6	2.0	13	34	22	485	525	356	33	21
18	5.7	11	2.3	2.0	13	33	27	615	570	384	24	22
19	2.0	9.9	2.3	1.8	13	34	19	408	448	348	22	24
20	4.8	11	2.6	1.7	14	33	19	610	585	272	21	22
21	14	9.9	2.6	1.7	13	45	17	510	655	211	22	24
22	14	9.9	2.3	1.6	13	90	17	436	642	176	22	25
23	14	9.9	2.0	1.6	13	56	18	735	575	144	22	23
24	14	11	2.3	1.6	13	384	20	510	540	130	21	24
25	16	11	2.0	7.6	14	36	45	336	610	114	20	24
26	19	6.2	2.3	19	14	33	90	384	535	105	21	24
27	18	2.3	2.3	19	13	30	88	432	560	78	31	24
28	19	2.3	2.0	16	13	29	62	480	575	56	51	23
29	22	2.3	2.0		13	30	45	352	545	44	60	23
30	20	2.3	2.0		13	34	36	316	485	35	62	23
31	2.0	2.0	2.0		13		116		480	33		24
TOTAL												
sec.fl.	381.8	325.2	58.0	109.8	388	5109	1061	13125	17203	7281	875	739
ac.ft.	757	647	135	218	789	10130	2100	26030	34120	14440	1740	1470

THE YEAR 92,580 acre-feet

APPENDIX 'B-7'

Arkansas River At Lamar, Colorado

ARKANSAS RIVER AT LAMAR, COLORADO
Report Year ending October 31, 1975
USGS Records Provisional Subject to Revision

DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1	2.9	3.9	3.5	9.2	3.9	1.9	9.2	90	27	74	13	39
2	3.9	5.0	3.0	9.2	3.9	8.0	8.6	22	28	58	11	36
3	3.9	5.6	3.0	9.2	3.9	5.6	7.4	61	4.4	30	10	24
4	3.9	8.0	3.5	9.2	3.9	3.9	5.0	53	5.0	7.4	11	18
5	3.9	6.8	3.5	6.0	3.4	2.9	3.9	74	27	5.6	13	12
6	4.4	4.4	4.0	4.0	2.4	3.4	2.9	54	36	3.9	12	9.2
7	4.4	5.0	5.0	5.0	2.9	3.4	3.4	40	38	3.9	10	6.6
8	3.9	5.6	5.0	5.0	3.4	5.2	5.0	34	13	2.9	10	5.0
9	3.9	7.4	1.0	6.0	4.4	374	7.4	70	9.2	11	10	5.0
10	3.9	6.8	1.5	8.0	3.4	404	9.2	20	16	15	9.2	5.0
11	3.4	6.9	1.5	13	2.9	419	5.6	27	35	14	8.6	5.6
12	3.4	9.8	1.5	12	2.9	401	6.2	427	31	14	10	6.2
13	3.4	9.2	2.0	11	2.9	180	7.4	82	228	30	16	4.4
14	3.4	9.0	2.0	9.2	2.9	62	5.6	48	176	25	19	4.4
15	3.4	10	2.0	7.4	2.9	73	5.6	62	30	20	24	3.9
16	3.9	10	2.5	9.8	3.9	53	5.0	97	74	78	37	4.4
17	3.9	11	3.0	7.4	2.9	36	3.9	42	55	110	31	3.9
18	4.4	10	5.0	8.6	2.9	24	2.9	117	102	24	18	4.4
19	4.4	8.6	18	8.0	2.9	22	2.9	57	62	19	13	3.9
20	3.9	10	15	8.6	2.4	17	2.4	68	89	32	12	4.4
21	3.4	10	11	6.9	3.4	14	3.4	55	130	24	14	1.4
22	4.4	12	10	4.4	2.4	18	2.4	20	64	28	8.6	5.0
23	4.4	10	8.6	5.6	1.4	35	2.9	955	113	19	8.0	5.0
24	3.4	8.0	12	7.4	1.4	25	3.4	441	56	20	6.2	5.6
25	3.4	7.0	10	3.9	1.9	15	2.9	103	79	14	6.8	5.6
26	5.0	5.0	8.6	5.0	5.6	11	6.7	13	72	22	7.4	5.6
27	5.6	5.0	7.4	4.4	3.4	7.4	53	37	64	28	7.4	5.6
28	4.4	3.0	10	3.9	1.4	6.2	68	159	59	24	8.6	6.0
29	4.0	3.0	8.0		1.9	6.8	27	59	53	18	24	7.4
30	4.0	2.5	8.6		.90	8.0	2.4	41	27	18	33	8.6
31		3.0	11		1.4		1.9		35	18		8.6
TOTAL	118.5	221.4	194.7	206.6	88.10	2282.5	282.5	3360.90	1836.6	810.7	421.8	272.9
sec ft	235	439	386	410	175	4530	560	6670	3640	1610	837	541

THE YEAR 20,000 acre-feet

APPENDIX 'B-B'

Arkansas River At The Colorado-Kansas Stateline

ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE
Report-Year ending October 31, 1975
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	13	9.6	6.0	18	27	19	33	37	197	794	34	23
2	13	11	6.0	18	27	19	37	29	116	341	34	31
3	13	13	6.0	18	27	22	32	23	108	215	36	37
4	13	11	7.0	15	26	19	32	26	83	164	41	39
5	13	14	8.0	13	25	19	30	27	69	132	39	34
6	12	16	9.0	12	25	16	26	29	59	105	35	30
7	13	16	9.0	12	25	16	27	28	63	75	30	20
8	14	14	9.0	12	25	19	27	27	70	68	30	17
9	14	16	9.0	12	25	24	27	48	68	62	27	16
10	14	16	8.0	13	30	75	27	64	61	62	31	17
11	14	15	7.0	16	40	170	44	63	64	59	34	16
12	14	17	6.0	18	34	231	62	49	63	53	32	17
13	15	19	6.0	18	32	249	108	114	46	65	30	15
14	14	19	10	18	32	163	31	79	71	60	27	14
15	14	19	20	20	34	79	25	59	104	57	29	17
16	14	20	24	20	34	68	23	63	61	177	30	15
17	13	19	22	20	36	55	25	64	69	594	28	14
18	13	19	20	20	36	40	21	54	62	212	28	15
19	13	21	18	20	42	38	19	45	58	125	29	16
20	15	22	18	22	38	46	20	53	182	111	26	18
21	16	28	18	26	34	38	19	67	1140	97	21	17
22	16	24	16	30	34	38	18	95	228	73	20	16
23	15	22	16	25	32	36	20	200	137	78	23	16
24	14	20	19	20	32	34	19	914	152	71	27	15
25	16	7.0	16	23	29	32	18	345	117	57	35	15
26	16	6.0	16	25	29	31	17	184	103	55	33	16
27	16	6.0	16	23	150	28	18	110	96	50	25	18
28	16	6.0	13	25	32	26	204	2230	93	46	25	16
29	15	6.0	14		22	29	876	622	105	45	23	16
30	14	6.0	14		22	32	128	310	97	43	23	20
31		6.0	18		22		55		79	37		16
TOTAL												
sec.ft.	425	463.6	404	532	1056	1711	2068	6058	4022	4183	885	600
ac.ft.	843	920	801	1060	2090	3390	4100	12020	7980	8300	1760	1190

The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas, and the Frontier ditch.
THE YEAR 44,450 acre-feet

APPENDIX 'B-9'

Demands By Colorado For Reservoir Water

Demands by Colorado for Reservoir Water (C.F.S.)
Report Ending October 31, 1975
Data Source: U. S. Corps of Engineers and Orders by the Secretary
of the Arkansas River Compact Administration
(Provisional-Subject to Revision)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1												
2												
3												
4												
5												
6												
7												
8								380				
9								600				
10								600				
11								600				
12								525				
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Totals												
sec.ft.												
ac.ft.												
Closed at Midnight for Winter Storage												x
YEARLY TOTAL: 5384 Ac. Ft.												

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1 OPEN: 001 MST	25	20			12	12						
2 River flow	25	20			12	12						
3	25		Closed 0900 MST		12	12						
4	25	6	Open 0900 MST		12	12						
5	25	10			12	12						
6	25	10			12	12						
7	25	10			12	12						
8	25	10			12	12						
9	25	10			12	12						
10	25	10			12	12						
11 Closed: 0830* MST	9	10			12	12						
12	0	10			12	12						
13	0	10			12	10.5						
14	0	10			12							
15	0	10			12							
16 Open: 0630 MST	13	10			12							
17	20	10			12							
18 Closed: 0830* MST	7	10			12							
19	0	10			12							
20 Open: 0630** MST	8	10			12							
21	15	10			12							
22	15	10			12							
23	15	10			12							
24	15	10			12							
25 Increase 0900MST	18	10	Open 0930 MDT	7	12							
26	20	4	Closed 0930 MDT	12	12							
27	20			12	12							
28	20			12	12							
29	20				12							
30	20				12							
31	20				12							
sec. ft.	484	267		43	378	142.5						
ac. ft.	960	529		798	292							

Closed at Midnight for
Winter Storage X

- Forced storage to permit construction work below reservoir
- Limited flow due to construction

APPENDIX 'B-11'

Demand By Kansas For Reservoir Water

DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	OCT.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Totals												
sec. ft.												
ac. ft.												

YEARLY TOTAL: 3,193 Ac. Ft.

APPENDIX B-12'

Stateline Flow On Days Of Kansas Demand*

STATELINE FLOW ON DAYS OF KANSAS DEMAND*
Report Year ending October 31, 1975
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11						170						
12						231						
13						249						
14						163						
15						79						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL						892						
sec. ft.						1770						
ac. ft.												

THE YEAR: 1770 acre-feet

*Three days' time is allowed for water released from John Martin Reservoir to reach State line.

APPENDIX 'B-13'

Diversion In Ditches By Colorado

REPORT YEAR ENDING OCTOBER 31, 1975
SOURCE: WATER COMMISSIONER'S MONTHLY REPORT
DIVERSIONS IN DITCHES BY COLORADO (A-F)
DISTRICTS #14 & #17

Name of Canal	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	COMPACT YEAR
Jessemer River	4221	3379	0	0	4180	4224	4087	7841	11171	11963	4224	4363	52700
Res. or Imported	0	0	0	0	0	0	1362	0	488	2195	0	0	4045
Total Bessemer	4224	3379	0	0	4180	4224	5449	7841	12259	6560	4224	4363	56705
Minnequa-Ft. Union (Res.)	0	0	0	0	0	0	0	0	0	0	0	233	233
West Pueblo (River)	0	95	31	26	4	13	152	332	278	191	190	38	1350
Excelsior (River)	0	0	0	0	0	0	0	1626	2066	454	59	0	4205
Res. or Imported	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Excelsior	0	0	0	0	0	0	0	1626	2066	454	59	0	4205
Collier	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorado Canal (River)	0	1622	6133	2606	0	0	0	884	1289	0	0	0	2173
Res. or Imported	0	0	0	0	0	0	0	5826	5921	527	0	0	22635
Total Colo. Canal	0	1622	6133	2606	0	0	0	12654	15676	9850	4309	0	43183
Highline (River)	333	1551	940	4206	4178	5334	5630	13469	21597	10377	4309	0	65818
Res. or Imported	0	0	0	0	0	0	906	0	619	4466	0	0	5991
Total Highline	333	1551	940	4206	4178	5334	6536	13469	19830	11871	5336	0	78064
Oxford Farmers (River)	1779	696	331	218	968	884	884	4942	6088	1773	789	781	20133
Res. or Imported	0	0	0	0	0	0	0	0	631	0	93	0	724
Total Oxford Farmers	1779	696	331	218	968	884	884	4942	6088	2404	882	781	20857
Total District #14	6336	7343	7435	7056	8330	10455	10753	34920	46544	14715	10588	9644	175229
Otero	0	0	0	0	0	0	0	958	2849	0	0	0	3857
Res. or Imported	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Otero	0	0	0	0	0	0	0	958	2849	0	0	0	3857
Catlin Canal (River)	5774	1196	906	337	6237	2659	5156	16088	16778	13387	2487	2560	73585
Res. or Imported	0	0	0	0	0	0	0	0	0	992	2778	0	3770
Total Catlin	5774	1196	906	337	6237	2659	5156	16088	16778	14379	5265	2560	77335
Holbrook (River)	0	763	6080	2570	0	0	0	5390	10197	1154	0	0	26344
Res. or Imported	0	0	0	0	0	0	0	0	0	4656	0	0	4656
Total Holbrook	0	763	6080	2570	0	0	0	5390	10197	5810	0	0	31000
Rocky Ford	2152	801	119	188	3476	5828	6445	5499	5725	5156	3726	4275	43390
Ft. Lyon Storage	0	0	119	0	0	0	0	0	5225	0	0	0	5344
Ft. Lyon (River)	12287	20131	12416	16374	12182	8975	7456	37483	44847	16668	9699	9437	209955
Res. or Imported	0	0	0	0	0	0	2195	0	2313	0	0	0	5108
Kicking Bird	0	0	0	0	0	0	0	0	2247	0	0	0	2247
Total Ft. Lyon-K.B.	12287	20131	12535	16374	12182	8975	9651	37483	52319	21581	9699	9437	222654
Las Animas Consol.	2996	1418	1346	1467	2695	1741	1580	5531	5913	3282	1922	1672	31583
Total Dist. #17	23209	24309	20996	20556	24590	19203	20637	71139	93831	41647	17834	17944	396285
Total Dist. #14 & #17	25645	31652	28421	28012	33920	28558	31390	106459	140475	56362	28432	27588	571514
Res. or Imported #14 & #17	0	0	0	0	0	0	17117	694	16783	25703	7180	233	67710
Grand Total	28545	31652	28421	28012	33920	28558	48507	106753	157258	82065	35612	27821	639224

APPENDIX B-14' **Diversions By Ditches In** **Colorado Water District 67** **Division #2**

Division of Ditches in Colorado Water District #67—Division #2
 Report Year Ending October 31, 1975
 Source of Information: Water Commissioner's Special Reports to Division Engineer
 (Provisional—Subject to Revision)
 Units in Acre-Feet

Name of Ditch	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	COMPACT YEAR
Fort Bent Canal	561	603	0	89	252	1313	763	2582	4156	2217	0	131	12667
Keesee Ditch	206	0	0	0	377	537	575	712	948	851	827	847	5080
Amity Canal	0	0	0	0	0	2625	0	13486	10694	7266	0	0	49871
Lamar Canal	1077	1105	1118	960	1257	1898	1318	3965	6318	4363	1114	1130	25643
Hyde Ditch	0	0	0	0	0	129	129	147	321	208	0	0	824
Manvel Canal	0	0	0	0	0	0	0	32	0	0	0	0	32
X. Y. & Graham Canals	0	0	0	0	0	295	0	383	730	284	0	0	1702
Buffalo Canal	428	438	430	389	1152	2647	1795	3125	4154	2350	2091	1001	19800
Sisson-Stubbs Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
Total: District	2272	2146	1548	1438	3038	9444	4580	24462	36211	17559	3942	3109	109729
Trans. Mt. Diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2272	2146	1548	1438	3038	9444	4580	24462	36211	17559	3942	3109	109729

APPENDIX 'B-15'

Diversions By Ditches

In Kansas

Diversions by Ditches in Kansas
Report Year Ending October 31, 1975
Source of Information: Frontier Ditch—U.S.G.S. Records
Other Ditches—Kansas Division of Water Resources Records
Units in Acre Feet (Subject to Revision)

Name of Ditch	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR
Frontier Ditch	491	456	0	0	0	565	945	595	1970	1860	1010	600	9335
Alamo Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
Ft. Aubrey Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Stateline to Syracuse	491	456	0	0	0	564	944	590	1970	1860	1010	600	9335
Amazon Canal	0	0	0	0	252	0	0	298	982	2969	0	0	4501
Great Eastern Canal	0	0	0	0	0	0	0	4138	617	0	0	0	4755
South Side Ditch	0	0	0	0	0	0	0	448	327	611	0	0	1386
Farmers Ditch	0	0	0	0	0	36	418	1273	1948	1236	0	0	4911
Garden City Canal	0	0	0	0	0	0	0	0	252	276	0	0	528
Total Syracuse to Garden City	0	0	0	0	252	36	418	6157	4136	5082	0	0	14081
Total Stateline to Garden City	491	456	0	0	252	1022	1306	6756	6086	6972	1010	600	25111

*168 Acre-feet returned directly to river

APPENDIX 'B-16'

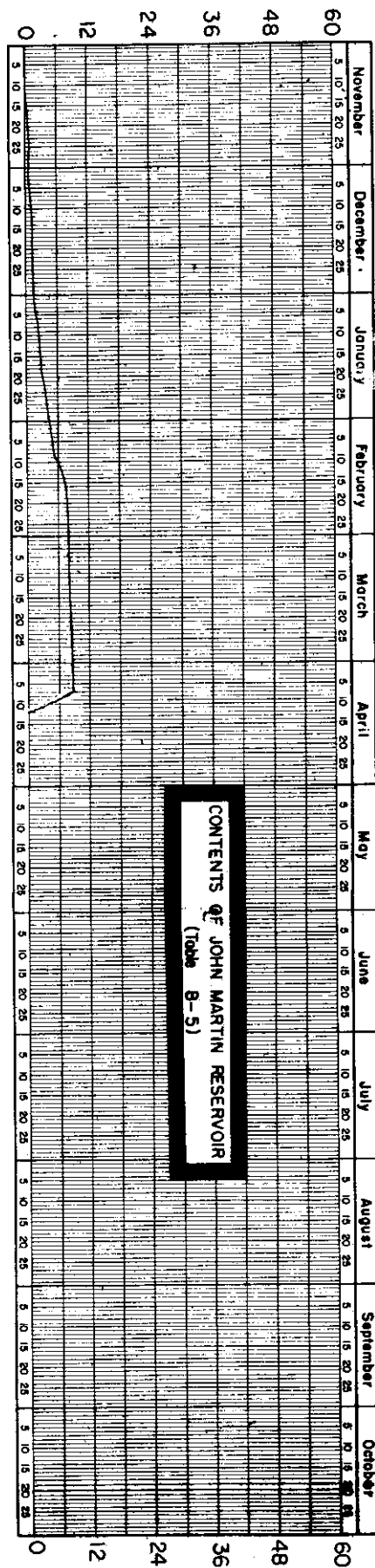
Summary Tabulation

SUMMARY TABULATION
(Acre-feet)

	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR	FROM APP. NO.
Arkansas River at Las Animas, Colo.	360	686	1160	1180	580	1080	2080	28270	38200	13430	1360	760	90100	B-2
Purgatoire River near Las Animas, Colo.	151	746	728	568	243	126	122	285	288	1180	60	76	4570	B-3
Inflow to John Martin Reservoir	515	1430	1890	1750	825	1210	2140	28550	38310	14610	1420	847	94500	B-4*
Reservoir contents at end of month	319	1556	4803	7870	8555	0	0	0	0	0	0	0	0	B-5
Net change in reservoir storage	+319	+1237	+3247	+3067	+685	-8555	0	0	0	0	0	0	0	B-5
Outflow from John Martin Reservoir	757	647	135	218	788	10130	2100	26030	34120	14440	1740	1470	92580	B-6
Diversions in District 67, Colo.	2272	2146	1548	1438	3038	9444	4580	24462	36211	17539	3842	3109	109729	B-14
Flow at Colorado-Kansas Stateline	843	920	801	1060	2080	3390	4100	12020	7980	8300	1760	1190	44450	B-8
Diversions in Kansas	491	456	0	0	252	1022	1366	6756	6096	6872	1010	680	25111	B-15

*Because of computation rules, figures in B-4 are not necessarily the exact sum of B-2 and B-3.

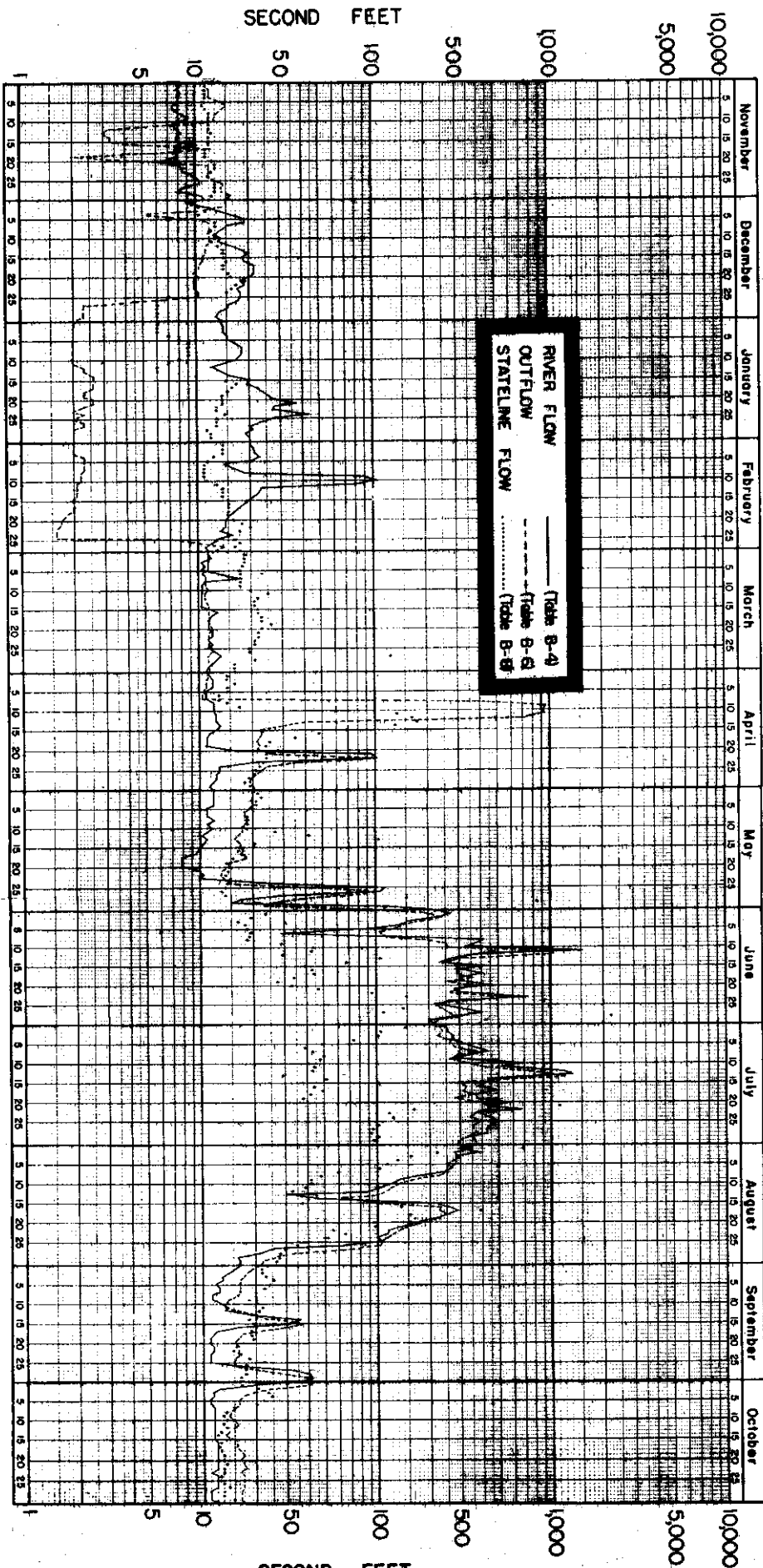
THOUSANDS OF ACRE FEET



CONTENTS OF JOHN MARTIN RESERVOIR
(Table B-5)

THOUSANDS OF ACRE FEET

SECOND FEET



RIVER FLOW (Table B-4)
OUTFLOW (Table B-6)
STATELINE FLOW (Table B-8)

SECOND FEET

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

Report Year, November 1, 1974 - October 31, 1975