

TWENTY-THIRD ANNUAL REPORT

**ARKANSAS RIVER
COMPACT
ADMINISTRATION
(1971)**

**For the Report-Year November 1, 1970
to October 31, 1971**



LAMAR, COLORADO

December 14, 1971

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THE ADMINISTRATION

COLONEL GUSTAV L. SELIGMANN
Chairman and Representative of the United States

J. T. REEDY, GEORGE F. REYHER and FELIX L. SPARKS
for Colorado

CARL E. BENTRUP, LOGAN N. GREEN and ROBERT V. SMRHA
for Kansas

210 South Fifth
Lamar, Colorado 81052

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Annual Report of
ARKANSAS RIVER COMPACT
ADMINISTRATION
(1971)

Report-Year November 1, 1970 to October 31, 1971

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, 1970 through October 31, 1971 as follows:

1. Members of the Administration

Representative of the United States:

Colonel Gustav L. Seligmann, USA, Ret.

Colorado Representatives:

J. T. Reedy, Hartman, Colorado
George F. Reyher, McClave, Colorado
Felix L. Sparks, Denver, Colorado

Kansas Representatives:

Carl E. Bentrup, Deerfield, Kansas
Logan N. Green, Garden City, Kansas
Robert V. Smrha, Topeka, Kansas

2. Officers of the Administration

Chairman:

Colonel Gustav L. Seligmann

Vice Chairman:

Carl E. Bentrup

Secretary:

Lane L. Hackett

Treasurer:

J. T. Reedy

3. Standing Committees

Administrative and Legal Committees:

Felix L. Sparks (Chairman)
Logan N. Green

Engineering Committees:

Robert V. Smrha (Chairman)
George F. Reyher

Operations Committee:

J. T. Reedy (Chairman)
Carl E. Bentrup

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

4. Meetings

December 9, 1970	Lamar, Colorado	Annual Meeting
April 14, 1971		Telephonic Meeting
August 9, 1971		Telephonic Meeting
August 30, 1971		Telephonic Meeting

5. Fiscal

(a)	Balance on Hand November 1, 1970	\$10,645.65
(b)	Receipts:	
	State of Colorado	\$3,174.00
	State of Kansas	 2,116.00
		<u>5,290.00</u>
(c)	Total Funds Available	\$15,935.65
(d)	Disbursements by the Administration — November 1, 1970 to October 31, 1971:	

Date	Voucher No.	Payee & Purpose	Amount
11/ 2/70	100	Mountain Bell—Oct. Service	\$ 23.25
12/ 8/70	101	Water Information Center, Inc.— Encyclopedia	21.50
12/ 8/70	102	Strait & Crimond—Audit	100.00
12/8/70	103	Robinson-Merrill Printing— Letterheads	19.00
12/ 8/70	104	Mountain Bell—Nov. Service	22.80
12/ 8/70	105	Lane Hackett—Salary, Travel & Postage	357.00
			103.00
			12.00

1/ 2/71	106	Federal Reserve Bank—FICA Tax	36.00
1/ 2/71	107	Mountain Bell—Dec. Service	15.85
1/ 2/71	108	Lamar Typewriter Co.—Calculator	645.00
		Office Supplies	4.56
1/20/71	109	Lane Hackett—Salary, Travel & Postage	357.00
			121.70
			18.00
1/20/71	110	Mountain Bell—Jan. Service	17.04
1/23/71	111	U.S. Geo. Survey—2nd Qtr. Agreement	950.00
3/ 5/71	112	Void — not issued	
3/ 5/71	113	Mountain Bell—Feb. Service	18.03
4/ 5/71	114	Federal Reserve Bank—FICA Tax	39.00
4/ 5/71	115	Mountain Bell—March Service	17.23
5/ 4/71	116	U.S. Geo. Survey—3rd Qtr. Agreement	950.00
5/ 4/71	117	Mountain Bell—April Service	40.02
5/ 4/71	118	Lamar Daily News—Printing Annuals	443.04
6/ 5/71	119	Mountain Bell—May Service	24.39
6/22/71	120	Lane Hackett—Salary, Travel & Postage	357.00
			147.60
			22.00
6/22/71	121	U.S. Geo. Survey—4th Qtr. Agreement	950.00
6/22/71	122	Mountain Bell—June Service	27.94
6/23/71	123	Federal Reserve Bank—FICA Tax	39.00
8/ 1/71	124	Mountain Bell—July Service	26.65
8/28/71	125	Lane Hackett—Salary, Travel & Postage	352.50
			144.50
			16.00
8/28/71	126	Federal Reserve Bank—FICA Tax	39.00
8/28/71	127	Mountain Bell—August Service	30.76
10/ 1/71	128	Lamar Daily News—Postal Cards, Printing	30.00
			20.76
10/ 1/71	129	Milne Agents, Inc.—Bond (Treasurer)	25.00
10/ 1/71	130	Mountain Bell—Sept. Service	35.77
10/30/71	131	Lane Hackett—Salary, Travel & Postage	355.50
			113.20
			8.00
10/30/71	132	U.S. Geo. Survey—1st Qtr. Agreement	1,000.00
10/30/71	133	Mountain Bell—Oct. Service	21.90
		TOTAL DISBURSEMENTS	\$8,118.49

Balance on Hand November 1, 1970	\$10,645.65
Deposits — State of Colorado	3,174.00
Deposits — State of Kansas	2,116.00

15,935.65

- (e) Balance on Hand October 31, 1971 7,817.16
- (f) At the Annual Meeting held December 9, 1970 the Compact Administration tentatively adopted the following budget for the Fiscal Year July 1, 1972 to June 30, 1973 and it was formally adopted by correspondence in July 1971.

Personal Services	\$1,675.00
Secretary's Salary	\$1,500.00
Social Security	75.00
Professional Services (Audit)	100.00
U. S. Geological Survey	4,400.00
Cooperative Services	4,400.00
Capital Outlay	100.00
Office Equipment	100.00
Maintenance and Operation	1,890.00
Bond (Treasurer)	15.00
Printing	500.00
Official Publications	100.00
Travel Expense	500.00
Typing and Mailing	125.00
Investigation and Inspection	100.00
Telephone and Telegraph	350.00
Office Supplies	200.00

Total Budget 1971-1972	\$8,065.00
Estimated Carryover June 30, 1972	155.00
To Be Appropriated	\$7,910.00
Colorado (60%)	\$4,746.00
Kansas (40%)	3,164.00

\$7,910.00

- (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 have been audited for the period commencing November 1, 1970 through October 31, 1971 the end of the Report-Year. The report of such audit is hereto attached as Appendix "A".

6. Cooperative Studies and Activities

- (a) Article VIII G (1) of the 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.

7. Water Supply, Reservoir Operation and Hydrologic Data

On November 1, 1970, the beginning of the compact year, 2,692 acre-ft. were stored in John Martin Reservoir. Inflow during the winter storage period, November 1, 1970, to March 31, 1971, amounted to 30,240 acre-ft. Outflow from the reservoir during same period amounted to 9,880 acre-ft. Maximum storage occurred on March 30 and 31, 1971, and amounted to 35,154 acre-ft.

Colorado made demands for riverflow during every month of the winter storage period except January, 1971. From November 1, 1970, until December 24, 1970, releases to meet those demands were made at rates up to 100 cfs which amounted to a total of 2,555 acre-ft. in November and 4,723 acre-ft. in December. On February 16, 1971, Colorado began demanding releases at rates up to 15 cfs which continued until February 20, 1971. The total amount of water released during the period was 206 acre-ft. Demands for riverflow were again made by Colorado beginning on March 9, 1971, and continued until April 1, which resulted in releases of 1,991 acre-ft. during March and 8 acre-ft. during April. The total releases of riverflow during the period beginning November 1 and ending April 1 amounted to 9,483 acre-ft.

Both Colorado and Kansas irrigators placed calls for storage water on April 1, 1971. Releases were made near the maximum allowable rates until April 7, 1971, when the mandatory compact reduction occurred. On April 19, 1971, the reservoir was declared empty. The total demands during April were 21,914 acre-ft. for Colorado and 15,838 acre-ft. for Kansas. Colorado benefited from small amounts of storage twice during August, 1971. Kansas requested delivery of water during one period in August, and the total discharge at the state line was 347 acre-ft.

During the compact year, a total of 113,500 acre-ft. crossed the Colorado-Kansas state line, and 69,270 acre-ft. of the total crossed during the irrigation season. Diversions by ditches in Water District No.

67 in Colorado were 149,688 acre-ft. during the irrigation season and 19,429 acre-ft. during the winter storage period. Diversions in Kansas were 65,729 acre-ft. during the irrigation season and 10,116 acre-ft. during the winter storage period.

8. 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.

It will be noted that there are differences in the releases from the reservoir, as measured at the gaging station, and the daily demands by Colorado and Kansas. Perfect agreement cannot be obtained, but the differences could be minimized by relocating the gaging station nearer to the dam and installing an artificial control. This would stabilize the rating and also reduce the time involved in adjusting the gates to the required release.

The Administration approved a cooperative agreement with the U. S. Geological Survey for the fiscal year July 1, 1971 to June 30, 1972, 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 the other Compact stations, the maintenance of the radio equipment, the providing of current streamflow data, and the preparation of records for the Annual Report.

9. Findings of fact by the Administration

Findings of fact were made on April 14, August 9, and August 30 that the reservoir would become empty on those dates, and the State Engineer of Colorado was requested to administer the river on a priority basis until such time as stored water was again available in John Martin Reservoir.

SPECIAL TELEPHONIC MEETING

April 14, 1971

A special telephonic meeting was held on April 14, 1971, in accordance with Article V-F of the Compact for the purpose of declaring the reservoir to become empty. It was declared that the reservoir would become empty on April 19, 1971.

Mr. C. J. Kuiper, Colorado State Engineer, and Mr. Rudy Styduhar, Division Engineer, were notified of the action and that administration of decreed water rights for Colorado would commence on April 19 unless a change of conditions justified cancellation or modification of this notice.

The reservoir became empty 1800 MST on April 19, 1971.

Participating Members:

For Colorado — Mr. Reedy and Mr. Reyher
For Kansas — Mr. Bentrup and Mr. Green

SPECIAL TELEPHONIC MEETING

August 9, 1971

A special telephonic meeting was held on August 9, 1971, in accordance with Article V-F of the Compact for the purpose of declaring the reservoir to become empty. It was declared that the reservoir would become empty on August 1, 1971.

Mr. C. J. Kuiper, Colorado State Engineer, and Mr. Rudy Styduhar, Division Engineer, were notified of this action and that administration of decreed water rights for Colorado would commence on August 9 unless a change of conditions justified cancellation or modification of this notice.

The reservoir became empty at 1600 MDT on August 9, 1971.

Participating Members:

For Colorado — Mr. Reedy and Mr. Reyher

For Kansas — Mr. Bentrup and Mr. Green

SPECIAL TELEPHONIC MEETING

August 30, 1971

A special telephonic meeting was held on August 30, 1971, in accordance with Article V-F of the Compact for the purpose of declaring the reservoir to become empty. It was declared that the reservoir would become empty on August 30, 1971.

Mr. C. J. Kuiper, Colorado State Engineer, and Mr. Rudy Styduhar, Division Engineer, were notified of this action and administration of decreed water rights for Colorado would commence on August 30 unless a change of conditions justified cancellation or modification of this notice.

The reservoir became empty at 1600 MDT on August 30, 1971.

Participating Members:

For Colorado — Mr. Reedy and Mr. Reyher

For Kansas — Mr. Bentrup and Mr. Green

Respectfully Submitted

ARKANSAS RIVER COMPACT ADMINISTRATION

BY:

COLONEL GUSTAV L. SELIGMANN, USA, Ret.
Representative of the United States and
Chairman of the Administration

J. T. REEDY
GEORGE F. REYHER
FELIX L. SPARKS

Colorado Members of the Administration

CARL E. BENTRUP
LOGAN N. GREEN
ROBERT V. SMRHA

Kansas Members of the Administration

Lamar, Colorado
December 14, 1971

APPENDICES

for

ANNUAL REPORT OF THE ARKANSAS RIVER COMPACT ADMINISTRATION

For the Report-Year November 1, 1970 to October 31, 1971

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APPENDIX "A"

* * * *

AUDITOR'S REPORT STRAIT & CRIMOND

CERTIFIED PUBLIC ACCOUNTANTS
Johnson-Strait Building
Lamar, Colorado 81052

November 18, 1971

To the Representative
Arkansas River Compact Administration
Lamar, Colorado 81052

Gentlemen:

We have examined the Statement of Assets and Liabilities resulting from cash transactions of the Arkansas River Compact Administration as of October 31, 1971, and the Statement of Cash Receipts and Disbursements for the fiscal year then ended.

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.

The receipts and disbursements for the budget year July 1, 1970, to June 30, 1971, compared with budget are presented in Exhibit C. This schedule is the result of the receipts and disbursements for the appropriate months of the current and previous report years.

In our opinion, Exhibits A and B, present fairly the assets and liabilities resulting from cash transactions of the Arkansas River Compact Administration at October 31, 1971, and the results of cash transactions of the fiscal year then ended, on a basis consistent with that of the previous year.

Respectfully submitted,

Strait & Crimond

EXHIBIT A

ARKANSAS RIVER COMPACT ADMINISTRATION

STATEMENT OF ASSETS AND LIABILITIES RESULTING FROM CASH TRANSACTIONS OCTOBER 31, 1971

<u>ASSETS:</u>	
Cash	\$ 7,817
Equipment	1,604
TOTAL ASSETS	\$ 9,421

LIABILITIES AND FUND BALANCE:

Liabilities	\$ ---
Fund Balance:	
Expended — Equipment	\$ 1,604
Unexpended	7,817
TOTAL FUND BALANCE	9,421
TOTAL LIABILITIES & FUND BALANCE	\$ 9,421

EXHIBIT B

ARKANSAS RIVER COMPACT ADMINISTRATION
STATEMENT OF RECEIPTS AND DISBURSEMENTS & CHANGES
IN FUND BALANCE
FOR THE FISCAL YEAR ENDED OCTOBER 31, 1971

FUND BALANCE, NOVEMBER 1, 1970\$10,646
 RECEIPTS:

Revenue from Assessments:

Colorado	\$ 3,174
Kansas	2,116
TOTAL RECEIPTS	\$ 5,290

DISBURSEMENTS:

U. S. Geological Survey — Gauging	\$ 3,850
Secretary Salary	1,779
Capital Outlay — Equipment	645
Travel	630
Printing	464
Telephone	322
Payroll Tax	153
Typing & Mailing	106
Legal & Audit	100
Office Supplies	45
Insurance	25
TOTAL DISBURSEMENTS	\$ 8,119
EXCESS OF DISBURSEMENTS OVER	
RECEIPTS	(\$2,829)
FUND BALANCE, OCTOBER 31, 1971	\$ 7,817

EXHIBIT C

ARKANSAS RIVER COMPACT ADMINISTRATION
 STATEMENT OF RECEIPTS & DISBURSEMENTS WITH BUDGET
 FOR BUDGET YEAR JULY 1, 1970 TO JUNE 30, 1971

	ACTUAL	BUDGET
CASH IN BANK, JULY 1, 1970	\$ 5,526	\$ 700
RECEIPTS:		
Revenue from Assessments:		
Colorado Portion — 60%	\$ 4,014	\$ 4,014
Kansas Portion — 40%	2,676	2,676
TOTAL RECEIPTS	\$ 6,690	\$ 6,690
TOTAL TO ACCOUNT FOR	\$12,216	\$ 7,390

DISBURSEMENTS:

U. S. Geological Survey — Gauging	\$ 3,800	\$ 3,300
Secretary Salary	1,428	1,500
Capital Outlay — Equipment	645	500
Travel	483	500
Printing	443	\$ 500
Telephone	286	300
Payroll Tax	150	75
Legal & Audit	100	100
Typing & Mailing	64	100
Office Supplies	45	300
Insurance	25	15
Investigation & Inspection	---	100
Official Publications	---	100
TOTAL DISBURSEMENTS	\$ 7,469	\$ 7,390
CASH IN BANK, JUNE 30, 1971 . . .	\$ 4,747	---

APPENDIX 'B-1'

ARKANSAS RIVER NEAR PUEBLO, COLORADO

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision
(Colorado State Engineer)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	639	533	345	351	206	295	188	1120	1780	643	1010	297
2	629	560	391	359	224	261	184	1070	1510	593	941	283
3	600	514	419	359	250	247	160	1180	1490	565	858	290
4	561	466	278	351	230	446	129	1230	1710	555	755	290
5	552	461	196	328	277	471	129	1280	1340	574	474	262
6	552	469	175	291	263	455	193	1210	1730	927	398	244
7	570	469	205	293	225	480	256	1420	1650	939	343	226
8	561	492	324	256	236	446	270	1530	1920	915	327	221
9	515	505	474	256	250	455	422	1550	1760	857	328	255
10	488	497	564	304	250	480	648	1510	1750	832	331	255
11	497	487	554	319	236	535	709	1510	1810	832	310	244
12	497	478	543	312	236	590	649	1390	1710	821	290	225
13	524	469	534	319	243	638	582	1430	1610	797	297	226
14	523	435	512	319	284	715	601	1460	1580	877	282	220
15	505	427	492	304	263	742	601	1620	1590	877	262	214
16	476	453	462	312	219	753	710	1740	1570	901	225	208
17	494	398	491	277	219	743	753	2000	1460	866	237	225
18	513	420	525	243	213	722	934	2100	1430	865	356	269
19	504	435	545	250	202	701	1070	2120	1590	887	356	304
20	495	427	560	271	179	689	1010	2160	1790	1020	356	297
21	477	401	454	272	181	640	639	2190	1710	1010	371	282
22	468	401	419	264	202	466	491	2200	1580	1130	394	289
23	460	365	372	236	207	457	482	2480	1570	1130	420	290
24	443	384	336	256	207	381	582	2800	1580	1140	379	297
25	460	384	343	263	225	358	573	2760	1490	1030	356	290
26	452	394	351	256	225	365	519	2640	1470	983	340	283
27	453	403	367	230	227	349	546	2540	1400	947	310	282
28	487	393	367	195	346	312	621	2370	1430	1100	282	283
29	514	347	344		377	271	948	2150	1200	1320	282	317
30	506	340	344		346	234	1400	1920	850	1220	296	395
31		360	351		301		1430		724	1080		411
TOTAL												
sec. ft.	15415	13567	12637	8046	7549	14697	16429	54680	48293	28233	12166	8474
ac. ft.	30580	26910	25070	15960	14970	29150	36550	10850	95790	56000	24130	16810
a) ac. ft.	0	0	0	0	0	13018	9471	0	20532	22874	3593	0
b) ac. ft.	30580	26910	25070	15960	14970	16130	27080	108500	75260	33130	20540	16810
a) Less upstream reservoir and transmountain water.												
b) Corrected total ac. ft.												
THE YEAR 480,400 acre-feet												
CORRECTED 410,900 acre-feet												

APPENDIX 'B-2'

ARKANSAS RIVER AT LAS ANIMAS, COLORADO

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	41	25	28	63	54	22	86	338	344	266	63	130
2	39	39	30	49	60	22	42	308	484	248	57	126
3	54	30	27	49	65	21	27	320	338	248	21	110
4	39	30	25	54	60	20	26	278	484	230	17	110
5	36	30	23	52	65	22	24	266	406	192	18	86
6	42	33	22	62	86	22	29	284	338	139	22	66
7	44	29	20	58	56	22	26	332	326	503	24	70
8	51	24	22	54	39	21	31	266	357	170	25	51
9	47	27	28	56	36	22	30	278	436	86	29	36
10	37	27	36	48	34	21	29	284	436	86	26	30
11	77	23	33	42	34	21	31	242	413	51	26	25
12	51	25	31	37	33	20	25	208	357	39	29	23
13	47	26	44	37	31	19	24	344	290	29	26	29
14	27	24	60	39	30	19	25	403	376	23	22	30
15	26	26	100	51	31	19	24	378	371	24	24	30
16	23	31	150	57	30	22	20	444	761	26	22	26
17	24	26	220	60	24	22	23	468	230	29	27	26
18	25	25	300	70	36	23	31	444	224	23	37	29
19	29	24	379	70	127	24	37	460	236	22	81	42
20	27	23	290	66	44	31	94	364	230	21	122	57
21	26	25	200	112	24	33	148	468	118	22	148	66
22	29	27	180	269	21	33	170	413	162	47	157	98
23	30	24	152	184	21	82	184	413	428	49	180	110
24	34	22	134	130	22	97	248	371	236	36	175	118
25	36	24	126	94	23	141	152	392	290	23	166	114
26	39	25	98	81	21	157	130	364	302	21	157	114
27	39	26	60	60	21	98	166	395	248	19	126	126
28	39	25	54	49	22	86	152	444	254	17	152	126
29	47	26	42		23	94	152	469	144	16	122	130
30	31	28	39		22	102	320	459	118	15	134	130
31		26	51		20		406		112	14		157
TOTAL												
sec. ft.	1136	825	3004	2053	1215	1358	2912	10897	9849	2734	2235	2421
ac. ft.	2250	1640	5960	4070	2410	2690	5780	21610	19540	5420	4430	4800
THE YEAR 80,600 acre-feet												

APPENDIX 'B-3'

PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	70	69	35	56	30	10	26	85	3.6	50	125	10
2	67	58	36	48	30	5.8	16	38	2.0	44	19	7.6
3	74	59	29	41	27	5.2	8.2	34	7.9	17	13	4.0
4	69	58	23	42	34	5.2	6.4	23	2.0	10	12	4.6
5	61	56	24	41	23	6.4	5.2	12	2.0	6.4	7.0	6.4
6	56	55	22	42	8.8	5.8	4.6	7.1	2.0	59	5.8	16
7	53	50	21	47	13	4.0	5.2	2.0	2.0	465	4.6	22
8	62	49	20	47	37	3.6	5.8	2.0	3.2	325	3.6	19
9	70	49	19	37	44	3.2	7.0	6.7	2.4	147	4.0	21
10	56	50	21	41	32	3.2	6.4	33	1.6	37	4.0	17
11	49	50	27	48	27	2.4	5.2	53	1.2	13	3.6	13
12	52	48	26	50	29	3.2	5.8	19	.80	5.8	3.6	7.6
13	52	46	34	45	29	5.2	5.2	14	.80	4.6	2.8	13
14	58	50	41	42	29	5.2	4.0	7.0	.80	4.0	2.4	23
15	66	59	43	43	36	4.6	5.2	4.0	1.6	54	2.4	22
16	74	59	45	37	27	4.6	4.0	3.2	31	44	2.0	17
17	80	64	50	29	18	4.6	4.0	2.4	66	23	2.8	20
18	64	72	55	16	45	5.2	8.8	1.6	5.8	11	3.6	147
19	56	56	74	17	49	8.8	8.8	3.6	17	7.0	5.2	76
20	61	36	97	19	36	7.6	5.8	4.0	43	372	7.0	42
21	56	56	156	23	15	5.8	8.1	19	120	23	38	
22	55	61	142	27	26	6.4	2.8	19	72	52	24	42
23	56	46	110	52	21	22	5.3	6.7	279	20	20	40
24	50	36	94	63	22	24	5.2	2.0	168	9.4	26	82
25	61	38	90	61	9.4	10	2.8	3.1	55	6.4	27	106
26	59	35	88	46	7.6	10	2.0	3.2	77	5.2	26	70
27	58	40	80	36	6.4	8.2	2.4	4.6	33	3.2	22	45
28	55	36	72	30	7.0	6.4	7.5	4.6	27	2.8	12	38
29	55	36	66		8.2	6.4	49	2.0	148	1100	10	37
30	64	48	59		8.8	75	22	2.8	179	100	11	45
31		45	58		7.6		84		51	418		19
TOTAL												
sec. ft.	1819	1570	1757	1126	742.8	278.0	334.2	410.7	1304.7	3535.8	434.4	1070.2
ac. ft.	3610	3110	3490	2230	1470	551	663	815	2590	7010	862	2120

THE YEAR 28,520 acre-feet

APPENDIX 'B-4'

INFLOW INTO JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	111	94	63	119	84	32	112	423	348	316	188	140
2	106	97	66	97	90	28	58	346	486	292	76	134
3	128	89	56	90	92	26	35	354	346	265	34	114
4	108	88	48	96	94	25	32	301	486	240	29	115
5	97	86	47	93	88	28	29	278	408	198	25	92
6	98	88	44	104	95	28	34	291	340	198	28	82
7	97	79	41	105	69	26	31	334	328	968	29	92
8	113	73	42	101	76	25	37	268	360	495	29	70
9	117	76	47	93	80	25	37	285	438	233	33	57
10	93	77	57	89	66	24	35	317	438	123	30	47
11	126	73	60	90	61	23	36	295	414	64	30	38
12	103	73	57	87	62	23	31	227	358	45	33	31
13	99	72	78	82	60	24	29	358	291	34	29	42
14	85	74	101	81	59	24	29	410	377	27	24	53
15	92	85	143	94	67	24	29	382	373	78	26	52
16	97	90	195	94	57	27	24	447	792	70	24	43
17	104	90	270	89	42	27	27	470	296	52	30	46
18	89	97	355	86	81	28	40	446	230	34	41	176
19	85	80	453	87	176	33	46	464	253	29	86	118
20	88	59	387	85	80	39	100	368	273	393	129	99
21	82	81	356	135	39	39	152	476	137	142	171	104
22	84	88	322	296	47	39	173	432	234	99	181	140
23	86	70	262	236	42	104	189	420	707	69	200	150
24	84	58	228	193	44	121	253	373	404	45	201	200
25	97	62	216	155	32	151	155	395	345	29	193	220
26	98	60	186	127	29	167	132	367	379	26	183	184
27	97	66	140	96	27	106	168	400	281	22	148	171
28	94	61	126	79	29	92	160	449	281	20	164	164
29	102	62	108		31	100	201	471	292	1120	132	167
30	95	76	98		31	177	342	462	297	115	145	175
31		71	109		28		490		163	432		176
TOTAL												
sec. ft.	2955	2395	4761	3179	1958	1635	3246	11309	11155	6273	2671	3492
ac. ft.	5860	4750	9440	6310	3880	3240	6440	22430	22130	12440	5300	6930
THE YEAR 109,200 acre-feet												

APPENDIX 'B-5'

CONTENTS OF JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1971
Corps of Engineers records—Provisional, subject to revision
Midnight contents in acre-feet from capacity table dated Jan. 1, 1969

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	2808	7986	10771	23347	31700	33811	0	0	0	0	0	0
2	2900	8033	11061	23606	31874	31700	0	0	0	0	0	0
3	3031	8064	11281	23867	32165	29526	0	0	0	0	0	0
4	3175	8095	11467	24103	32369	27078	0	0	0	0	0	0
5	3244	8127	11597	24392	32632	24762	0	0	0	0	0	0
6	3343	8174	11747	24656	32867	22397	0	0	0	0	0	0
7	3455	8221	11879	24868	33102	20273	0	0	0	0	0	0
8	3642	8237	11993	25134	33337	18456	0	0	0	282	0	0
9	3930	8252	12127	25401	33515	16604	0	0	0	0	0	0
10	4152	8316	12280	25668	33692	14845	0	0	0	0	0	0
11	4438	8347	12434	25937	33870	13002	0	0	0	0	0	0
12	4734	8379	12609	26207	33988	11171	0	0	0	0	0	0
13	4953	8411	12864	26533	34107	9445	0	0	0	0	0	0
14	5126	8411	13361	26805	34226	7801	0	0	0	0	0	0
15	5316	8443	13929	27078	34316	6174	0	0	0	0	0	0
16	5508	8475	14634	27297	34376	4473	0	0	0	0	0	0
17	5717	8539	15400	27518	34435	2647	0	0	0	0	0	0
18	5917	8604	16139	27959	34525	989	0	0	0	0	0	0
19	6120	8684	17076	28181	34585	0	0	0	0	0	0	0
20	6284	8782	18129	28403	34645	0	0	0	0	0	0	0
21	6423	8847	19140	28683	34704	0	0	0	0	0	0	0
22	6620	8929	19981	28963	34734	0	0	0	0	0	0	0
23	6791	8995	20494	29356	34734	0	0	0	0	0	0	0
24	6964	9110	20888	29922	34794	0	0	0	0	0	0	0
25	7139	9260	21311	30520	34854	0	0	0	0	0	0	0
26	7317	9445	21713	30835	34914	0	0	0	0	0	0	0
27	7527	9682	22015	31122	34974	0	0	0	0	0	0	0
28	7693	9871	22320	31411	35034	0	0	0	0	0	0	0
29	7893	10080	22626		35094	0	0	0	0	376	0	0
30	7955	10290	22882		35154	0	0	0	0	0	0	0
31		10556	23140		35154		0		0	0		0

APPENDIX 'B-6'

OUTFLOW FROM JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	100	114	3.8	3.5	3.3	658	202	543	367	218	314	200
2	114	97	3.8	3.3	3.3	1,090	129	457	451	291	211	177
3	106	96	3.8	3.4	3.3	1,180	106	408	465	296	131	160
4	94	97	3.8	3.3	3.3	1,260	87	383	487	272	92	149
5	94	98	3.6	3.3	3.6	1,230	81	358	466	232	81	140
6	92	100	3.6	3.6	3.3	1,240	77	359	426	238	67	131
7	92	102	3.6	3.3	3.0	1,140	78	356	377	320	61	120
8	50	102	3.6	3.0	3.0	978	83	366	411	474	59	117
9	4.0	105	3.6	3.0	11	971	90	319	438	381	59	103
10	8.5	106	3.6	3.0	21	964	80	356	421	266	56	94
11	14	106	3.3	3.3	20	969	75	362	427	153	54	87
12	14	108	3.3	3.0	20	967	80	304	365	108	54	81
13	20	111	3.3	3.3	20	924	76	344	369	97	54	81
14	25	114	3.3	3.3	20	875	77	369	386	89	54	90
15	26	114	3.3	3.3	20	882	85	415	495	88	54	93
16	26	117	3.3	10	39	875	76	358	1,220	151	53	92
17	26	117	3.3	18	54	889	68	388	780	101	54	81
18	26	103	3.3	20	56	910	85	393	405	98	69	166
19	25	87	3.3	19	57	792	99	363	491	92	81	185
20	25	87	3.3	19	57	100	109	360	762	290	109	155
21	26	87	3.4	12	57	94	161	419	364	465	178	145
22	26	88	3.4	3.6	56	86	251	517	281	234	208	159
23	29	80	3.3	3.6	55	93	271	454	496	134	204	181
24	29	44	3.3	3.6	54	194	357	406	593	108	211	181
25	29	5.7	3.2	3.3	56	169	321	426	383	90	211	230
26	30	4.8	3.4	3.3	43	243	251	458	365	81	219	222
27	31	4.3	3.5	3.3	33	198	272	359	357	71	209	200
28	33	4.0	3.5	3.6	33	155	298	478	308	67	184	189
29	34	3.8	3.4		33	135	341	436	285	321	197	192
30	90	3.8	3.5		33	169	386	457	338	623	195	219
31		3.8	3.6		31		486		262	291		280
TOTAL												
sec. ft.	1,338.5	2,420.2	107.3	171.2	905.1	20,430	5,238	11,971	14,041	6,745	3,783	4,700
ac. ft.	2,650	4,800	213	340	1,800	40,520	10,390	23,740	27,850	13,380	7,500	9,320

THE YEAR 142,500

ARKANSAS RIVER AT LAMAR, COLORADO

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	5.7	5.7	9.0	27	32	150	7.3	197	41	29	6.2	5.7
2	5.7	5.7	8.0	31	27	500	7.3	83	34	28	5.2	6.7
3	5.2	5.7	6.5	26	30	520	7.3	29	82	25	5.2	8.5
4	5.2	5.2	5.5	25	37	570	7.3	16	58	14	5.2	7.9
5	5.2	5.7	4.0	22	37	616	6.7	12	77	13	5.2	6.2
6	5.2	5.7	3.0	20	37	620	7.9	9.2	50	13	4.7	6.2
7	5.2	5.2	4.5	21	35	616	7.9	9.9	38	13	4.7	5.7
8	3.8	5.7	6.0	22	29	486	6.7	9.9	41	43	4.7	5.7
9	3.4	6.2	8.0	23	7.9	492	6.2	9.2	44	19	4.7	5.7
10	3.4	6.2	10	24	7.9	472	5.2	7.9	42	15	5.2	5.7
11	3.4	5.7	18	25	7.3	478	5.7	7.9	33	9.9	5.2	5.7
12	3.4	5.7	24	24	7.3	464	5.7	7.3	24	8.5	5.7	5.7
13	3.4	5.7	31	22	6.2	454	4.2	7.3	15	9.2	5.7	5.7
14	3.4	5.7	38	24	5.7	388	5.7	8.5	7.3	9.9	6.2	6.2
15	3.4	5.7	32	22	6.2	398	6.2	23	50	34	6.2	6.2
16	3.4	5.7	22	21	6.2	405	4.7	14	768	14	6.7	6.2
17	3.4	6.2	23	22	5.2	408	5.2	8.5	422	7.3	6.7	6.2
18	3.4	6.2	25	31	8.4	433	9.2	11	77	7.3	7.3	5.2
19	4.2	6.2	30	42	5.7	444	7.3	9.2	35	6.7	7.3	7.9
20	4.2	6.2	35	34	5.2	112	6.7	9.2	202	6.7	7.3	6.2
21	4.2	6.2	43	25	4.7	7.9	6.2	20	26	54	7.3	6.7
22	4.2	5.7	38	34	6.2	6.2	6.2	41	11	7.3	7.3	7.3
23	4.2	5.5	36	36	6.7	5.7	9.9	15	50	7.9	7.3	8.5
24	4.2	5.0	35	32	6.2	6.2	9.9	19	109	7.3	6.7	7.3
25	4.2	5.0	35	31	5.7	6.7	11	32	19	6.7	6.7	6.7
26	4.2	6.0	35	29	5.2	7.9	14	74	65	5.7	6.7	7.3
27	4.2	6.5	35	30	4.7	9.2	15	52	91	4.2	6.2	7.9
28	4.2	7.0	31	35	4.7	8.5	13	57	56	12	6.2	8.5
29	4.2	8.0	30		5.7	7.9	630	57	85	12	6.2	7.9
30	5.2	9.0	29		25	7.3	225	50	45	211	5.7	7.3
31		10	27		39		143		35	8.5		7.3
TOTAL												
sec. ft.	126.6	189.9	716.5	760	457.0	9099.5	1213.6	906.0	2732.3	662.1	181.6	207.9
ac. ft.	251	377	1420	1510	906	18050	2410	1800	5420	1310	360	412

THE YEAR 34,230 acre-feet

APPENDIX 'B-8'

ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

Report-Year ending October 31, 1971
USGS Records--Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	145	153	110	140	150	60	118	252	133	250	112	49
2	141	156	105	160	150	52	125	263	131	228	63	51
3	148	160	95	192	150	289	141	182	138	188	60	53
4	162	200	90	188	156	429	124	172	131	157	70	60
5	161	188	85	172	155	482	113	154	204	144	65	64
6	166	188	90	176	156	506	108	134	161	145	51	64
7	167	192	95	164	150	536	108	110	106	107	58	65
8	146	192	100	164	136	42	98	134	81	103	46	71
9	145	150	110	168	132	452	115	503	84	163	48	84
10	193	136	120	168	136	434	121	192	87	149	52	95
11	159	132	130	172	136	440	105	136	86	140	54	92
12	153	119	140	142	136	511	92	127	72	93	67	93
13	159	128	150	139	128	479	93	180	64	85	64	79
14	155	128	155	150	119	456	95	210	54	79	40	72
15	139	132	160	160	110	416	78	192	57	72	44	59
16	139	136	165	164	113	410	74	177	64	87	55	48
17	142	180	170	160	98	407	69	154	558	107	67	59
18	139	119	176	172	104	399	86	87	444	92	101	91
19	132	136	176	192	101	809	107	62	348	75	82	84
20	132	136	188	249	110	538	111	69	174	162	68	94
21	142	146	216	249	101	315	113	85	242	72	61	94
22	146	128	200	418	101	214	104	71	157	103	89	92
23	139	120	188	345	98	186	96	66	672	88	91	89
24	156	105	172	196	98	172	96	56	396	66	75	95
25	153	125	160	188	98	174	99	44	254	62	82	94
26	153	128	146	176	98	178	88	47	729	57	82	104
27	153	153	142	156	86	178	62	49	443	59	93	98
28	160	164	139	153	89	174	50	68	271	77	79	107
29	160	168	139		77	155	75	77	696	98	69	105
30	160	132	132		60	146	748	76	486	145	63	125
31		110	128		55		405		323	333		128
TOTAL												
sec. ft.	4545	4540	4372	5273	3579	10539	4017	4129	7846	3786	2051	2558
ac. ft.	9020	9010	8670	10460	7100	20900	7970	8190	15560	7510	4070	5070

THE YEAR 113,500 ac-ft

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

APPENDIX 'B-9'

DEMANDS BY COLORADO FOR RESERVOIR WATER

REPORT ENDING OCTOBER 31, 1971
DATA SOURCE: U.S. CORPS OF ENGINEERS AND ORDERS BY THE SECRETARY
OF THE ARKANSAS RIVER COMPACT ADMINISTRATION (Provisional, Subject to Revision)
Units in Cubic Feet Per Second

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1		Open 8:30 A.M.				390						
2						600						
3						666						
4						750						
5						750						
6						750						
7		Compact Reduction 3:00 P.M.				693						
8						600				95	Storage available	
9						600				500	7:30 P.M.	
10						600				335	Empty at 4:00 P.M.	
11						600						
12						600						
13						577						
14						500						
15						500						
16						500						
17						500						
18						500						
19		Empty: 6:00 P.M.				375						
20												
21												
22												
23												
24												
25												
26												
27												
28												
29										260	Storage Available	
30										335	11:30 A.M.	
31												
Totals												
Sec. Ft.						11051				1525		
Acre Ft.						21914				3024		
												THE YEAR 24,938

APPENDIX 'B-10'
DEMANDS BY COLORADO FOR RIVER FLOW
OPERATION OF RESERVOIR

REPORT YEAR ENDING OCTOBER 31, 1971
DATA SOURCE: U.S. CORPS OF ENGINEERS AND BY ORDERS OF THE SECRETARY
ARKANSAS RIVER COMPACT ADMINISTRATION (Provisional, Subject to Revision)
Units in Cubic Feet Per Second

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	100	100				11	8:30 A.M. Open to Colorado Reservoir Demand					
2	100	100										
3	100	100										
4	100	100										
5	100	100										
6	100	100										
7	100	100										
8	*41	100										
9	0	100	Open: 9:00 A.M.		9							
10	**7	100			15							
11	10	100			15							
12	10	100			15							
13	13	100			15							
14	15	100			15							
15	15	100	Open:		15							
16	15	100	8:30 A.M.	10	38							
17	15	100		15	50							
18	15	100		15	50							
19	15	100		15	50							
20	15	100	Closed:	7	50							
21	15	100	10:30 A.M.		50							
22	15	94			50							
23	15	90			50							
24	15	32	Closed:		50							
25	15		8:30 A.M.		50							
26	15				37							
27	15				30							
28	15				30							
29	15				30							
30	61				30							
31					30							
Totals												40, Open:
Sec.Ft.	1082	2316		62	774	11						0:00 A.M.
Ac.Ft.	2146	4593		123	1535	22						40
*Closed 10:00 A.M.												79
**Open 8:30 A.M.												THE YEAR 8498 A.F.

APPENDIX 'B-11'

DEMANDS BY KANSAS FOR RESERVOIR WATER

REPORT ENDING OCTOBER 31, 1971
 DATA SOURCE: KANSAS STATE BOARD OF AGRICULTURE AND BY ORDERS OF THE
 SECRETARY—ARKANSAS RIVER COMPACT ADMINISTRATION (Provisional, Subject to Revision)
 Units in Cubic Feet Per Second

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1		Open: 8:30 A.M.				325						
2						500						
3						500						
4						500						
5						500						
6						500						
7		Compact Reduction 3:00 P.M.				462						
8						400						
9						400						
10						400						
11						400						
12						400						
13						400						
14						400						
15						400						
16						400						
17						400						
18						400						
19		Empty: 6:00 P.M.				300						
20												
21												
22												
23												
24												
25												
26												
27												
28												
29										208	Storage Available 11:30 A.M.	
30										268	Empty at 4:00 P.M.	
31												
Total												
Sec. Ft.						7987				476		
Acre Ft.						15838				944		
											THE YEAR 16,782	

APPENDIX 'B-12'

STATELINE FLOW ON DAYS OF KANSAS DEMAND*

Report-Year ending October 31, 1971
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1											112	
2											63	
3												
4						429						
5						432						
6						506						
7						536						
8						542						
9						452						
10						434						
11						440						
12						511						
13						479						
14						456						
15						416						
16						410						
17						407						
18						399						
19						809						
20						538						
21						315						
22						214						
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL												
sec. ft.						8775					175	
ac. ft.						17410					347	

THE YEAR 17,760 acre-feet

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

REPORT YEAR ENDING OCTOBER 31, 1971
 SOURCE OF INFORMATION: WATER COMMISSIONERS SPECIAL REPORTS TO DIVISION ENGINEER
 RESERVOIR WATER IS THAT FROM UPSTREAM RESERVOIRS ABOVE PUEBLO, COLORADO (Subject to Revision)
 Units in Acre Feet

APPENDIX 'B-13'
DIVERSIONS BY DITCHES IN COLORADO
DISTRICTS 14 AND 17
DIVISION #2

NAME OF DITCH	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	COMPACT YEAR
Bessemer (River)	4690	0	0	958	4226	4242	4489	10832	6907	4321	4174	4350	49180
Res. or Imported	0	0	0	0	0	1263	1333	60	1525	2001	60	86	6328
Total: Bessemer	4690	0	0	958	4226	5505	5822	10883	8432	6322	4234	4436	55508
West Pueblo	55	0	0	0	0	66	143	377	379	192	179	120	1511
Booth-Orchard Grove	240	0	0	0	633	1005	1144	1158	1196	1200	1122	997	8695
Excelsior	811	573	66	0	0	0	46	1305	444	0	0	0	3245
Collier	0	0	0	0	0	0	32	254	222	0	0	0	508
Colorado Canal (Riv.)	16259	12820	0	4317	1953	0	0	0	0	0	0	0	35349
Res. or Imported	0	0	0	0	0	11894	8107	0	18242	19003	3431	0	60677
Total: Colorado Canal	16259	12820	0	4317	1953	11894	8107	0	18242	19003	3431	0	96026
Highline (River)	4129	5578	2877	4521	5322	4142	4692	13488	6141	4386	4176	5146	64598
Res. or Imported	0	0	0	0	0	869	1178	0	1231	2778	32	0	6088
Total: Highline	4129	5578	2877	4521	5322	5011	5870	13488	7372	7164	4208	5146	70686
Oxford Farmers (Riv.)	400	1126	335	1475	2197	918	1021	6225	6796	1196	859	865	23413
Res. of Imported	0	0	0	0	0	0	0	0	0	448	0	0	448
Total: Oxford Farmers	400	1126	335	1475	2197	918	1021	6225	6796	1644	859	865	23861
Baldwin-Stubbs Imp. (Riv.)	0	0	0	0	0	0	0	0	0	27	60	0	87
Total: Dist. No. 14	26584	20097	3278	11171	14331	10373	11567	33630	22085	11295	10510	11478	186499
Otero Canal	833	258	0	244	276	0	30	1011	65	0	0	0	2717
Catlin Canal (Riv.)	4598	3906	819	4753	8797	11278	10552	17383	14932	13994	5568	6316	102896
Res. or Imported	0	0	0	0	0	0	0	0	656	169	0	0	825
Total: Catlin Canal	4598	3906	819	4753	8797	11278	10552	17383	15588	14163	5568	6316	103721
Holbrook Canal	4722	1261	4844	7091	642	0	403	490	1846	0	0	0	21299
Rocky Ford Canal	1305	2041	1472	1210	3688	5818	5150	6538	4710	5874	3978	3468	45252
Ft. Lyon Stg. Canal	644	4002	23459	8874	3847	0	0	0	0	0	0	0	40826
Kicking Bird Canal	12953	5429	0	0	0	0	0	0	0	0	0	0	18382
Ft. Lyon Canal	19120	21036	8186	10377	15446	10105	11134	38417	39426	13167	9820	10546	206780
Total: Ft. Lyon & K.B.	32073	26465	8186	10377	15446	10105	11134	38417	39426	13167	9820	10546	225162
Las Animas Consol.	2237	1317	906	960	2211	3948	3682	6558	6312	4493	4025	3345	39994
Total: District No. 17	46412	39250	39686	33509	34907	31149	30951	70397	67291	37528	23391	23675	478146
Total: Dists. No. 14 & No. 17	72996	59347	42964	44780	49238	41522	42518	104027	89376	48823	33901	35153	664645
Res. or Imported	0	0	0	0	0	14026	10618	60	21654	24426	3583	86	74453
GRAND TOTAL	72996	59347	42964	44780	49238	55548	53136	104087	111030	73249	37484	35239	739098

APPENDIX 'B-14'
DIVERSIONS BY DITCHES IN COLORADO
WATER DISTRICT 67
DIVISION #2

REPORT YEAR ENDING OCTOBER 31, 1971
 SOURCE OF INFORMATION: WATER COMMISSIONERS SPECIAL REPORTS TO DIVISION ENGINEER
 1970 1971

Units in Acre Feet

NAME OF DITCH	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	COMPACT YEAR
Fort Bent Canal	466	266	30	270	777	2963	1739	2812	2980	2116	1664	1541	17624
Keesee Ditch	313	228	0	109	351	702	676	601	666	553	535	432	5166
Amity Canal	1237	4047	0	0	0	13490	2739	17397	19995	8249	2782	4107	74043
Lamar Canal	1896	1462	0	0	775	6155	4434	5844	5267	4210	3181	4152	37376
Hyde Ditch	309	307	0	0	32	450	389	349	484	389	307	307	3323
Manvel Canal	0	0	0	0	0	0	0	0	0	8	0	0	8
X-Y and Graham Canals	0	0	0	0	0	1107	803	964	704	539	68	88	4273
Buffalo Canal	2693	2011	654	0	1152	2869	3117	2966	4168	3090	2344	2056	27120
Sisson-Stubbs Canal	0	0	0	0	44	32	24	0	0	0	0	84	184
GRAND TOTAL	6914	8321	684	379	3131	27768	13921	30933	34264	19154	10881	12767	169117

DIVERSIONS BY DITCHES IN KANSAS

REPORT YEAR ENDING OCTOBER 31, 1971
 SOURCE OF INFORMATION: FRONTIER DITCH U.S.G.S. RECORDS
 OTHER DITCHES, KANSAS DIVISION OF WATER RESOURCES RECORDS
 Units in Acre Feet

NAME OF DITCH	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	COMPACT YEAR
Frontier Ditch	472	0	0	0	0	1470	2860	1670	2250	1990	2520	2200	*15432
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	472	0	0	0	0	1470	2860	1670	2250	1990	2520	2200	15432
Amazon Canal	0	0	0	0	714	5312	0	3598	1666	0	0	1868	13158
Great Eastern Canal	0	0	0	1382	3181	5286	3322	2206	2303	3134	0	438	21252
South Side Ditch	2995	1100	43	0	120	2906	2489	1044	2693	46	0	0	13436
Farmers Ditch	0	0	0	0	109	4536	1004	493	679	2034	851	1249	10955
Garden City Canal	0	0	0	0	0	432	153	277	366	0	384	0	1612
Total Syracuse to Garden City	2995	1100	43	1382	4124	18472	6968	7618	7707	5214	1235	3555	60413
TOTAL STATELINE TO GARDEN CITY	3467	1100	43	1382	4124	19942	9828	9288	9957	7204	3755	5755	75845

*5,860 Acre-Feet returned directly to river.

APPENDIX 'B-16'

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.	2250	1640	5960	4070	2410	2690	5780	21610	19540	5420	4430	4800	80600	B-2
Purgatoire River near Las Animas, Colo.	3610	3110	3490	2230	1470	551	663	815	2590	7010	862	2120	28520	B-3
Inflow to John Martin Reservoir	5860	4750	9440	6310	3880	3240	6440	22430	22130	12440	5300	6930	109200	B-4*
Reservoir contents at end of month	7955	10556	23140	31411	35154	0	0	0	0	0	0	0	0	B-5
Net change in reservoir storage	+5263	+2601	+12584	+8271	+3743	-35154	0	0	0	0	0	0	-2692	B-5
Outflow from John Martin Reservoir	2650	4800	213	340	1800	40520	10390	23740	27850	13380	7500	9320	142500	B-6
Diversions in District 67, Colo.	6914	8321	684	379	3131	27768	13921	30933	34264	19154	10881	12767	169117	B-14
Flow at Colorado-Kansas Stateline	9020	9010	8670	10460	7100	20900	7970	8190	15560	7510	4070	5070	113500	B-8
Diversions in Kansas	3467	1100	43	1382	4124	19942	9828	9288	9957	7204	3755	5755	75845	B-15

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

APPENDIX "C"

RESOLUTION IN MEMORIAM TO JOHN T. MARTIN

Be it resolved by the Arkansas River Compact Administration:

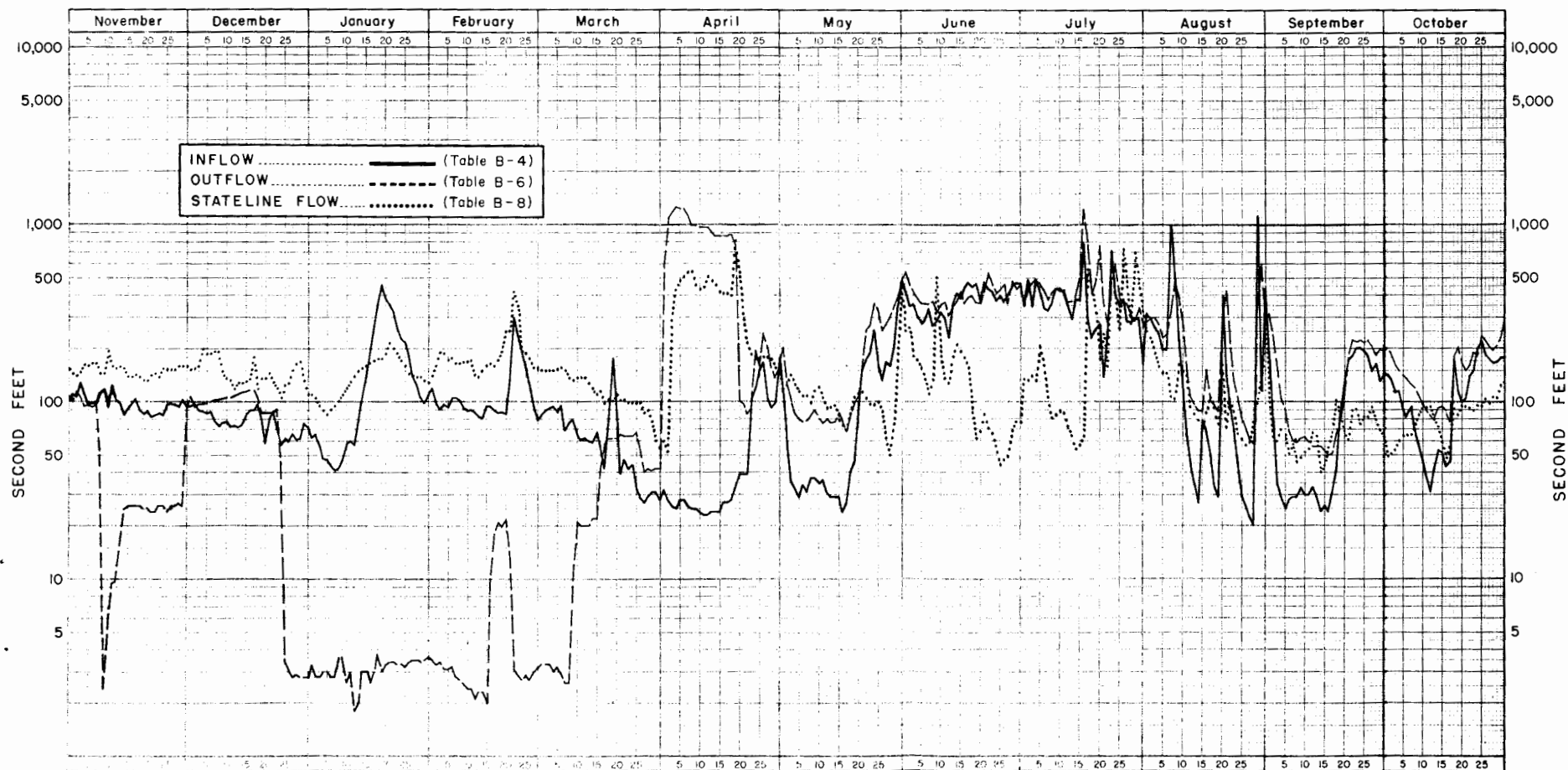
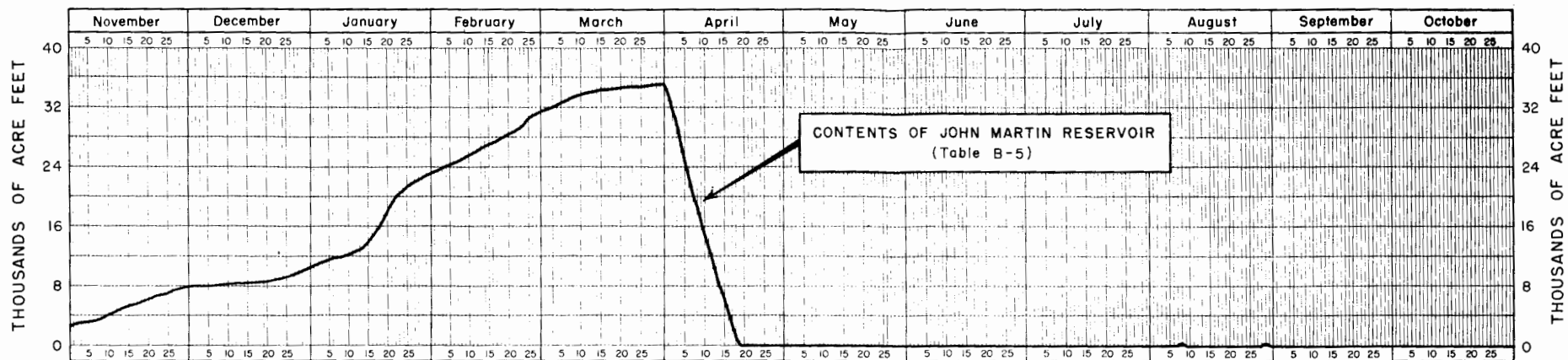
We pause to express our profound grief caused by the untimely passing of our former associate John T. Martin on April 15, 1971.

From 1953 to 1963, when he retired from federal service, John T. Martin was the official representative of the Albuquerque District, Corps of Engineers, to the Arkansas River Compact Administration. He also served as an engineering advisor to the Federal Representative and Chairman. His knowledge and understanding of technical problems related to reservoir operation and river administration were of invaluable aid in the accomplishment of our purposes. His loyalty and enthusiasm were outstanding and he will be remembered as a proficient, cooperative and understanding public servant.

To his survivors we express our deepest sympathy, knowing that they may obtain solace by the memory of a life well lived.

It is directed that this resolution be spread upon the minutes of this Administration and that a copy thereof be sent to Mrs. Martin.

**ARKANSAS RIVER COMPACT ADMINISTRATION
DECEMBER 14, 1971**



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

Report Year, November 1, 1970 - October 31, 1971