

TWENTY-SIXTH ANNUAL REPORT

Arkansas River

Compact

Administration

(1974)

**For the Report-Year
November 1, 1973 to October 31, 1974**

LAMAR, COLORADO

December 10, 1974

THE ADMINISTRATION

COLONEL GUSTAV L. SELIGMANN
(Nov. 1, 1973 to Nov. 29, 1973)
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

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PLATE 1	River Flow, Outflow, and Contents of John Martin Reservoir and Stateline Flow.
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Annual Report Of
ARKANSAS RIVER COMPACT
ADMINISTRATION
(1974)

Report-Year November 1, 1973 to October 31, 1974

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, 1973 through October 31, 1974, as follows:

1. Members of the Administration

Representative of the United States:

Colonel Gustav L. Seligmann, USA, Ret. (Nov. 1, 1973 to Nov. 29, 1973)

Colorado Representatives:

J. T. Reedy, Hartman, Colorado (Nov. 1, 1973 to Jan. 15, 1974)

Harry Bates, Jr., Holly, Colorado (Jan. 15, 1974 to Oct. 31, 1974)

George F. Reyher, McClave, Colorado (Nov. 1, 1973 to Jan. 15, 1974)

Robert Tempel, Wiley, Colorado (Jan. 15, 1973 to Oct. 31, 1974)

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:

Colonel Gustav L. Seligmann (Nov. 1, 1973 to Nov. 29, 1973)

Vice Chairman:

Carl E. Bentrup

Secretary:

Lane L. Hackett

Treasurer:

J. T. Reedy, Hartman, Colorado (Nov. 1, 1973 to Jan. 15, 1974)
Harry Bates, Jr. (Jan. 15, 1974 to Oct. 31, 1974)

3. Standing Committee

Administrative and Legal Committee:

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

Engineering Committee:

Guy E. Gibson (Chairman)
George F. Reyher (Nov. 1, 1973 to Jan. 15, 1974)
Robert Tempel (Jan. 15, 1974 to Oct. 31, 1974)

Operations Committee:

J. T. Reedy (Chairman) (Nov. 1, 1973 to Jan. 15, 1974)
Harry Bates, Jr. (Jan. 15, 1974 to Oct. 31, 1974)
Carl E. Bentrup

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

4. Meetings

December 11, 1973
April 16, 1974

Annual Meeting
Telephonic Meeting

5. Fiscal

- (a) Balance on hand November 1, 1973\$ 9,992.95
(b) Receipts\$16,370.00
State of Colorado\$5,022.00
State of Kansas 3,348.00
~~Restricted—Equipment—~~
Colorado 8,000.00
(c) Total funds available\$26,362.95
(d) Disbursements by the Administration:

Date	Voucher No.	Payee & Purpose	Amount
12/ 9/73	196	Mountain Bell-November service	\$ 18.75
12/ 9/73	197	Federal Reserve Bank-FICA	52.65
12/ 9/73	198	Joetta Hackett-Typing	30.00
1/ 4/74	199	Strait, Crimond & Co.-Audit	125.00
1/ 4/74	200	El Mar Restaurant-meeting room	19.16
1/ 4/74	201	Mountain Bell-December service	19.70
2/ 3/74	202	Lane Hackett — Salary ... \$423.68	
		Mailing ... 24.00	
		Travel ... 152.76	600.44
2/ 3/74	203	Mountain Bell-January service	21.55
3/ 1/74	204	Sears Roebuck-Office supplies	25.00
3/ 1/74	205	Mountain Bell-February service	18.95

3/ 1/74	206	Lamar Daily News, Printing	474.66
4/ 1/74	207	Federal Reserve Bank-FICA	52.65
4/ 1/74	208	U.S. Geological Survey-	
		Cooperative agreement	4,000.00
4/ 1/74	209	Mountain Bell-March service	18.85
4/30/74	210	Mountain Bell-April service	35.13
5/31/74	211	Lane Hackett -- Salary ... \$423.68	
		Mailing ... 20.00	
		Travel ... 157.44	601.12
5/31/74	212	Mountain Bell-May service	15.95
6/29/74	213	Federal Reserve Bank-FICA	52.65
6/29/74	214	Mountain Bell-June service	17.29
7/31/74	215	Mountain Bell-July service	15.95
8/30/74	216	Lane Hackett -- Salary ... \$423.68	
		Mailing ... 20.00	
		Travel ... 152.64	596.32
8/30/74	217	Mountain Bell-August service	15.95
9/30/74	218	Milne Agents-Treasurer bond	25.00
9/30/74	219	Mountain Bell-September service	20.52
9/30/74	220	Federal Reserve Bank-FICA	52.65
10/31/74	221	Mountain Bell-October service	15.95

TOTAL DISBURSEMENTS\$ 6,941.84

(e) Balance on hand, October 31, 1974\$19,421.11

(f) At the annual meeting on December 11, 1973 the Administration adopted the following budget for the fiscal year, July 1, 1975 to June 30, 1976.

PROPOSED BUDGET

Fiscal Year July 1, 1975—June 30, 1976

Personal Service	\$2,065.00
Secretary's Salary	\$1,800.00
Social Security	125.00
Professional Services (Audit) ... \$	140.00
U. S. Geological Survey	4,400.00
Cooperative Services	4,400.00
Capital Outlay	100.00
Office Equipment	100.00
Maintenance and Operation	1,925.00
Bond (Treasurer)	25.00
Printing	500.00
Official Publications	100.00
Travel Expense	600.00
Typing and Mailing	125.00
Investigation and Inspection	100.00
Telephone and Telegraph	375.00
Office Supplies	100.00
Total Budget 1975-1976	\$8,490
Estimated Carryover June 30, 1975	100.00
To Be Appropriated	\$8,390.00

Colorado (60%)	\$5,034.00
Kansas (40%)	3,356.00
	\$8,390.00

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

7. Cooperative Studies and Activities

- (a) Article VIII G (1) of Arkansas River Compact requires the Administration to cooperate with the Chief Official of each of the states of Colorado and Kansas charged with the administration of water rights in their respective States, and with the Federal agencies in systematically determining and correlating the facts pertaining to the flow and diversion of the water of the Arkansas River and to the operation and siltation of John Martin Reservoir and other related 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.

Winter storage season began with the reservoir empty, and the gates were closed at 12:01 a.m., November 1, 1973.

A river flow demand by Colorado of 40 cfs was made and released on November 1, 1973. Blowing snow and freezing temperatures caused Colorado to cancel this demand on November 20, 1973, at 9:30 a.m. Storage by this time had accumulated to 1,865 acre-feet. On March 7, 1974, a river flow demand of 15 cfs was released to Colorado. Storage had reached 26,335 acre-feet on this date. River flow release of 15 cfs to Colorado water users was made during ten days in March.

Conservation storage on April 1, 1974, was 31,274 acre-feet. High winds and deficient moisture conditions during the late winter and spring months caused both states to demand release of reservoir water on April 1, 1974. Near maximum releases were maintained for each state until the reservoir was emptied on April 18. The gates remained opened and the river was administered according to the Colorado priority system until winter storage began at midnight on October 31, 1974.

The Purgatoire River ran two freshets during the season. One occurred on June 24, 1974, when peak flow of 1,370 cfs was recorded at the Las Animas gaging station. The other freshet occurred on August 17 and peak flow at the Las Animas gaging station was 400 cfs. Two small flows also occurred in Cheyenne Creek and Horse Creek near the stateline. With the exception of these floods, tributary flow into the Arkansas River was slight.

The river flow into John Martin Reservoir during compact year 1974 amounted to 77,550 acre-feet, which fell far below the 1949-73 average of 174,761 acre-feet. Ditch diversions during compact year 1974 in Colorado Water District 67 were 97,004 acre-feet. Ditch diversions in Kansas from the stateline to Garden City during the same period totaled 42,917 acre-feet.

9. Gaging 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. In general, streamflow records of satisfactory accuracy were obtained at the Compact stations, except at the station on the Arkansas River at Las Animas where residual effects from construction of a new bridge caused interference with stage-discharge relationships during November and December 1973.

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 to minimize these differences the gaging station below John Martin Reservoir will be relocated at a site 1.5 miles upstream which is 0.2 mile below the dam. A concrete control will be installed at the new site in November 1974, and a new recorder shelter will be installed in

December 1974. This will stabilize the rating and also reduce the time involved in adjusting the gates to the required release. Records will be collected at both sites for a short period of time for low-flow comparison purposes.

The stilling wells were rebuilt and a new Parshall flume was installed on Frontier Ditch in December 1973.

The Administration approved a cooperative agreement with the U. S. Geological Survey for the fiscal year July 1, 1974 to June 30, 1975, in the amount of \$24,000; \$12,000 for each party. Of these funds \$8,000 is 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. The remaining \$16,000 is for the construction of an artificial control at the new site for the gaging station Arkansas River below John Martin Reservoir.

10. Findings of fact by the Administration

SPECIAL TELEPHONIC MEETING
APRIL 16, 1974

A special telephonic meeting was held on April 16, 1974, in accordance with Article V F of the Compact, for the purpose of declaring that the reservoir would become empty on April 18, 1974. 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 18, 1974, unless a change of conditions justified cancellation or modification of this notice.

The reservoir became empty at 12:01 A.M., April 18, 1974.

Participating members:

For Colorado — Mr. Bates and Mr. Tempel

For Kansas — Mr. Bentrup and Mr. Reeve

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For the Report-Year
November 1, 1973, to October 31, 1974

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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 and Liabilities arising from Cash Transactions of the Arkansas River Compact Administration as of October 31, 1974, and the Statement of Cash Receipts and Disbursements and Changes in Cash Balance 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, 1973, to June 30, 1974, compared with budget are presented in Exhibit C. This schedule is the result of the cash 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 arising from Cash Transactions of the Arkansas River Compact Administration at October 31, 1974, and the results of Cash Transactions of the fiscal year then ended, on a basis consistent with that of the previous year.

Respectfully submitted,
Crimond, Schemahorn & Co.

Lamar, Colorado
November 13, 1974

EXHIBIT A

ARKANSAS RIVER COMPACT ADMINISTRATION

STATEMENT OF ASSETS AND LIABILITIES ARISING FROM CASH TRANSACTIONS OCTOBER 31, 1974

ASSETS:	
Cash	\$19,421
Equipment	1,635
TOTAL ASSETS	<u>\$21,056</u>

LIABILITIES AND CASH BASIS EQUITY	
Liabilities	\$ ---
CASH BASIS EQUITY:	
Expended — Equipment	\$ 1,635
Restricted — Equipment	8,000
Unexpended	11,421
TOTAL CASH BASIS EQUITY	21,056
TOTAL LIABILITIES & CASH BASIS EQUITY	<u>\$21,056</u>

EXHIBIT B

ARKANSAS RIVER COMPACT ADMINISTRATION STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS AND CHANGES IN CASH BALANCE FOR THE FISCAL YEAR ENDED OCTOBER 31, 1974

CASH BALANCE, NOVEMBER 1, 1973 \$ 9,993

RECEIPTS:

Revenue from Assessments:	
Colorado	\$5,022
Kansas	3,348
TOTAL ASSESSMENTS	\$8,370
Other Appropriations:	
Relocation of Gaging Station —	
Colorado	\$8,000
TOTAL OTHER APPROPRIATIONS	<u>\$8,000</u>

TOTAL RECEIPTS \$16,370

DISBURSEMENTS:

U. S. Geological Survey — Gaging	\$4,000
Secretary's Salary — Net	1,271
Printing	475
Travel	463
Telephone	235
Payroll Tax	210
Professional Fees	125
Typing & Mailing	94
Insurance	25
Office Supplies	25
Annual Meeting Expenses	19

TOTAL DISBURSEMENTS 6,942

EXCESS OF RECEIPTS OVER DISBURSEMENTS \$ 9,428

CASH BALANCE, OCTOBER 31, 1974 \$19,421

EXHIBIT C

ARKANSAS RIVER COMPACT ADMINISTRATION STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS WITH BUDGET FOR BUDGET YEAR JULY 1, 1973 TO JUNE 30, 1974

	ACTUAL	BUDGET
CASH IN BANK, JULY 1, 1973	\$ 3,457	\$ 100
RECEIPTS:		
Revenue from Assessments:		
Colorado — 60%	\$ 4,788	4,788
Kansas — 40%	3,192	3,192
TOTAL ASSESSMENTS	\$7,980	
Other Appropriations:		
Relocation of Gaging Station — Colorado	\$8,000	
TOTAL OTHER APPROPRIATIONS ..	\$8,000	
TOTAL RECEIPTS	\$15,980	—
TOTAL TO ACCOUNT FOR	\$19,437	\$ 8,080
DISBURSEMENTS:		
U. S. Geological Survey — Gaging	\$ 4,000	\$ 4,400
Secretary's Salary	1,800	1,500
Travel	596	600
Printing	475	500
Telephone	329	350
Professional Fees	125	100
Typing & Mailing	122	125
Payroll Taxes	106	80
Office Supplies	47	100
Insurance	25	25
Annual Meeting Expense	19	—
Office Equipment	—	100
Official Publications	—	100
Investigation & Inspection	—	100
TOTAL DISBURSEMENTS	\$ 7,644	\$ 8,080
CASH IN BANK, JUNE 30, 1974	\$11,793	

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

APPENDIX 'B-1'

Arkansas River Near Pueblo, Colorado

Report-Year ending October 31, 1974
USGS Records--Provisional, Subject to Revision
(Colorado State Engineer)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	219	378	240	281	171	245	617	2010	934	722	95	136
2	208	378	113	295	191	251	607	1830	824	722	104	128
3	230	394	146	295	192	251	607	1590	682	754	468	132
4	236	411	185	274	211	258	616	1370	634	914	456	102
5	231	356	205	240	216	265	597	1360	576	832	474	142
6	237	340	265	266	177	251	694	1350	469	732	517	148
7	230	333	315	307	153	245	882	1400	812	670	489	152
8	236	315	355	259	134	234	1140	1460	881	603	446	166
9	237	328	230	233	138	179	1150	1320	846	592	463	157
10	238	315	311	227	143	127	1280	1000	881	601	298	161
11	227	302	410	258	148	102	1490	799	846	688	305	180
12	198	316	465	298	138	63	1730	810	800	772	318	158
13	198	301	497	305	134	67	1890	764	1160	664	304	172
14	198	301	477	292	122	67	1920	879	1220	617	290	202
15	208	323	401	285	134	67	1790	975	1330	617	142	177
16	202	301	395	264	148	65	1420	1110	1300	617	201	177
17	192	308	394	238	148	61	1090	1400	1330	617	219	191
18	202	355	400	238	157	51	1150	1510	1360	578	212	186
19	225	386	386	263	167	49	1190	1460	1310	523	196	152
20	237	338	386	271	182	55	1330	1420	1230	532	211	152
21	251	315	379	292	194	54	1510	1400	1240	402	205	156
22	303	323	363	305	211	42	1280	1400	1620	370	151	127
23	330	347	332	257	211	36	760	1580	1900	542	98	96
24	317	331	267	220	211	36	816	1510	1380	268	127	106
25	311	322	241	237	211	42	726	1350	1040	202	76	138
26	354	293	230	257	205	48	620	1290	986	177	51	130
27	324	300	267	209	205	47	881	1250	938	177	81	166
28	370	294	267	185	222	228	1280	1280	855	167	136	190
29	362	339	247		241	402	1700	1210	743	140	162	166
30	363	362	241		252	470	1870	1100	938	148	161	196
31		357	261		245		2010		786	152		207
TOTAL	7674	10362	9671	7351	5612	4358	36643	39188	31851	16112	7456	4809
ac.ft.	15220	20550	19180	14580	11130	8640	72680	77730	63180	31960	14790	9540
a) ac.ft.	0	0	0	0	0	1414	19703	3852	32019	17986	7422	0
b) ac.ft.	15220	20550	19180	14580	11130	7230	52980	73880	31160	13970	7370	9540
a) Less upstream reservoir and transmountain water.												
b) Corrected total ac. ft.												

THE YEAR 359,200 acre-feet
CORRECTED 276,800 acre-feet

APPENDIX 'B-2' **Arkansas River** **At Las Animas, Colorado**

Report-Year ending October 31, 1974
 USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	50	40	20	48	33	26	20	432	414	17	6.0	4.9
2	30	40	40	38	35	26	19	438	408	27	6.4	4.9
3	29	40	20	42	29	29	18	504	438	14	6.8	4.5
4	28	40	20	43	26	31	71	426	280	13	6.8	4.5
5	27	21	30	52	38	31	48	480	188	12	6.0	4.1
6	26	16	38	35	29	29	20	426	110	12	5.6	4.1
7	26	24	38	31	26	27	18	486	65	11	5.3	4.5
8	26	34	44	36	26	27	18	402	40	12	4.5	4.9
9	26	25	48	65	24	27	18	444	26	11	4.5	4.5
10	26	21	56	67	26	24	22	480	16	12	4.9	4.9
11	26	21	56	71	29	21	119	492	10	14	4.9	4.9
12	26	20	60	52	30	24	480	444	10	12	5.3	4.9
13	26	20	70	54	31	27	500	366	10	11	5.3	8.0
14	30	19	100	52	31	30	500	315	10	11	4.9	7.0
15	27	18	180	48	29	28	468	340	10	9.8	4.9	6.8
16	27	21	138	44	28	29	402	345	11	10	5.3	6.4
17	29	23	156	44	27	29	420	414	12	8.9	4.9	6.4
18	29	22	147	49	26	24	426	414	12	8.5	4.5	6.4
19	30	22	118	46	26	24	360	426	12	8.0	4.1	6.4
20	27	22	135	36	26	26	260	420	12	6.4	3.7	6.0
21	29	22	123	36	26	27	224	450	12	6.4	3.7	5.6
22	33	25	85	33	26	23	228	486	12	6.4	4.1	5.6
23	30	30	65	38	25	22	414	498	12	6.4	4.1	5.6
24	30	30	69	35	27	20	366	450	31	6.4	4.1	5.6
25	33	30	67	39	26	21	390	384	356	6.8	4.5	5.6
26	41	30	65	49	26	20	390	408	208	6.4	4.5	5.6
27	41	30	65	35	29	19	360	414	79	6.4	4.1	5.6
28	41	60	61	34	26	20	300	432	37	7.2	4.1	5.6
29	41	40	54		24	20	290	426	32	7.2	4.1	6.0
30	41	25	55		24	20	350	420	20	6.4	4.5	6.0
31		20	50		25		414		12	6.0		6.0
TOTAL												
sec.ft.	931	851	2249	1252	859	751	7913	12862	2905	312.6	146.4	171.8
ac.ft.	1850	1690	4460	2480	1700	1490	15700	25510	5760	620	290	341

THE YEAR 61,890 acre-ft.

APPENDIX 'B-3'

Purgatoire River

Near Las Animas, Colorado

Report-Year ending October 31, 1974
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	24	19	15	57	56	25	6.8	5.2	1.5	.90	0	.15
2	23	18	15	69	57	12	5.2	9.2	.90	.90	.45	.45
3	20	17	15	66	57	40	6.0	5.2	.90	.90	.90	.90
4	23	18	15	63	52	60	6.8	3.6	1.5	.90	.45	.15
5	28	18	15	55	41	36	6.0	2.2	.45	.15	.15	.45
6	27	15	15	44	46	12	4.4	.15	.45	.15	.15	.90
7	18	15	15	35	59	10	4.4	.90	.90	0	.45	.90
8	20	18	15	35	54	9.2	4.4	3.6	.90	.15	.15	.90
9	18	20	15	37	42	9.2	6.0	6.0	2.2	.15	.15	.90
10	20	23	15	43	32	9.2	9.2	7.6	3.6	.15	.15	.45
11	18	23	15	56	43	9.2	8.4	5.2	2.8	.45	0	.45
12	18	31	15	57	57	9.2	6.0	3.6	1.5	.15	0	.15
13	17	27	15	52	55	10	3.6	2.2	1.5	0	.45	.15
14	16	25	83	49	69	12	7.6	2.2	1.5	0	.45	.15
15	17	25	99	32	59	14	2.8	2.8	1.5	0	.90	.15
16	18	26	99	52	50	16	2.2	2.8	.90	.355	.90	.45
17	17	28	99	46	50	14	2.8	3.6	.45	262	.45	.45
18	18	20	83	49	50	13	4.4	2.2	0	30	.15	.45
19	20	18	73	52	50	8.4	2.2	2.2	0	6.0	0	.45
20	18	19	63	66	50	12	4.4	1.5	0	2.2	0	.45
21	12	20	80	62	50	9.2	4.4	.90	0	1.5	0	.15
22	31	18	110	66	51	5.2	4.4	.90	0	.90	.15	.15
23	38	20	153	66	53	2.8	4.4	1.5	2.2	.45	.15	.45
24	42	22	108	54	55	6.8	5.2	225	.15	.45	.15	.45
25	41	18	117	59	58	1.5	6.0	116	0	.45	.15	.45
26	37	16	110	64	61	1.5	5.2	18	0	0	0	.45
27	25	18	99	64	63	.15	4.4	8.4	0	0	0	.45
28	21	22	64	56	42	.15	2.8	4.4	.45	.15	0	.45
29	21	20	52	24	24	2.2	2.2	2.2	2.2	.45	.15	.45
30	19	18	64	18	18	5.2	1.5	2.2	1.5	.15	0	.90
31	17	17	63	31	31	2.8	2.8	2.8	1.5	0	0	.90
TOTAL	685	632	1814	1526	1535	375.1	146.9	451.45	31.9	664.6	6.45	22.50
sec.ft.	1360	1250	3600	3030	3040	744	291	895	63	1320	13	45
ac.ft.												

THE YEAR 15,650 acre-ft.

APPENDIX 'B-4'

River Flow Into

John Martin Reservoir

Report-Year ending October 31, 1974
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	74	59	35	105	89	51	27	437	416	18	6.0	5.0
2	53	58	35	107	92	38	24	447	409	28	6.4	5.0
3	49	57	35	108	86	69	24	509	439	15	7.2	5.0
4	51	58	35	106	78	91	78	430	282	14	7.7	5.4
5	53	39	45	107	79	67	54	482	189	12	6.4	4.2
6	53	31	53	79	75	41	24	426	110	12	5.8	4.6
7	44	39	53	66	85	37	22	487	66	11	5.4	5.4
8	46	52	59	71	80	36	22	406	41	12	5.0	5.8
9	44	45	63	102	66	36	24	450	28	11	4.6	5.4
10	46	44	67	110	58	33	31	488	20	12	5.0	5.4
11	44	44	71	127	72	30	127	497	13	14	4.9	5.4
12	44	51	75	109	87	33	466	448	12	12	5.3	9.3
13	43	47	85	106	86	37	504	368	12	11	5.4	10
14	46	44	183	101	100	42	508	317	12	11	5.4	9.2
15	44	43	279	100	88	42	471	343	12	9.8	5.8	8.3
16	45	47	237	96	78	45	404	348	12	365	6.2	6.8
17	46	51	255	90	77	43	423	418	12	271	5.4	6.8
18	47	42	230	98	76	37	430	416	12	38	4.6	6.8
19	50	40	191	98	76	32	362	428	12	14	4.1	6.8
20	45	41	198	102	76	38	264	422	12	8.6	3.7	6.4
21	41	42	203	98	76	36	228	451	12	7.9	3.7	5.8
22	64	43	195	99	77	28	252	487	12	7.3	4.2	5.8
23	68	50	218	104	78	25	418	500	14	6.8	4.2	6.0
24	72	52	177	89	82	27	371	675	31	6.8	4.2	6.0
25	74	48	184	98	84	22	396	500	356	7.2	4.6	6.0
26	78	46	175	113	87	22	395	426	208	6.4	4.5	6.0
27	66	48	164	99	92	19	364	422	79	6.4	4.1	6.0
28	62	82	125	90	68	20	303	456	37	7.4	4.1	6.0
29	62	60	106	48	48	22	292	428	34	7.6	4.2	6.4
30	60	43	119	42	42	25	352	422	22	6.6	4.5	6.4
31		37	113	56	56		417		14	6.0		6.9
TOTAL	1616	1483	4063	2778	2394	1124	8057	13314	2940	975.8	152.6	194.3
sec.ft.	3210	2940	8060	5510	4750	2230	15980	26410	5830	1940	303	385

THE YEAR 77,550 acre-ft.

APPENDIX 'B-5'

Contents Of

John Martin Reservoir

Report-Year ending October 31, 1974
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	442	4403	9578	18649	25305	30068	0	0	0	0	0	0
2	747	4549	9694	18890	25533	27932	0	0	0	0	0	0
3	833	4745	9875	19178	25685	25993	0	0	0	0	0	0
4	903	4921	10009	19445	25916	24285	0	0	0	0	0	0
5	983	5076	10160	19691	26096	22351	0	0	0	0	0	0
6	1046	5222	10296	19983	26302	20801	0	0	0	0	0	0
7	1141	5407	10432	20141	26459	19156	0	0	0	0	0	0
8	1219	5620	10569	20300	26616	17522	0	0	0	0	0	0
9	1305	5722	10690	20527	26774	15681	0	0	0	0	0	0
10	1383	5876	10847	20824	27092	13882	0	0	0	0	0	0
11	1463	6019	10969	21124	27279	12008	0	0	0	0	0	0
12	1524	6165	11109	21448	27414	10093	0	0	0	0	0	0
13	1577	6311	11233	21658	27685	8462	0	0	0	0	0	0
14	1627	6446	11411	21938	27932	6487	0	0	0	0	0	0
15	1680	6568	11662	22174	28208	4459	0	0	0	0	0	0
16	1735	6692	12191	22410	28459	2414	0	0	0	0	0	0
17	1786	6816	12788	22646	28741	0	0	0	0	0	0	0
18	1835	6984	13301	22884	28883	0	0	0	0	0	0	0
19	1896	7041	13823	23147	29083	0	0	0	0	0	0	0
20	2021	7197	14333	23387	29284	0	0	0	0	0	0	0
21	2139	7327	14810	23556	29544	0	0	0	0	0	0	0
22	2332	7662	15233	23749	29747	0	0	0	0	0	0	0
23	2595	8005	15742	23895	30010	0	0	0	0	0	0	0
24	2920	8248	16176	24138	30243	0	0	0	0	0	0	0
25	3243	8462	16550	24334	30507	0	0	0	0	0	0	0
26	3544	8617	16927	24506	30713	0	0	0	0	0	0	0
27	3671	8711	17330	24828	30889	0	0	0	0	0	0	0
28	3854	8853	17651	25053	31066	0	0	0	0	0	0	0
29	4053	9091	17930	31126	31126	0	0	0	0	0	0	0
30	4215	9333	18168	31214	31214	0	0	0	0	0	0	0
31		9480	18451	31274	31274							

APPENDIX 'B-6'

Outflow From John Martin Reservoir

Report Year ending October 31, 1974
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	70	8.1	3.3	3.0	3.0	590	54	450	369	25	7.1	6.6
2	28	4.0	3.6	3.0	2.8	1010	51	455	329	29	7.6	7.1
3	40	6.2	3.3	2.8	2.8	1080	49	436	386	33	8.1	7.1
4	43	2.8	3.3	2.8	2.8	1000	48	475	325	28	8.5	6.6
5	45	3.6	3.0	3.0	3.0	959	117	450	272	26	8.1	6.2
6	46	3.3	3.0	3.0	2.8	952	77	445	192	23	7.1	6.2
7	48	3.6	2.8	3.0	6.2	917	56	480	125	20	7.1	6.6
8	38	3.0	2.8	3.0	15	882	51	480	79	17	6.6	7.1
9	23	3.6	2.8	3.0	16	931	46	455	59	17	6.6	8.1
10	19	3.6	2.8	3.0	8.1	973	54	465	49	16	6.2	9.0
11	19	3.0	2.8	3.0	2.8	973	56	455	40	16	5.7	8.5
12	34	2.8	2.8	3.0	2.6	952	117	418	38	18	5.7	13
13	36	2.8	2.8	3.0	2.8	959	253	382	35	17	5.7	20
14	35	2.6	3.3	3.3	2.8	973	404	333	31	16	6.2	15
15	36	2.8	2.6	3.6	2.8	973	436	280	31	14	6.6	14
16	35	2.8	3.0	3.6	2.8	973	475	272	28	14	7.1	14
17	35	2.8	3.3	3.3	2.8	980	506	306	22	247	7.1	13
18	38	3.3	3.0	3.3	2.8	217	506	374	20	90	7.1	13
19	38	3.3	3.0	3.3	3.0	79	352	413	20	49	6.6	13
20	22	3.0	3.0	3.0	2.8	71	284	460	20	26	6.2	13
21	7.6	3.0	3.0	3.6	3.0	63	257	470	23	16	6.2	13
22	8.1	3.3	3.0	3.0	3.3	61	227	460	25	14	6.6	13
23	8.1	3.3	3.0	3.0	3.0	59	325	523	30	12	6.6	14
24	8.1	3.0	3.0	3.0	3.0	57	382	560	26	11	7.1	13
25	6.2	3.3	2.8	3.0	7.1	57	450	610	70	9.9	6.6	13
26	8.1	3.3	3.0	3.0	17	57	440	440	131	9.0	6.2	13
27	4.8	3.3	3.0	3.6	15	53	480	422	120	8.5	6.2	14
28	4.0	3.3	3.0	3.0	15	49	329	374	65	8.5	5.7	15
29	3.6	3.6	2.8	3.0	16	51	272	391	59	8.5	6.2	14
30	6.6	3.6	2.8	16	16	51	265	352	38	8.1	6.2	14
31		3.8	3.0	16	16	395			29	7.6		14
TOTAL												
sec.ft.	793.2	107.8	92.7	87.2	204.9	17002	7814	12886	3086	854.1	200.6	357.1
ac.ft.	1570	214	184	173	406	33700	15500	25560	6120	1690	398	708
THE YEAR	86,220 acre-feet											

APPENDIX 'B-7'

Arkansas River

At Lamar, Colorado

Report-Year ending October 31, 1974
USGS Records--Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	21	32	27	26	25	78	28	61	46	5.6	2.9	1.9
2	39	33	26	25	24	338	28	53	48	6.2	3.4	1.9
3	40	31	26	24	22	434	19	53	52	10	2.9	1.9
4	38	32	26	24	21	475	7.4	60	55	15	2.4	1.4
5	35	30	26	20	18	416	6.2	44	55	8.6	2.4	1.4
6	34	33	25	15	19	410	25	45	50	6.8	1.9	1.4
7	38	31	25	15	21	401	30	59	45	5.6	1.4	1.4
8	42	30	25	15	20	365	25	69	48	5.6	.90	1.4
9	40	28	25	40	18	365	19	58	48	6.2	.90	1.4
10	34	27	25	35	22	428	15	39	36	7.4	.90	1.4
11	31	28	24	28	39	461	9.8	30	29	7.4	.90	1.4
12	30	27	24	26	42	458	8.6	27	24	6.8	1.4	2.4
13	32	27	30	25	37	468	8.0	49	18	6.8	1.4	2.4
14	18	28	50	25	33	489	35	44	12	7.4	1.4	1.9
15	9.2	27	61	24	29	489	70	36	6.2	8.6	1.4	1.9
16	9.2	26	33	24	30	489	34	44	3.9	9.2	1.4	1.9
17	9.2	28	36	24	35	492	35	44	6.2	49	1.4	.90
18	9.2	29	44	26	32	295	19	46	.90	74	1.4	1.9
19	9.2	30	37	26	31	65	21	41	.40	28	1.4	.90
20	10	30	37	26	30	47	28	41	.90	17	.90	1.4
21	40	44	38	24	28	36	33	41	.90	9.8	.90	1.4
22	50	41	35	24	24	33	32	40	.90	8.0	.90	1.4
23	41	31	32	24	19	33	31	49	5.0	5.6	.40	1.4
24	39	24	28	33	20	32	32	68	2.4	3.9	.40	1.4
25	37	55	29	38	20	30	33	136	3.4	2.4	.40	1.4
26	36	28	28	25	24	30	33	55	41	1.4	.40	1.4
27	35	28	27	26	22	30	29	52	92	1.9	.90	1.4
28	33	28	27	26	15	31	33	47	60	2.9	1.4	1.9
29	33	27	27	26	5.6	30	59	49	49	3.9	1.4	1.4
30	33	27	25	25	5.6	28	55	48	36	3.4	1.4	1.4
31	33	27	25	25	5.6	28	60	48	15	2.9	1.4	1.4
TOTAL	905.0	947	954	713	736.8	7776	901.0	1528	890.10	337.30	41.00	50.40
sec.ft.	1800	1880	1890	1410	1460	15420	1790	3030	1770	669	81	100
ac.ft.	1800	1880	1890	1410	1460	15420	1790	3030	1770	669	81	100
THE YEAR	31,300 acre-ft.											

APPENDIX 'B-8'

Arkansas River At The Colorado-Kansas Stateline

Report Year ending October 31, 1974
USGS Records—Provisional, Subject to Revision

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	92	104	70	119	125	96	92	50	43	13	7.2	7.3
2	101	110	70	119	122	101	72	53	36	3.9	7.8	7.6
3	107	113	70	113	122	315	77	79	32	9.1	8.4	9.2
4	98	113	70	104	116	637	61	63	29	11	9.2	9.0
5	101	110	70	107	122	560	66	37	30	9.9	9.2	11
6	95	104	70	84	122	476	61	43	32	13	9.6	7.9
7	86	107	70	90	116	451	58	61	29	12	10	7.6
8	80	104	71	100	107	386	64	109	31	13	9.0	7.4
9	65	107	70	107	113	403	52	176	29	62	9.8	7.8
10	62	110	70	136	132	376	94	148	29	12	10	7.0
11	62	113	70	125	128	428	90	113	23	11	13	7.2
12	68	107	70	122	136	456	72	89	23	11	19	26
13	62	104	100	119	139	454	57	53	22	9.8	16	54
14	57	107	115	107	146	451	51	50	22	10	5.0	16
15	53	116	130	107	146	437	70	43	22	9.8	7.0	12
16	52	113	130	110	150	527	114	41	19	9.8	7.9	11
17	46	105	130	113	150	522	99	52	16	9.4	6.4	11
18	54	100	130	116	146	484	122	60	14	9.2	6.4	11
19	49	100	146	116	125	326	109	56	13	8.1	6.3	12
20	45	100	150	125	107	163	89	52	14	8.8	6.3	11
21	50	100	156	119	118	141	53	39	14	7.2	6.4	9.8
22	65	100	150	110	130	135	59	43	14	7.0	8.1	9.6
23	98	90	150	122	141	125	60	40	18	8.7	9.2	9.9
24	98	90	136	119	134	116	66	46	15	8.5	7.8	11
25	95	90	136	116	128	122	339	64	13	8.2	7.2	12
26	74	90	116	113	110	117	135	65	13	9.6	7.0	11
27	77	80	125	119	101	116	84	74	13	7.6	5.3	12
28	83	80	122	119	92	100	71	54	15	6.8	5.0	12
29	95	80	119	87	96	96	66	48	20	7.9	6.5	12
30	89	70	113	86	96	96	53	40	14	7.7	6.5	12
31		70	113	110	110		56		15	7.2		13
TOTAL	2259	3087	3308	3176	3807	9273	2612	1941	672	348.2	252.5	377.3
sec.ft.	4480	6120	6560	6300	7550	18390	5180	3850	1330	691	501	748

THE YEAR 61,700 acre-ft.
The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas, and the Frontier ditch.

Report ending October 31, 1974
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

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APPENDIX 'B-10'

Demands By Colorado For River Flow Operation Of Reservoir

Report Year ending October 31, 1974
Data Source: U. S. Corps of Engineers and Orders by the Secretary
of the Arkansas River Compact Administration (Provisional, Subject to Revision) (Rev. 12/11/74)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	40	Open 00:01			0	5.25	Closed 8:30 A.M.					
2	40	(River Flow)			0							
3	40				0							
4	40				0							
5	40				0							
6	40				0							
7	40				0							
8	27	Reduced 9:00 A.M.			15	9	Open 10:00 A.M.					
9	20				15							
10	20				7		Closed 10:00 A.M.					
11	20				0							
12	26				0							
13	30	Increased 9:00 A.M.			0							
14	30				0							
15	30				0							
16	30				0							
17	30				0							
18	30				0							
19	30				0							
20	12	Gates Closed 9:30 A.M.			0							
21	0				0							
22	0				0							
23	0				0							
24	0				0							
25	0				0							
26	0				9	Open: 10:00 A.M.						
27	0				15							
28	0				15							
29	0				15							
30	0				15							
31	0				15							
Totals												
sec. ft.	615	0	0	0	145	5.25						
ac.ft.	1219	0	0	0	288	10.4						
THE YEAR 1517.4 A.F.												

Closed at Midnight
for winter storage

APPENDIX 'B-11'

Demand By Kansas For Reservoir Water

Report ending October 31, 1974
Data Source: Kansas State Board of Agriculture and Orders by 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						325						
2						500						
3						500						
4						500						
5						500						
6						500						
7						440						
8						400						
9						400						
10						400						
11						400						
12						400						
13						400						
14						400						
15						400						
16						400						
17						400						
18						0						
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Totals												
sec.ft.												
ac.ft.												

Closed at Midnight
X for winter storage

7265
14407

THE YEAR 14407 A.F.

APPENDIX 'B-12' **Stateline Flow On Days** **Of Kansas Demand***

Report-Year ending October 31, 1974
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												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Total												
sec.ft.												
ac.ft.												

THE YEAR 15,070 acre-ft.
*Three days' time is allowed for water released from John Martin Reservoir to reach State line.

APPENDIX 'B-13'

Diversion In Ditches

By Colorado

WATER DISTRICTS NO. 14 AND NO. 17 — DIVISION NO. 2

Report-Year Ending October 31, 1974
Source of Information: Water Commissioners Special Reports to Division Engineer
Units in Acre Feet (Provisional, Subject to Revision)

Name of Canal	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	YEAR	COMPACT
Bessemer (Riv.)	2901	0	0	264	4275	4224	4952	5425	4365	4309	3151	3817	37683	
Res. or Imported	0	0	0	0	0	0	1380	0	1761	627	0	0	3768	
Total: Bessemer	2901	0	0	264	4275	4224	6332	5425	6126	4936	3151	3817	41451	
Minnequa-Ft. Union (R)	0	0	0	0	0	0	173	216	902	323	0	0	1614	
West Pueblo (Riv.)	61	0	0	0	0	60	196	178	184	196	111	123	1109	
Excelsior (Riv.)	0	0	0	0	0	0	79	159	0	0	0	0	238	
Res. or Imported	0	0	0	0	0	0	79	40	0	0	0	0	119	
Total: Excelsior	0	0	0	0	0	0	158	199	0	0	0	0	357	
Collier	0	0	0	0	0	0	103	181	0	0	0	0	284	
Colorado Canal (Riv.)	4928	11642	9913	0	0	0	16308	2975	19386	14478	7177	0	26483	
Res. or Imported	0	0	0	0	0	1335	16308	2975	19386	14478	7177	0	61659	
Total: Colo. Canal	4928	11642	9913	0	0	1335	16308	2975	19386	14478	7177	0	88142	
Highline (Riv.)	4831	2711	1384	1806	4575	5784	7097	7510	6385	5136	4049	2707	53975	
Res. or Imported	0	0	0	0	0	79	1329	436	2427	3155	99	0	7525	
Total: Highline	4831	2711	1384	1806	4575	5863	8426	7946	8812	8291	4148	2707	61500	
Oxford Farmers (Riv)	0	839	216	373	2263	2100	3036	5114	978	855	819	817	17410	
Res. or Imported	0	0	0	0	0	0	0	0	716	0	0	0	716	
Total: Oxford Farmers	0	839	216	373	2263	2100	3036	5114	1694	855	819	817	18126	
Total: District No. 14	12721	15192	11513	2443	11113	12168	15463	18567	11912	10496	8130	7464	137182	
Otero	0	0	0	1628	0	0	0	0	412	0	0	0	1628	
Res. or Imported	0	0	0	1628	0	0	0	0	412	0	0	0	412	
Total: Otero	0	0	0	1628	0	0	0	0	412	0	0	0	2040	
Catlin Canal (Riv)	3823	1156	1462	1707	2979	4047	12231	14845	8091	1402	0	1610	53353	
Res. or Imported	0	0	0	0	0	0	1987	0	1771	0	0	0	3758	
Total: Catlin	3823	1156	1462	1707	2979	4047	14218	14845	9862	1402	0	1610	57111	
Holbrook (Riv)	722	4258	1612	8521	1033	0	0	587	46	0	0	0	16779	
Res. or Imported	0	0	0	0	0	0	0	0	3524	0	0	0	3524	
Total: Holbrook	722	4258	1612	8521	1033	0	0	587	3570	0	0	0	20303	
Rocky Ford	2707	1047	0	839	1779	4202	5342	5624	6361	5923	3738	3413	40975	
Ft. Lyon Storage	0	0	14436	6193	0	0	0	0	10900	7155	2836	8061	131733	
Ft. Lyon (Riv)	13504	9885	889	8000	25035	10490	12455	22523	3155	0	0	0	3155	
Res. or Imported	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kicking Bird	7133	10603	11291	6188	0	0	0	0	10900	7155	2836	8061	35215	
Total: Ft. Lyon & K.B.	20637	20488	12180	14188	25035	10490	12455	22523	14055	7155	2836	8061	166948	
Ft. Lyon Grand Tot:	20637	20488	12180	14188	25035	10490	12455	22523	14055	7155	2836	8061	134888	
Las Animas Consol.	1719	642	307	825	1638	2166	2755	3549	2312	833	438	827	18011	
Total: Dist. No. 17	29608	27591	29997	33901	32464	20905	32783	47128	27710	15313	7012	13911	318323	
Total: Districts No. 14 & No. 17	42329	42783	41510	36344	43577	33073	48246	65695	39622	25809	15142	21375	455505	
Res. or Imported	0	0	0	0	0	1414	21256	3667	34054	18583	7276	0	86250	
GRAND TOTAL	42329	42783	41510	36344	43577	34487	69502	69362	73676	44392	22418	21375	541755	

APPENDIX B-14'

Diversions By Ditches In

Colorado Water District 67

Division #2

Report-Year ending October 31, 1974
Source of Information: Water Commissioners Special Reports to Division Engineer
Units In Acre-Feet

Name of Ditch	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	COMPACT YEAR
Fort Bent Canal	809	0	0	0	478	3121	1773	2213	716	101	0	0	9211
Res. or Imported								325					325
Total: Fort Bent	809	0	0	0	478	3121	1773	2538	716	101	0	0	9536
Keesee Ditch	359	0	0	0	0	674	908	763	785	720	361	603	5173
Amity Canal	79	0	0	0	0	9536	7065	14549	1662	6	0	0	32897
Lamar Canal	1196	801	938	763	900	4388	3924	5640	2280	972	1069	1116	23987
Hyde Ditch	0	0	0	0	0	430	536	555	232	0	0	0	1753
Manvel Canal	175	0	0	0	0	161	0	30	0	0	0	0	366
X-Y. & Graham Canals	127	0	0	0	0	1309	0	200	26	0	0	0	1662
Buffalo Canal	2153	992	964	674	777	3903	3772	3899	2449	926	728	393	21630
Sisson-Subbs Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
Total: District	4898	1793	1902	1437	2155	23522	17978	27849	8150	2725	2158	2112	96679
Trans. Mt. Diversions	0	0	0	0	0	0	0	325	0	0	0	0	325
Grand Total	4898	1793	1902	1437	2155	23522	17978	28174	8150	2725	2158	2112	97004

APPENDIX 'B-15'

Diversions By Ditches

In Kansas

Report Year ending October 31, 1974
 Source of Information: Frontier Ditch; USGS 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.	THE YEAR
Frontier Ditch	91	0	0	0	339	1810	2100	1890	1110	477	358	386	*8561
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	91	0	0	0	339	1810	2100	1890	1110	477	358	386	8561
Amazon Canal	1843	0	0	0	654	2936	0	0	0	0	0	0	5433
Great Eastern Canal	1565	2533	0	131	3939	3219	3169	1172	0	0	0	0	15728
South Side Ditch	0	0	0	0	2836	2715	0	0	0	0	0	0	5551
Farmers Ditch	968	50	0	0	0	4877	831	344	113	0	0	0	7183
Garden City Canal	0	0	0	0	0	430	0	31	0	0	0	0	461
Total Syracuse to													
Garden City	4376	2583	0	131	7429	14177	4000	1547	113	0	0	0	34356
Total Stateline to													
Garden City	4467	2583	0	131	7768	15987	6100	3437	1223	477	358	386	42917

*2,570 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.	1850	1690	4460	2480	1700	1490	15700	25510	5760	620	290	341	61890	B-2
Purgatoire River near														
Las Animas, Colo.	1360	1250	3600	3030	3040	744	291	895	63	1320	13	45	15650	B-3
Inflow to John Martin														
Reservoir	3210	2940	8060	5510	4750	2230	15980	26410	5830	1940	303	385	77550	B-4*
Reservoir contents at														
end of month	4215	9480	18451	25053	31274	0	0	0	0	0	0	0	0	B-5
Net change in reservoir														
storage	+4215	+5265	+8971	+6602	+6221	-31274	0	0	0	0	0	0	0	B-5
Outflow from John Martin														
Reservoir	1570	214	184	173	406	33700	15500	25560	6120	1690	398	708	86220	B-6
Diversions in														
District 67, Colo.	4898	1793	1902	1437	2155	23522	17978	28174	8150	2725	2158	2112	97004	B-14
Flow at Colorado-Kansas														
Stateline	4480	6120	6560	6300	7550	18390	5180	3850	1330	691	501	748	61700	B-8
Diversions in														
Kansas	4467	2583	0	131	7768	15987	6100	3437	1223	477	358	386	42917	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 Concerning

J. T. Reedy

(Adopted December 10, 1974)

BE IT RESOLVED BY THE ARKANSAS RIVER COMPACT ADMINISTRATION

WHEREAS, J. T. Reedy served as a Colorado Commissioner on the Arkansas River Compact Administration from March 4, 1970 to January 15, 1974; and

WHEREAS, J. T. Reedy has been an invaluable aid to the Administration as a representative from Colorado and has performed his duties with distinction; and

WHEREAS, J. T. Reedy has contributed immensely from his wide experience and knowledge to the solution of difficult problems which have confronted this Administration.

NOW THEREFORE, BE IT RESOLVED by the Arkansas River Compact Administration that said Administration wishes to express its deep appreciation to J. T. Reedy for his loyal and faithful service and his personal devotion to his duties as a Commissioner, and to wish him continued good health and happiness.

BE IT FURTHER RESOLVED that this resolution be entered into the records of this Administration and that the Secretary be instructed to send a copy to Mr. Reedy.

APPENDIX "D"

Resolution Concerning

George F. Reyher

(Adopted December 10, 1974)

BE IT RESOLVED BY THE ARKANSAS RIVER COMPACT ADMINISTRATION:

WHEREAS, George Reyher has served as a Colorado Commissioner on the Arkansas River Compact Administration for the past 11 years; and

WHEREAS, George Reyher has served with honor as a member of said Administration and has at all times conducted himself with high integrity, and has contributed unselfishly of his knowledge and professional skill in solving the problems which have confronted this Administration; and

WHEREAS, his endeavors in fulfilling the obligations of this Administration have been a great aid in creating a harmonious atmosphere between members of the Administration.

NOW THEREFORE, BE IT RESOLVED that regret is felt by this Administration in the loss of the services of George F. Reyher. He will be missed by all members of this Administration. We wish him and his family continued health and happiness in the years to come.

BE IT FURTHER RESOLVED that this resolution be entered into the records of this Administration and that the secretary be instructed to send a copy to Mr. Reyher.

APPENDIX "E"

Resolution In Memoriam To

Colonel Gustav L. Seligmann

(Adopted December 10, 1974)

**BE IT RESOLVED BY THE ARKANSAS RIVER COMPACT
ADMINISTRATION:**

We pause to express our profound grief caused by the passing of our former associate, Gustav L. Seligmann.

Gustav Seligmann became chairman of the Arkansas River Compact Administration in May of 1970 and during his term of office served as a steady and guiding hand in its operation.

To those of his family he left behind, we extend our deepest sympathy, knowing that they may obtain some solace by the memory of a life well lived.

BE IT FURTHER RESOLVED that this resolution be entered into the records of this Administration and that the Secretary be instructed to send a copy to his next of kin.