# Twentieth Annual Report

(And By-Laws As Amended)

# ARKANSAS RIVER COMPACT ADMINISTRATION

(1968)

For the Report Year November 1, 1967 to October 31, 1968

# LAMAR, COLORADO

December 10, 1968

# THE ADMINISTRATION

WILBUR L. HECKLER, Chairman and Representative of the United States

ERNEST HOFMEISTER, 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

(1968)

Report-Year November 1, 1967 to October 31, 1968

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, 1967 through October 31, 1968 as follows:

1. Members of the Administration

Representative of the United States:

Wilbur L. Heckler

Colorado Representatives:

Ernest Hofmeister, Lamar, 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:

Wilbur L. Heckler

Vice Chairman:

Carl E. Bentrup

### Secretary:

Lane L. Hackett

Treasurer:

Ernest Hofmeister

### Standing Committees 3.

Administrative and Legal Committees:

Logan N. Green (Chairman) George F. Reyher

### **Engineering Committee:**

Robert V. Smrha (Chairman) Felix L. Sparks

### Operations Committee:

Ernest Hofmeister (Chairman) Carl E. Bentrup

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

### Meetings

**Annual Meeting** January 16, 1968 Lamar, Colorado

### Fiscal

(a) Balance on Hand November 1, 1967. . . . . . . . . . \$12,926.57 (b) Receipts: 

5,490,00

October 31, 1968:

	Vouche	r	
Date	No.		Amount
11/ 2/67	. 8	Mountain States Telephone - October Service	.\$ 20.36
12/ 4/67	9	Mountain States Telephone - November Service.	
12/28/67	10	U. S. Treasurer - 4th Quarter FICA	
12/28/67	11	Lane Hackett - 4th Quarter Salary & Travel	. 336.64
1/ 5/68	12	Strait & Crimmond - Audit	92.00
1/ 5/68	13	Mountain States Telephone -	
2/ 1/68	14	December Service	
- 1 - 1		January Service	. 11.50
2/ 1/68	15	Lamar Typewriter Co Office Supplies	. 8.79
2/ 1/68	16	U. S. Geological Survey - 1st Half Coop Agreement	. 2,875.00
2/ 1/68	17	Allied Radio Corp VHF Monitor & Antenna	-
2/ 4/68	18	Mountain States Telephone -	. 34,40
		February Service	
2/ 4/68	19	Ronald Anderson - Bookkeeping Service	. 20.00
3/27/68	20	Lane Hackett - 1st Quarter Salary & Travel	. 345,36
3/27/68	21	U. S. Treasurer - 1st Quarter FICA	
3/27/68	22	Mountain States Telephone -	. 20.40
	_	March Service	. 13.35
3/27/68	23	Schoenith Office Equipment Co Office Supplies	. 4.40
5/ 6/68	24	Mountain States Lefebhone -	
E / C /CO	25	April Service.	. 27.59
5/ 6/68	43	Lamar Daily News -	400 55
E/ C/C0	26	Printing Annual Reports	. 489.55
5/ 6/68 6/ 7/68	26 27	Lane Hackett - Travel & Postage Mountain States Telephone - May Service.	
6/ 7/68	28	Mountain States Telephone - May Service.	. 15.30
0/ 1/00	20	June Service	. 20.77
6/26/68	29	U. S. Geological Survey -	
0 /00 /00	00	2nd Half Coop Agreement	. 2,875.00
6/26/68	30	Lane Hackett - 2nd Quarter Salary & Travel	. 339.24
6/26/68	31	U. S. Treasurer - 2nd Quarter FICA	. 26.40
8/ 1/68	32	Mountain States Telephone -	9E 16
8/ 3/68	33	July Service	
8/ 3/68	33 34	Mountain States Telephone -	. 25.00
		August Service	. 37.25
9/30/68	35	Radio Specialists Co Monitoradio	. 182.30
9/30/68	36	Mountain States Telephone – September Service	. \15.40
9/30/68	37	U. S. Treasurer - 3rd Quarter FICA	

9/30/68	38	Lane Hackett - 3rd Q	uarter Salary 358.5	0
		Less Refund by Allie		
		Total Disbursements.		3
Balance of	n Han	i November 1, 1967	\$12,926.57	
Deposit -	State	of Colorado of Kansas	3,294.00 2,196.00	
			<del></del>	
Disbursem	ents		\$18,416.57 8,371.38	
(e) B	alance	on Hand October 31, 196	58 \$10,045.19	

### 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 waters 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 streamflow and related data. Under the By-laws of the Administration, these cooperative studies and activities are assigned to the Engineering Committee of the Administration.
- (b) During the year covered by this report the Administration has received excellent cooperation from all agencies referred to in the foregoing provisions of the Compact. The United States Geological Survey has continued the operation of the compact gaging stations and the analyses 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 Hydologic Data

On November 1, 1967, the beginning of the Compact Year, there were 14,999 acre-feet of water in storage in John Martin Reservoir. Inflow to the reservoir during the winter storage period amounted to 21,520 acre-feet. Outflow from the reservoir during the same period was 2,250 acre-feet. On March 31, 1968, there were 42,949 acre-feet in storage which was a total gain in storage during the winter of 27,950 acre-feet.

Releases of stored water were begun at 8:30 a.m. on April 1, 1968, to meet the demands of Colorado and Kansas. Releases were continued until the reservoir was emptied at 9:00 a.m. on April 21, 1968.

River flow was passed through the reservoir until 3:15 p.m. on June 15, 1968, when the gates were closed to store runoff. Releases were made again at 10:00 a.m. on June 16, 1968, at the demand of Colorado and the reservoir was again emptied at 9:00 p.m. on June 23, 1968. Maximum water in storage during this period amounted to 2,812 acre-feet at midnight on June 16, 1968.

River flow was again passed through the reservoir until runoff above the reservoir provided an opportunity to store water. The gates were closed for 10 hours beginning at 9:00 a.m. on July 28, 1968, and again for 8 hours from midnight August 14, 1968, to 8:00 a.m. on August 15, 1968. Water accumulated in storage reached a maximum of 10,518 acre-feet at midnight on August 12, 1968. Releases were begun at 7:00 p.m. on July 28, 1968, to meet the demands of Colorado and increased on July 30, 1968, to meet the demands of Kansas. Demands by both states continued until the reservoir was declared empty at noon on August 22, 1968.

The reservoir remained empty and river flow was passed through the reservoir until the gates were closed at the end of the irrigation season at midnight on October 31, 1968.

Inflow into John Martin Reservoir during the irrigation season totaled 103,880 acre-feet which is 66 per cent of the nineteen-year average.

Total diversions downstream from John Martin Reservoir during the period April 1 through October 31 by the ditches in Colorado Water District No. 67 was 141,300 acre-feet. Ditch diversions in Kansas for the same period amounted to 80,903 acre-feet.

Reservoir releases April 1 through October 31 were 145,250 acre-feet which was 76,953 acre-feet less than total diversions below John Martin Reservoir. Runoff from areas below the reservoir and return flows provided 35 per cent of the water diverted during the irrigation season.

Releases from the reservoir averaged 7.5 c.f.s. from November 1, 1967, to March 31, 1968, and 342 c.f.s. from April 1, 1968, to Octo-

ber 31, 1968. Stateline flows for corresponding periods averaged 121 c.f.s. and 184 c.f.s. respectively.

The total discharge for the year at Garden City was 49,140 acrefeet of which 35,040 acre-feet or 71 per cent occurred as winter flows.

### 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 recording gage for the Arkansas River at Lamar was relocated at the bridge on U. S. Highways 50 and 287 in March 1968 because channel improvements caused the previous gage, located 450 ft. above the bridge, to be isolated from the river at low stages. A 42-inch galvanized metal shelter was installed near the north end of the bridge for the gas-purge manometer. The old structure will be left in place for the time being.

The radio-relay stations between the Coolidge gaging stations and Garden City, one south of Syracuse and the other west of Lakin, were completed and the radio equipment was installed in March 1968.

The Administration approved a cooperative agreement with the U. S. Geological Survey for the fiscal year July 1, 1968 to June 30, 1969 in the amount of \$4,400; \$2,200 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 providing of current streamflow data, and the preparation of records for the Annual Report.

### 9. Findings of fact by the Administration

The Administration has had no occasion, during the period cov-

ered by this report, to make any Findings of Fact under the provisions of the Arkansas River Compact.

Respectfully submitted

ARKANSAS RIVER COMPACT ADMINISTRATION BY:

WILBUR L. HECKLER

Representative of the United States and Chairman of the Administration

> ERNEST HOFMEISTER 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 10, 1968

# **APPENDICES**

### for

# ANNUAL REPORT OF THE

# ARKANSAS RIVER COMPACT

# **ADMINISTRATION**

For the Report-Year November 1, 1967 to October 31, 1968

- APPENDIX "A" — Auditor's Report. APPENDIX "B" - Daily Discharges, Arkansas River near Pueblo, Colorado. APPENDIX "B- 2" — Daily Discharges, Arkansas River at Las Animas, Colorado. APPENDIX "B- 3" — Daily Discharges, Purgatoire River near Las Animas, Colorado. APPENDIX "B- 4" — Inflow into John Martin Reservoir.

  APPENDIX "B- 5" — Daily Contents, John Martin Reservoir.

  APPENDIX "B- 6" — Outflow from John Martin Reservoir.

  APPENDIX "B- 7" — Daily Discharges; Arkansas River at Lamar, Colorado. APPENDIX "B- 8" -- Daily Discharges, Arkansas River at Colorado-Kansas Stateline. APPENDIX "B- 9" - Daily Discharges, Arkansas River at Garden City, Kansas. APPENDIX "B-10" — Demands by Colorado for Water. APPENDIX "B-11' — Demands by Kansas for Water. APPENDIX "B-12" — Stateline Flow on Days of Kansas Demand. APPENDIX "B-13" — Diversions by Ditches in Colorado Water Districts 14 and 17. APPENDIX "B-14" — Diversions by Ditches in Colorado Water Dis-
- APPENDIX "B-16" Summary Tabulation.

  APPENDIX "C" By-Laws As Amended to December 10, 1968.

APPENDIX "B-15" - Diversions by Ditches in Kansas, Stateline to

trict 67.

Garden City.

PLATE I — Graphs showing inflow, outflow and contents of John Martin Reservoir and Stateline Flow for Report-Year.

### APPENDIX "A"

# AUDITOR'S REPORT STRAIT & CRIMOND

Certified Public Accountant Johnson-Strait Building Lamar, Colorado 81052

December 9, 1968

To the Representatives Arkansas River Compact Administration Lamar, Colorado

### Gentlemen:

We have examined the receipts, disbursements and changes in Fund Balances of the Arkansas River Compact Administration for the fiscal year ended October 31, 1968. Our examination was made in accordance with generally accepted auditing standards and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

We submit herewith the following financial statements:

EXHIBIT A — Statement of Receipts, Disbursements and Changes in Fund Balances for the fiscal year ended October 31, 1968.

SCHEDULE 1 — Statement of Receipts and Disbursements Compared with Budget for the Budget Year July 1, 1967 to June 30, 1968.

### COMMENTS

### EXHIBIT A

Exhibit A presents the cash receipts and disbursements of the Arkansas River Compact Administration. The assessments for the current year were received in August, 1968.

### SCHEDULE 1

The receipts and disbursements for the budget year of July 1, 1967 to June 30, 1968, as compared with budgeted amounts are shown in

Schedule 1. This schedule differs from the report year of November 1, 1967 to October 31, 1968, and is the result of combining the receipts and disbursements for the appropriate months of the current and previous report years.

Financial position of the administration as compared with fiscal year November 1, 1966 to October 31, 1968 is shown below:

### COMPARATIVE BALANCE SHEET

ASSETS Cash in Bank	767.50	OCT. 31, 1968 \$ 10,045,19 959,25 \$ 11,004,44
LIABILITIES AND FUND BALANCES Expended Fund Balances - Equipment\$ Unexpended Fund Balance TOTAL LIABILITIES AND FUND BALANCES\$	12,926,57	\$ 959.25 10.045.19 \$ 11,004.44

### OPINION

In our opinion the statement of receipts, disbursements and changes in fund balances presents fairly the financial position of the Arkansas River Compact Administration at October 31, 1968, and the results of operations for the fiscal year then ended on a basis consistent with that of the preceding year.

Respectfully submitted.

Strait & Crimond

# **EXHIBIT A**

# ARKANSAS RIVER COMPACT ADMINISTRATION

# STATEMENT OF RECEIPTS, DISBURSEMENTS AND CHANGES IN FUND BALANCES FOR THE FISCAL YEAR ENDED OCTOBER 31, 1968

3014	
CASH IN BANK - NOVEMBER 1, 1967	12,926.57
FUND BALANCE - NOVEMBER 1, 1967\$	12,926.57
RECEIPTS: Revenue from Assessments: Colorado	
TOTAL RECEIPTS	5,490.00
TOTAL AVAILABLE\$	18,416.57
DISBURSEMENTS:           Surface Water Investigations, Cooperative           Gage Replacements & Rehabilitations,         5,750.00           U. S. Geological Survey.         5,750.00           Secretary's Salary.         489.00           Printing.         233.57           Telephone.         212.08           Equipment.         191.75           Legal & Audit.         112.00           Payroll Taxes.         56.10           Office Supplies.         26.88           Insurance & Bonding.         25.00	
TOTAL DISBURSEMENTS	8,371.38
FUND BALANCE, OCTOBER 31, 1968\$	

# **SCHEDULE 1**

# ARKANSAS RIVER COMPACT ADMINISTRATION

STATEMENT OF RECEIPTS AND DISBURSEMENTS WITH BUDGET FOR THE BUDGET YEAR JULY 1, 1967 TO JUNE 30, 1968

ACT	UAL	BUDGET
CASH IN BANK - July 1, 1967	\$ 2,000.70	\$ 400.00
RECEIPTS:		
Revenue from Assessments:		
Colorado Portion - 60% \$ 7,404.00		\$ 7,404.00
Kansas Portion - 40% 4,936.00		4.936.00
TOTAL RECEIPTS.	12,340.00	\$ 12,340,00
TOTAL TO		1 1-10 10100
ACCOUNT FOR	\$ 14,340.70	\$ 12,740.00
DISBURSEMENTS:		
Investigation & Inspection		\$ 100,00
Surface Water Investigations-		7 200,000
U. S. Geological Service \$ 6,250.00		9,500.00
Secretary's Salary 1,500.00		1,200.00
Printing 489.00		1,000.00
Travel 342.48		200.00
Telephone 243.59		300.00
Legal & Audit 112.00		100.00
Office Supplies 76.38		300.00
Payroll Taxes 66.00		75.00
Insurance & Bond 15.00		15.00
Equipment. 9.45		300.00
Typing & Mailing 5.00		100.00
TOTAL DISBURSEMENTS	\$ 9,108.90	\$ 13,190,00
CASH IN BANK - JUNE 30, 1968	\$ 5,231.80	\$ (450,00)

# APPENDIX "B-1" ARKANSAS RIVER NEAR PUEBLO, COLORADO

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ending Oc. Provision to State	LPR.	391	532	451	355	294	192	263	245	<u>201</u>	169	149	146	210	262	239	203	ŝ	<b>89</b> 2	323	317	292	122	245	211	195	185	180	147	242	439	,		7881	15630	1332	14300	Automst	TOTAL CHEEK
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# APPENDIX "B-2" ARKANSAS RIVER AT LAS ANIMAS, COLORADO

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	JUNE	248	\$	98	908	304	<b>408</b>	325	440	230	539	458	<b>4</b>	416	10 <del>5</del> 01	521	190	8	42	101		36	æ	312	194	440	<b>56</b> 1	376	384	458				20050 THE V	
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	NAY 1	. 01	03	4	ra	9	-	œ	6	2	=	71	e2 13	7	12	91	13	81	19	8	12	22	ន	77	52	97	22	8	ន	8	3	TOTAL	sec.ft.1908	ac. ft. 3780	

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

	œr.	3.4	3.7	4.0	 	3,7	S. 7	4.4	4.4	4.4	4.4	4.4	4.8	5	7.2	6.4	19	19	12	91	16	16	16	<b>5</b> 6	92	8	22	2	유	19	12	16		359.8	714
٠	SEPT.	9.0	2	12	7	6	8 9	6.0	5.6	5.6	6,8	6.4	5,6	2,5	5	4.8	4.4	5.6	5.2	4.8	4,4	4.0	4.0	8	0.9	6.0	5.2	4. &	4.0	4.0	4.0			183.7	364 re-feet
or sion	AUG.	1					ı					ı					201					19				6.4						0.6		9036.0	17920 364 45.930 acre-feet
ANIMAS, COLORADO 1r 31, 1968 1. Subject to Revision	JULY	9.0	5.6	4.4	4.4	14	6.4	5.6	3.7	23,7	4.0	<b>4</b>	4.4	4.0	23	88	13	6.0	4,8	8,9	7.6	7.2	4.0	4.8	0.8	44	201	257	903 2003	1940	1190	240		6460.2	12810 : YEAR
	JUNE	196	2	33	22	98	28	88	26	22	44	97	92	25	37	624	102	36	22	14	27 27	2	13	14	2	99	47	<u>6</u>	43	<u>[</u> 2	15			1957	3880 J
Cctobe	MAY	3,7	S	8	12	2	ខ្ម	2.6	& &	7,2	æ.	=	0.6	9.0	00 U	2	4.4	8.8	6.4	r. Si	5.6	9	6.4	0.9	7.6	12	71		6.8	13	16	306		593.5	1180
艺艺	ΑP	8,0	2	8,8	8 2	4.4	4.0	6.0	12	Ξ	4,0	3.4	3.4	4.0	4.8	5.2	5.2	4.8	5,2	5.6	4.4	3.7	5.6	4.8	4.8	4.4	4.8	0.9	9.6	4.8	4.0			169.4	336
ORE RIVER Report-Year S Records -	MAR	9	2	8	23	7	12	2	8	8.9	7.	14	22	21	12	7	14	9.5	6.4	7.2	5.6	2	7.2	6.4	6.4	8.9	8.9	5.6	<b>6</b>	6.4	6.4	11		352.0	869
PURGATORRE Repoi		2	26	5	43	4	39	36	22	13	13	9,0	21	12	5	8	17	2	=	8	Ξ	83	ដ	9	10	0.6	12	Ξ	=	Ξ				634.5	1260
PURG/		22	8	ន	22	22	23	92	27	23	53	31	325	88	35	36	37	38	.35	4	43	98	20	81	6	87	72	89	8	20	80	28		1366	2710
	DEC.	44	5	8		. E	5	8	22	8	.7	22	2	1	ន	18	ଛ	18	8	22	83	12	ຂ	ន	92	53	24	21	ន	24	83	23		796	1580
	NOV	54	7	7.	, K	2 2	2	4	6	45	4	49	, K.	7	45	6	္က	32	32	32	85	<u>ښ</u>	36	36	43	3	34	23	52	8	33		ļ	1252	2480
	DAY	-	<b>6</b> 3	<del>د</del> ئ	4	· LC	۵		- 00	, ca	91	=	12	2	1	<u> </u>	91	17	18	19	ន	2	22	ឌ	Z	22	92	27	8	8	S	25	TOTAL	sec.ft.	2c.ft.

# APPENDIX "B-4" INFLOW INTO JOHN MARTIN RESERVOIR

U. S. C. S. Records — Provisional, Subject to Revision  U. S. C. Records — Provisional, Subject to Revision  1772					t-Yea	Report-Year ending October 31, 1968	900	ber 31	, 1968				
172         79         73         91         30         28         20         493         503         128         321           181         87         70         86         31         27         38         318         438         126         314           176         88         73         84         5         36         40         24         385         640         24         385         126         314         38         126         410         24         385         640         24         385         640         24         385         640         24         385         640         24         385         640         38         116         485         116         385         116         385         116         385         116         385         116         385         117         385         385         24         386         482         118         482         385         117         385         385         485         485         485         117         385         385         485         485         485         485         485         485         485         485         485         485         485 <t< th=""><th>747</th><th>NOV</th><th>US C</th><th>Z Z</th><th>ords -</th><th>- Prov</th><th>isiona App</th><th>l, Subj MAV</th><th>ect to R</th><th>evision</th><th>A11C</th><th>CFDT</th><th>Į</th></t<>	747	NOV	US C	Z Z	ords -	- Prov	isiona App	l, Subj MAV	ect to R	evision	A11C	CFDT	Į
181         87         70         86         31         27         38         318         438         438         126         31           197         88         73         80         42         35         41         432         489         416         212           176         36         72         78         46         24         385         640         342         136         416         212           190         88         61         72         38         29         24         360         342         139         376           104         80         64         51         28         22         378         420         139         376           104         80         64         51         28         22         378         420         139         376           108         80         64         51         28         22         378         420		172	6		6	S	8	R	493	503	128	321	83
197         88         73         80         42         35         41         432         489         416         212           272         95         72         78         45         58         30         385         653         174         196           176         88         61         72         36         24         322         318         511         422           190         88         61         72         35         27         23         444         358         112         422           190         88         61         77         36         22         378         420         79         375           103         65         64         57         30         32         22         378         42         72         32           104         80         69         41         22         376         420         774         262           91         91         72         34         45         20         24         420         774         262           80         82         31         22         44         420         774         262	N	181	87	2	86	31	27	88	318	438	126	314	31
176         88         73         78         45         58         30         385         653         1740         196           272         95         72         78         36         40         24         332         318         561         226           314         75         63         70         38         22         344         356         199         375           146         80         64         57         30         33         22         444         356         47         262           98         86         67         51         28         29         22         462         428         47         262           98         86         67         51         28         29         22         462         428         47         262           98         86         67         71         35         36         41         21         22         482         47         262           89         82         43         20         24         45         24         26         428         47         26           80         10         43         45         20	۰-	197	88	5	8	42	35	41	432	489	416	212	S
272         95         72         76         36         40         24         332         318         561         226           314         75         63         70         38         29         24         360         342         199         375           190         88         61         72         35         22         462         428         47         262           103         65         67         51         28         29         22         462         428         47         262           98         88         69         43         28         21         22         462         428         47         262           93         35         71         35         36         20         26         428         428         174         262           91         91         71         35         36         22         36         428         470         774         205           92         14         20         29         42         33         22         86         453         34         774         205           62         78         100         43 <t< td=""><td>, t</td><td>176</td><td>88</td><td>23</td><td>82</td><td>45</td><td>28</td><td>စ္တ</td><td>385</td><td>653</td><td>1740</td><td>196</td><td>8</td></t<>	, t	176	88	23	82	45	28	စ္တ	385	653	1740	196	8
314         75         63         70         38         29         24         360         342         119         375           190         88         61         72         35         22         444         356         112         422           190         88         61         43         28         22         462         428         260         27           93         86         64         57         36         22         462         428         47         262           93         88         69         43         28         20         26         428         47         262           91         91         77         34         45         20         26         453         456         453         44         27         49         47         26           65         78         46         27         36         453         45         26         453         44         27         30         494         771         206           65         78         46         27         36         453         45         27         45         45         46         47         47	2	272	95	72	78	36	4	24	332	318	261	226	ઢ
190         88         61         72         35         27         23         444         358         112         420           146         80         64         57         30         33         22         378         420         79         326           103         65         67         51         28         22         452         426         420         77         326           93         95         71         35         36         20         26         636         420         1760         226           91         91         72         34         45         20         24         534         420         774         206           89         82         83         39         41         21         32         484         470         774         206           60         78         104         42         22         24         524         446         771         205           60         72         116         42         33         22         24         22         413         413         421         774         206           60         72         100	9	314	75	63	70	38	සි	24	360	342	199	375	12
146         80         64         57         30         33         22         378         420         79         326           103         65         67         51         28         22         462         428         47         262           93         86         69         43         28         22         634         428         260         271           91         91         91         71         34         45         20         24         634         428         1760         24           91         91         91         71         34         45         20         24         634         420         774         206           89         82         83         41         21         32         44         420         774         206           60         78         104         43         44         22         36         453         413         171         206           60         72         115         33         35         27         24         226         34         24         271         376           60         72         100         34 <t< td=""><td>7</td><td>190</td><td>88</td><td>19</td><td>22</td><td>32</td><td>ઢ</td><td>ន</td><td>444</td><td>358</td><td>112</td><td>422</td><td>22</td></t<>	7	190	88	19	22	32	ઢ	ន	444	358	112	422	22
103         65         67         51         28         22         462         428         47         262           98         88         69         43         28         21         22         634         428         260         271           93         95         43         28         21         22         636         429         174         206           89         82         83         39         41         21         32         492         494         771         206           65         78         104         43         44         22         36         453         552         413         157           65         78         104         43         44         22         36         453         552         413         157           60         72         116         43         44         22         36         453         522         41         771         205           57         80         100         30         28         26         22         42         149         471         20           60         81         110         32         32	80	146	8	2	57	8	33	23	378	420	79	326	92
98         89         69         43         28         21         22         634         428         2600         271           93         95         71         35         36         20         26         636         429         174         206           91         91         92         82         34         45         20         26         429         471         206           89         82         82         42         33         22         36         453         524         413         150           65         78         104         43         44         22         36         453         524         413         150           65         78         104         43         44         22         36         453         343         87           66         72         116         33         37         22         24         623         413         167         74         206           60         71         100         30         28         26         122         24         52         1149         75           60         81         100         30         <	6	103	65	67	51	82	83	22	462	428	47	262	2
93         95         71         35         36         26         656         429         1760         246           91         91         72         34         45         20         24         534         420         174         206           91         91         92         32         32         36         452         52         494         471         206           65         78         104         43         44         22         36         453         54         171         205           65         78         104         43         44         22         36         453         343         87           60         72         116         33         30         22         24         623         413         241         75           60         81         100         30         28         26         24         56         171         87         75           60         81         100         30         28         26         24         56         171         87         34         28         46         77         141         141         141         141 <t< td=""><td>01</td><td>86</td><td>88</td><td>69</td><td>43</td><td>8</td><td>ಸ</td><td>22</td><td>634</td><td>428</td><td>2600</td><td>271</td><td>2</td></t<>	01	86	88	69	43	8	ಸ	22	634	428	2600	271	2
91         91         72         34         45         20         24         534         420         774         205           89         82         83         39         41         21         32         494         771         205           76         82         95         42         33         22         36         453         552         413         157           60         72         116         39         35         22         24         526         286         149         77         157           60         72         116         33         30         22         24         226         286         149         75           57         80         100         30         22         24         226         286         149         75           57         80         100         30         22         24         226         186         171         87           57         80         80         22         24         226         186         171         87         39           60         81         100         60         37         42         22 <td< td=""><td>11</td><td>93</td><td>95</td><td>12</td><td>35</td><td>36</td><td>ଛ</td><td>92</td><td>636</td><td>429</td><td>1760</td><td>246</td><td>25</td></td<>	11	93	95	12	35	36	ଛ	92	636	429	1760	246	25
89         82         83         39         41         21         32         494         771         205           76         82         95         42         33         22         36         453         552         413         157           60         72         116         43         35         22         24         525         523         443         176           60         72         116         33         30         22         24         525         28         113         241         76           57         86         93         33         27         23         26         102         205         119         42           57         80         100         30         22         24         226         205         119         42           57         80         100         30         22         24         256         119         42         34         25         34         22         34         22         34         28         36         31         34         28         31         36         31         34         28         31         36         34         38<	12	91	91	72	34	45	ន	24	534	420	774	808	92
76         82         95         42         33         22         36         453         552         413         157           65         78         104         43         44         22         30         1660         533         343         87           60         72         115         33         35         22         24         623         413         241         76           58         68         93         33         27         23         26         102         206         119         42           57         80         100         30         28         26         24         56         171         87         34           60         81         100         50         37         24         22         101         87         34         28         101         82         34         28         35         34         22         34         35         34         35         34         35         34         36         34         36         34         36         34         38         31         34         36         34         36         34         36         34         36	13	8	85	83	33	41	2	32	492	494	771	202	8
65         78         104         43         44         22         30         1660         533         343         87           62         72         109         39         35         22         24         623         413         241         76           60         72         115         33         27         23         24         625         246         119         42         149         75           57         80         100         30         28         26         22         24         56         171         87         34         24         55         171         87         34         28         26         102         34         28         16         171         87         34         28         26         171         87         34         28         26         171         87         34         28         34         28         31         34         28         31         34         28         31         34         38         31         34         38         38         38         38         38         38         38         38         38         38         38         38         38 <td>14</td> <td>76</td> <td>83 83</td> <td>32</td> <td>42</td> <td>ee</td> <td>22</td> <td>36</td> <td>453</td> <td>552</td> <td>413</td> <td>157</td> <td>¥</td>	14	76	83 83	32	42	ee	22	36	453	552	413	157	¥
62         76         109         39         35         22         24         623         413         241         76           58         68         93         33         27         23         22         24         266         286         149         75           57         80         100         30         22         24         26         205         111         42         34           60         81         100         50         37         24         23         123         34         24         35         34         28         36         36         34         28         36         36         35         31         34         28         36         36         34         28         36         36         36         31         36         36         31         36         38         31         36         38         31         38         31         38	15	65	29	104	43	44	22	္က	1660	533	343	87	¥
60         72         115         33         30         22         24         226         286         149         75           58         93         33         27         23         26         102         205         119         42           57         80         81         100         30         28         24         56         171         87         34           60         81         100         50         37         24         22         101         36         34         28         34         28         34         28         34         23         34         28         34         35         34         35         34         35         34         35         34         28         34         36         38         38         38         36         35         27         23         52         220         34         28         28         30         23         22         22         23         25         220         34         28         28         30         23         22         22         23         25         28         24         28         28         28         28         28	91	29	رم 80	109	68	32	22	ষ	623	413	241	92	41
58         68         93         33         27         23         26         102         205         119         42           57         89         100         30         28         26         24         56         171         87         39           60         81         100         30         34         24         23         123         36         134         <	17	8	25	115	S	S	22	ಸ	226	983 786	149	5	41
57         80         100         30         28         26         24         56         171         87         39           60         81         87         82         84         24         23         123         93         42         34         24         3		28	89	93	33	<u>5</u>	ន	92	102	සි	119	42	43
57         89         87         32         34         24         23         123         53         42         34           60         81         160         50         37         24         22         101         360         35         31           64         88         111         32         28         30         23         52         226         276         31           58         97         110         32         28         30         25         320         276         31         28         28         30         25         320         276         31         28         28         30         25         320         276         316         28         28         30         25         320         276         316         28         28         30         25         320         276         316         28         28         30         25         320         276         316         28         28         28         28         28         28         28         28         28         28         28         28         28         28         28         28         31         30         38         38	19	57	8	8	8	82	93	24	26	171	87	33	47
60         81         100         50         37         24         22         101         360         35         31           64         88         110         42         32         27         23         55         220         34         28           64         88         111         32         28         30         23         55         220         230         276         31           63         96         102         34         28         22         29         230         548         406         28           53         86         96         102         34         28         23         45         487         290         446         37           51         83         86         95         32         27         24         154         368         675         363         416         37           51         83         89         31         28         21         207         411         210         31         38         31           62         83         85         27         28         21         207         411 <t>210         37         37      &lt;</t>	20	57	83	8,	32	ష	2	23	123	8	42	34	52
62         75         110         42         32         27         23         55         220         34         28           64         88         111         32         28         30         23         52         220         276         31           71         96         110         32         28         30         25         220         276         31         28         28         30         548         406         28         28         29         230         548         406         28         28         29         230         548         406         28         28         29         230         548         406         28         28         28         29         230         548         406         28         28         28         419         246         37         31         31         31         38         31         32         3	21	09	81	100	20	37	22	22	101	360	35	31	8
64         88         111         32         28         30         23         52         220         276         31           71         96         110         32         28         30         25         322         172         38         28           58         97         117         31         28         22         29         230         548         406         28           53         86         95         32         27         24         154         386         676         34         31           51         83         89         31         28         21         207         411         2460         33         38           59         79         87         30         28         21         207         411         2100         340         31           62         83         85         27         20         216         473         1240         37           71         85         32         32         27         20         216         473         1240         37           71         85         32         32         32         32         34         3	22	29	75	110	45	35,	23	23	22	83 83	*	83	61
71         96         110         32         28         30         25         322         172         386         28           58         97         117         31         28         22         29         230         548         406         28           58         96         95         34         28         22         439         419         246         37           51         83         89         31         28         22         189         419         2460         332         34           62         83         89         31         28         22         189         419         2460         332         34           62         83         85         28         21         207         411         2100         340         31           71         85         3         28         21         207         411         210         37         27           71         85         3         2         27         20         216         473         1240         37           80         258         2         2         2         2         2         2         2	83	Z	88	=======================================	25	83	8	23	25	83	276	3	8
63         97         117         31         28         22         29         230         548         406         28           58         96         102         34         28         23         45         487         290         446         37           51         86         95         32         27         24         154         36         675         363         41           59         79         87         30         28         21         207         411         2100         340         31           62         83         85         27         20         216         473         1240         376         27           71         85         32         514         275         376         37         275         37           3160         2583         2705         1380         1019         802         1982         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         27850         8750	24	71	96	110	32	83	39	22	322	172	385	83	33
58         96         102         34         28         23         45         487         290         446         37           53         86         95         32         27         24         154         388         675         363         41           59         79         87         30         28         22         189         419         2460         332         38           62         83         85         27         20         216         473         1240         376         31           71         85         32         32         514         275         337         275           3160         2583         2705         1380         1019         802         1982         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         32850         27850         8750	25	63	97	117	31	82	22	23	230	548	406	28	89
53         86         95         32         27         24         154         368         675         363         41           51         83         89         31         28         22         189         419         246         332         38           62         83         85         27         20         216         473         1240         376         31         27         31         27         27         214         376         276         33         37         275         37	92	58	96	102	34	83	Ŕ	45	487	230	446	37	2
51         83         89         31         28         22         189         419         2460         332         38           59         79         87         30         28         21         207         411         2100         340         31           71         85         27         20         216         473         1240         378         27           3160         2583         2705         1380         1019         802         1962         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         32850         27850         8750	. 22	33	98	92	32	23	24	154	368	675	363	41	48
59         79         87         30         28         21         207         411         2100         340         31           62         83         85         27         20         216         473         1240         378         27           71         85         32         514         275         337         275         337           3160         2583         2705         1380         1019         802         1982         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         32850         27850         8750	88	21	83	68	8	83	22	189	419	2480	332	88	47
62         83         85         27         20         216         473         1240         378         27           71         85         32         514         275         337           3160         2583         2705         1380         1019         802         1982         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         32850         27850         8750	62	29	79	83	S	82	7	8	411	2100	3	33	72
71         85         32         514         275         337           3160         2583         2705         1380         1019         802         1982         12061         16562         14039         4412           6270         5120         5370         2740         2020         1590         3930         23920         32850         27850         8750	90	62	83	88		23	ଷ	216	473	1240	378	23	Z
3160 2583 2705 1380 1019 802 1982 12061 16562 14039 4412 6270 5120 5370 2740 2020 1590 3930 23920 32850 27850 8750	31		17	8		35		514		275	337		82
3160 2583 2705 1380 1019 802 1982 12061 16562 14039 4412 6270 5120 5370 2740 2020 1590 3930 23920 32850 27850 8750	TOTAL					;	;	;					
6270 5120 5370 2740 2020 1590 3930 23920 32850 27850 8750	sec.ft.	3168	2583	2705	1380	1019	<b>3</b> 05	1982	12061	16562	14039	4412	1365
	ic.ff.	6270	5120	5370	274	2020	1590	3930	23920	32850	27850	8750	2710

# APPENDIX "B-5" CONTENTS OF JOHN MARTIN RESERVOIR

			CONTENTS OF Report-Year		JOHN M.	MARTIN RESERVOR October 31, 1968	ESER 1, 196	VOIR				
	~ >	Corps of		rs records —	ds — Pr	Provisional,	l, sut	ect to	subject to revision le dated ADr. 3, 1967	_		
DAY	NOV		JAN.	FEB	MAR	APR.	MAY	JUNE	TULY	~	EPT	OCT.
-	15271	22942	29228	36106	40029	41756	0	o	0	9969	0	0
~	15692	23087	29440	36310	40121	39725	0	0	0	6291	0	0
67	16032	23232	29520	36484	40273	37628	0	0	•	6231	0	0
4	16524	23498	0896Z	36659	40365	35528	0	0	0	8026	0	0
100	17042	23644	29867	36805	40457	33397	0	0	0	8707	이	٥
-	17631	23838	\$0027	36980	40549	31378		0	0	8471	0	0
· [~	18183	24034	30188	37186	40733	29228	0	0	0	7905	0	0
- 00	18583		30376	37333	40764	27142	0	0	0	7305	0	•
· 63	18852		30564	37481	40826	24797	0	0	0	6449	0	0
9	19122	-	20754	37628	41104	22439	0	0	0	7564	이	٥
	19348	İ	86608	37746	41258	20146	b	0	0	10099	0	0
2	19575		31160	37865	41382	17984	0	0	0	10518	0	0
2	19871		31296	37983	41538	15968	0	0	0	10394	0	0
7	20100		31488	38132	41693	13926	0	0	0	99.18	0	0
· ·	20261		31707	38251	41818	11778	0	982	0	9740	9	0
9	20446		32009	38340	41943	9538	0	2812	0	8565	0	0
17	20607		32367	38459	42099	7506	0	2796	0	7376	0	0
<b>2</b>	20792		32617	38579	42162	5440	0	<b>2</b> 409	0	5944	0	0
61	20932		32894	38699	42193	3399	0	1926	0	4404	0	0
8	21118			38819	42287	1112	٥	1541	٥	2708	이	٥
21	21211	l		38939	42381	0	0	1143	0	1040	0	۰ د
22	21399		-	33 180	42476	0	0	99	0	0	0	۰,
23	21634			39241	42570	0	0	0	0	0	<b>-</b>	<b>-</b>
z	21799			39362	42602	0	0	0	0	0 (	> 0	<b>-</b> •
£	21964		- 1	39452	42665	0	٥	٩	٩	9	ا ا	۹.
92	22106		34697	39574	42728	0	0	0	0	0	<b>-</b>	۰ د
23	22249	28281	34954	39664	42759	0	0	0	0	0	o 1	> •
8	22391		35212	39816	42822	0	0	0	2637	<b>-</b>	9	ه د
23	22582			39907	42885	0	0	0	5585	-	0	<b>5</b>
8	22726		35614		42949	0	0 (	0	7667	<b>-</b>	>	<b>&gt;</b>
31		96062			42949		∍		900	2	ł	۱

# APPENDIX "B-6" OUTFLOW FROM JOHN MARTIN RESERVOIR

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

•																																		1					
	0CT.	71 C	- 1	- 0	9.0	2 0	- 1	2.0		6.2 6.2	6.7	5.7	5.7	7	e.	) t	3	9.0	2	ر دو دو	91	43	36	ន	23	88	2.5	0	· ·	3 5	9 1	ا م	2.5	5.2		345.3		685	
	SEPT.	6,0	6.			2	ر دور	ر. دن	 9	<b>2.</b> 9	6.7	6.5	¢¢	4		- c	3	9	9	5	5	5.7	ςς (Λ)	2.5	2	8	i c	-			;		5.7			189.4		376	
2.		186	177	513	212	188	182	173	171	149	222	252	75	600	3 5	101	<b>5</b>	217	8	461	436	405	377	366	4	1 3	: =	1	, c	4 6	7 1		œ,	7		7024 2		13930 e-feet	1
	OLY A	7.3	7.3	6.2	21	33	6.2	8.5	7.3	7	41	8	ď		- 0	, ,	3.4	3,0	3.4	4.2	ಜ	6.2	2.2	r.	7	•	, c	0	20.0	51	446	2	5,2	164			100	1950 13930 A5 640 acre-feet	10 0E0 C
0	JUNE	290	160	43	17	11	8	41	23	o o	a a	3 =	10	n c	P. 1	6.7	20	8	12	8,5	6,2	6.7	9			- (	. 5	22	6.7	<b>.</b> .	5	7,3	8.5			6	- 5		THE YEAR
1, 1968	MAY .		2.6	8 5	6.	43	54	12	ا ا ا	o c	9 4	3 0	a c	o .		œ ru	6.	7.9	6.7	5	<u>.</u>	<u></u>	6		- r	n 1	G (	7.3	<u>ر-</u> دن	 	9.2	7.9	7.9	ß			377.7	749	ואר
MAR, CO	iai, suoje APR.	6.7 9.	466	492	486	534	250	5	47.0	2 2	200	200	000	).Tc	468	478	468	454	25	402	405	430		• 50	8 4	CT	7.	12	12	12	6.6	6.6	6	3			9628.4	19100	
R AT LA ending	Provisional, Subject to Acvision WAR APR APR MAY JUNE	3.5					ļ				4		<b>6</b>	5.0	5.0	5.2	2.5								<u>.</u> :									. r			168.9	335	
ARKANSAS RIVER AT LAMAR, COLORADO Report-Year ending October 31, 1968	crds —	200						3 5	97	9 :	2 :	12	12	23	20	18	5	2	2 0	, n	9 0	) (	7, 4	0.0	0.0	0	3,0	3.0	3.0	3.0	3.0		•				347.6	683	
•	S G S			G				2 :	<b>;</b> ;	£.	5	2	44	43	43	44	44	<b>1</b>	2 7	F	<b>‡</b> ;	<b>#</b> •	40	<b>4</b>	54	Z	47	36	ဓ	S	8	3 6	3 2	\$ 8	3	,	1292	2560	
	ט הפר	3		2	6.	5 5	5 8	n (	9 .	<b>;</b> ;	56	24	22	12	34	g	7	5 5	2 6	9 9	⊋ \$	4	φ.	44	42	43	4	33	န္တ	7		5 6	5 6	, E	5		1109	2200	i
	MOI!	1	30	6	2	9 5	7	0 1			e S	2.0	5,0	4.7	16	<b>8</b>	24	5 8	9 8	9 8	5 8	3 8	3	87	5	27	83	ş	32	6	42	9	Ç t	7		Į:	616.8		
		<u>-</u>	٠.	, «	> <	* 4	2	۱ 0	-	œ	6	2	Ξ	12	13	7	-	2 2	9;	- :	2 :	2	នា	2	22	ន	25	\$	18	5	, a	3 8	G	3 :	, ,	TOTAL		ac. ft	

# APPENDIX "B-8" ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

	Į	22	46	47	4	5	4	55	3 2	3 9	, e	8	8 8	3 2	5 8	3 6	1	9	8	3 2	8 &	3 4	2	2 2	9	84	86	68	200	c.	2	~	3		1951	3870	3	
	SEDT	8	92	8	6	112	8	8		-	139	38	3 =	9	2 00	5 5	2	7.	72	: : :	£	3 2	3	3	292	80	53	22	23	8	8	!			2325	4610	2	sas,
	AUG	295	358	343	433	338	27.1	249	244	8	511	262	278	8	2	5	757	582	524	473	421	437	422	403	232	146	140	110	68	2	72	89			10248	20330	e-feet	dge, Kans
STATELINE	JULY	83	92	88	91	105	140	127	116	6	8	107	24	20	2	6	74	22	7.	132	158	144	20	75	608	212	125	130	226	412	243	198			3991	7920	114,800 acre-feet	The daily discharges shown are the sum of the flows of the Arkansas River near Coolidge, Kansas, and the Frontier ditch.
μ	JUNE	256	579	368	260	223	216	25	171	179	169	172	192	201	157	275	350	330	8	188	168	147	102	110	===	251	163	149	137	132	120				9 8 9	12300	YEAR 11	s River n
	MAY	116	86	101	87	96	122	201	144	116	114	134	155	154	127	116	115	133	122	123	122	125	129	121	122	122	117	116	116	107	116	158			3835	7610	THE Y	Arkansa
IVER AT THE COLORADI Report-Year ending October S. Records — Provisional	APR.	62	88	184	424	426	419	459	444	473	459	226	260	587	542	206	206	512	518	20	476	200	440	220	168	164	153	169	155	140	127				10887	21590		ws of the
THE C	MA	83	7	83	86	85	8	98	83	8	92	86	85	36	85	83	74	17	77	55	7	8	<b>.</b>	78	71	62	23	88	26	S	26	29		1	2415	4790		of the flo
RIVER AT Report-Yes	FEB.	135	121	133	122	122	116	116	116	126	133	147	130	144	158	162	130	109	112	116	109	130	109	112	107	98	93	8	8	8					3504	6950		the sum
ARKANSAS RI USG	JAN.	90	S	92	901	102	8	110	120	125	ස ද	<del>2</del>	13	145	<u>8</u>	160	170	23	151	174	177	147	151	144	170	155	121	¥ :	135	145	145	140			4224	8450		hown are
ARKA	DEC.	119	136	122	126	113	126	130	136	138 83	103	116	122	<u>8</u>	138	133	133	147	33	147	136	136	60	112	155	12	147	7	23	119	116	80			200	7890		harges s ler ditch.
	Z	8 2 2	දූ	196	18	174	1.20	128	155	121	<u>국</u>	136	126	133	133	122	126	126	112	112	122	126	130	133	144	144	136	133	711	112	112		1.	ί. 1369	4003	8460		The daily discharges and the Frontier ditch
	DAY	-	NJ ·	e.	4	co.	9	-	æ	o	2	=	12	<del>.</del>	14	2	16	-	8	19	ଷ	21	25	23	<b>%</b>	S .	92	7	3	<b>%</b> :	ස ද	3	TOTAL	sec, fr	\$		į	The d

# APPENDIX "B-9" ARKANSAS RIVER AT GARDEN CITY, KANSAS

																												,						i	ı		<u>-</u>		
	Н	5.1	6.5	-	4	co	-		2 2	3 :	* :	4.	<u>4</u> :	9	<u></u>	91	13	9.6	8	ıc.	=	2 4	4:	9 :	3 3	9 !	11		-	9	97	16	11	28			439.7	872	
	SEPT, O	4.3	4.3	3.6	7.7	2.0	1 6			- 0	7	0.9	6.4	4.1	6.	12	14	23	6			3 -	  -		21	12	12	77	2	7	2	8,5	2				258.1	512	
	ug.	ļ	54	5	3 2	3 2	3 6	97	5 t	<u>.</u>	<b>8</b>	g	18	91	17	57	101	œ	ر د د	9 0		) (	2	in i	4.	2.1	3.1	3.6	4.1	4.6	4.1	3.4	4.7	0			599.4	1190	e-feet
	1 1111.V A	1			3 -							16	17	43	. E		. c		1	n c	77	47 5	12	12	14	15	16	109	110	63	69	£.	9	3 6	•		976,9	1940	49,140 acre-feet
KANSAS 1968	Subject to Revision	280	3 2	, ,	2 8	66.	3	25	13	49	45	132	177	6	154	160	3 5	200	3 8	612	222	267	222	179	135	104	6	48	2	22	2	<u> </u>	2 =	3			3385	6710	~
CITY, KAI	ubject to	MAY	2 2	<u>*</u> :	= :	14	F1	13	11	11	13	212	36	9 4	2 5	10	<b>2</b> 6	S	· ·	82	<b>5</b> 6	31	8	33	34	6. (1)	8	; ∓	2	2	3 8	- 4	3 5	5 6	8		830	1770	THE
	<u>,                                     </u>	APIC.	2, 3	<b>5</b> 7	ន	22	92	23	ន	15	2	2 -	1		# ¢	71	<u>c</u> :	16	23	15	17	13	15	12	-	? -	2 2	2 8	3 5	5 8	9 5	- 6	3∶	<b>2</b>			295	9	0111
AT GA	- Provi											3 6		- G	2	8	8	88	ន	17	22	13	5	۶	3 2	2 6	77 6	3;	- -	3 6	3.5	2	8	6	19		1012	9	2010
ARKANSAS RIVER AT GARDEN Report-Year ending Octobe	ecords	FEB.	189	187	185	177	177	175	177	202		# E	إَوْ	<u>6</u>	<u>1</u>	162	162	158	146	148	153	144	17.	144	7	141	3	3	\$								4452		8830
ARKANS. Rep	SGSF	JAN.	8	57	8	en en	2	2	9 9	8 7	7	116	152	181	187	184	197	197	152	172	5	3 5		3	3 5	292	263	278	623	ຊິ	8 8	8	198	195	190		5082		10080
	n	DEC.	91	82	63	. F.	8 5	3 2	7.	9 6	2	8 ;	115	132	132	143	173	141	105	117	194	5 -	127	3	25	155	104	141	185	188	180	180	168	181	90		3990		7910
		NOV.	157	172	28	100	806	300	3 5	997	3	141	127	==	101	88	82	7.5	8	3 4	3 8	3 5	?	25	23	20	8	8	2	Z	29	8	2	8	,	TOTAL	. ft. 3131	•	6210
		DAY		Ġ	3 67	> <	r u	2	0 (	<u>.</u> - ,	<b>~</b>	6	2	Ξ	12	13	14	<u>.</u>	2	2 :		2 :	ŝ	ន	22	25	ន	24	22	36	23	28	63	<b>S</b>	2	ĮΣ	sec. ft	ac. ft	l

# APPENDIX "B-10" DEMANDS BY COLORADO FOR WATER RELEASES FROM CONSERVATION POOL

×.

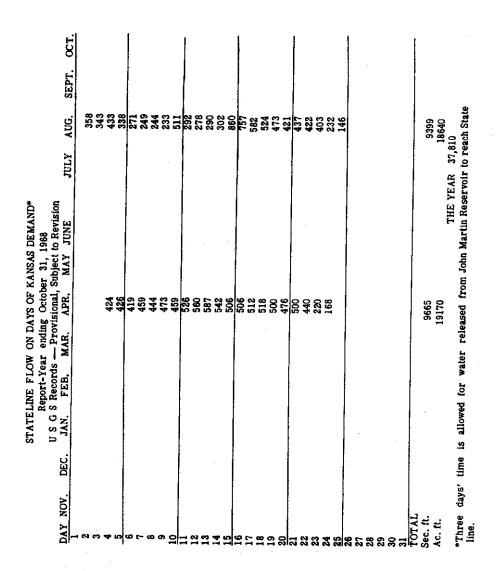
ĭ.	ŧ.		o e		0	0	0	0	0		<b>-</b>	0	0 0 0	0	: Midnight	Open: 8:00 A.M.	0		0	0	0	0	: Noon	P	0	0	0		0 *(July) Closed: 9 4	0	0	0 Closed: Midnight		0	0 The Year: 45,297
N POC	CFDT		0	0	0	0	0	0	0	0 (	-	0	0	0	Closed	Open	b	0	0	0	0	482 0	Empty:	•	0	0		0	0	0	0	0		0	Ō
ERVATIC SRETAR TON	AIIC	250	228	167	119	8	81 18	120	<b>3</b>	66 <u>5</u>	S	225	288	406	8	*335 *	200	467	450	450	450	482		P. M.	0	0	•	0	0	0	0	0		6203	12907
M CONSI 1968 THE SEC NISTRAT ION)	V.111T.		0	0	0	0	0	0	0	0 (	ا د	<b>-</b>	0	0	0	0	6	0	0	0	0	0	0	331 Empty: 9 P.	0	0	 	0	\$ \$	430	373	583		1182	2344
LORADO FOR WATER RELEASES FROM CC REPORT YEAR ENDING OCTOBER 31, 1968 PS OF ENGINEERS AND ORDERS BY THE HE ARKANSAS RIVER COMPACT ADMINISTI (PROVEIONAL, SUBJECT TO REVISION) Inits in Cumic Feet par Second	TIME.		• •	0	0		0	<u> </u>	0	<b>-</b>	5	<b>-</b>	0 (	0	0	•	221	375	375	346	325	341	370	331 E	0	0	0	0	0	0	0	i		2684	5322
D FOR WATER RELEASES FR T YEAR ENDING OCTOBER 31 ENGRIERS AND OCTOBER BY ANSAS RIVER COMPACT ADM VESTONAL, SUBJECT TO REV	MAV			0	0	۹.	0	0	<b>o</b> (	<b>&gt;</b>		<b>-</b>	0 (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		o ·	0
FOR WAT YEAR EN INGINEERS INSAS RIVI	A DR	1	220	220	615	920	620	92	2	200	200	3	635	99	9	900	<u> </u>	8	9	909	8	222	0	0	0	0	Q	0	0	0	0			12363	24516
DEMANDS BY COLORADO FOR WATER RELEASES FROM CONSERVATION POOL REPORT YEAR ENDING OCTOBER 31, 1968 U. S. CORPS OF ENGINEERS AND ORDERS BY THE SECRETARY OF THE ARKANSAS RIVER COMPACT ADMINISTRATION (PROVISIONAL, SUBJECT TO REVISION) INTER IN CAMP FEAT DET SOCIETY	DAY NOV. DEC. JAN. FEB. MAR.	1 105 Closed: 9:00 A. M. Open: 8:30 A. M.	ο <b>ι</b>		4 Note: Variations of discharge	6 represent release change by	7 order of the Compact Cornelant	2 Thirty five change orders	O more icensed for Colombia	10 during the Compact Vear	1)	: £	3 5	3 :	**	15 Tune) Closed: 3:15 P. M.	9 5		97 ·	61		Z1 Empty: 9:00 A. M.	7-M 66	_	24 "Reservoir gates closed by order	25 of Compact Secretary for periods	26 of: 18.75 hours on June 15-16 (#12),	27 10 hours on July 28 (#18), and 8	28 hours on August 15 (#30) due to heavy	29 rains on the river.	98	-1-1-1- 	LOGALS Con Et 105	Sec. ft. 103	Ac. Ft. 200

# APPENDIX "B-11"

# DEMANDS BY KANSAS FOR WATER RELEASES FROM CONSERVATION POOL

POOL TARY	oct.	0	0	0	0	0	0	0	0	0	0	0	0	0		268 Open: 8:00 A. M.	0	0	0	0	0	.0	200 Empty Noon 0	0	0	0	0	0	0 *(July) Closed: 9:00 A. M.	0	0	0 Closed: Midnight	0	0 The Year 34,017
TION ECRE	SEPT.	٥	0	0	0	0	0	0	0	0	0	0	0	0	losed	ben	0	0	0	0	٥	0	mpty	0	0	٥	0	0	0	0	0		0	0
ONSERVA 1968 BY THE S STRATIO	AUG. S	8	300	8	8	300	300	300	暴	346	400	<b>4</b> 0	<del>4</del>	<b>4</b> 0	400	*268 (	400	<del>6</del>	408	<del>4</del>	400	\$		χ.	0	0	0	0	0	0	0		7614	15099
FROM CCOBER 31, ORDERS 1	JULY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥	0	0	0 Empty 9:00 P. M	0	0	0	0	₽	0	132	8	432	857
ELEASES ING OCTO RS, AND OCOMPACY BJECT TO Feet Per	JUNE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b> *	0	0	0	0	٥	0	0	0 Emp	0	a	0	0	0	0	0		¢	0
SAS FOR WATER RELEASES FROM CON EPORT YEAR ENDING OCTOBER 31, 1 ARMY ENGINEERS, AND ORDERS BY ARKANSAS RIVER COMPACT ADMINIST (PROVISIONAL, SUBJECT TO REVISION Units in Cubic Feet Per Second	MAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	a	0	0	0	0	0	0	0	0	0	0	٩	c	. 0
海田の田	MAR. APR	I. 7	200	200	200	200	200	200	200	200	200	200	435	400	400	400	400	400	400	400	400	148	0	0	0	0	0	0	0	0	0	9	9108	18061
DEMANDS BY KA U. S. CORPS OF TH	FEB. M.	Open 8:30 A.M	•		Note: Variations of discharge rep-	resent release changes by order of	the Compact Secretary. Eight change	orders were issued for Kansas dur-							1	*(June) Closed: 3:15 P.M.						Empty: 9:00 A.M.				l by order	for peri-	June 15-	fuly 28	ugust 15	is below			
	JAN.				ns of disc	changes	ecretary.	ssued for	ct Year.							e) Closed:						Empt				*Reservoir gates closed by order	of Compact Secretary for peri-	ods of: 18.75 hours on June 15-	.6 (#12), 10 hours on July 28	#18) and 8 hours on August 15	#30) due to heavy rains below			
	DEC.				: Variatio	nt release	ompact S	rs were i	ing the Compact Year.							*(Jun	i								2.5	servoir ga	Compact 5	of: 18.75	(#12), 10	8) and 8 h	0) due to	he reservoir		
	NOV				Note	rese	the C	orde	ing t		1														Note:	*Res	) Jo	ods	16	<u>*</u>	ਲ *	-1	lls F	Acre Ft.
	DAY	-	N	က	4	ß	တ	<u>-</u> -	œ	60	9	=	77	13	7	12	91	17	18	13	ଷ	17	<b>5</b> 5	ឌ	7	23	56	27	88	62	8	딞	Totals	Acr

# APPENDIX "B-12" STATELINE FLOW ON DAYS OF KANSAS DEMAND\*



# APPENDIX "B-13"

# DIVERSIONS BY DITCHES IN COLORADO WATER DISTRICTS 14 AND 17

DIVERSION BY DITCHES IN COLORADO WATER DISTRICTS #14 and #17, DIVISION #2
REPORT YEAR ENDING OCTOBER 31, 1968
SOURCE OF INFORMATION:
WATER COMMISSIONERS SPECIAL REPORTS TO DIVISION ENGINEER
RESERVOIR WATER IS THAT FROM UPSTREAM RESERVOIRS ABOVE PUEBLO, COLO.

RE	RESERVOIR WATER IS	WATER IS	THAT FROM UPSTREAM RESERVOIRS ABOVE FUEBLO, COLO.	M UPSTR	EAM RES	EX VOING	A P C	ロコハイコ	2, 7	į		4
			run O	its in Ac	re Feet							Compact
SANCHA	Nov	Dec	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. Year
Control of the Contro	FAOR		٦	c	3153	4240	4400	8290	5443	11027	4176	4364 51,220
Desseller (Viter)	3		• <			•	<b>-</b>	O	. 1448	773	198	0 2,419
Hes. or Imported	2		ř		215	4940	4400	2590	6891	11800	4374	4364 53,639
Total Bessemer	2403		•	<b>5</b> 0	2		218	2	25	9	8	28 2,411
West Pueblo (River)	280		<b>&gt;</b> (	> 0	9		7 0	3 6	110	5	100	1052 8 354
Booth-Orchard Grove (Riv)	627		0	<b>.</b>	123	ecor To	e G	000	071	2009	3	3 934
Excelsior (River)	0		0	0	9	<b>-</b>	<b>&gt;</b> •	0917	3 3		<b>-</b>	1 936
Collier (River)	0		0	0	0	0	0	261	\$	200	> 0	7,450
Colorado Canal (River)	0		5356	0	0	0	0	12897	0	8202	<b>-</b>	0.36,960
Res. or Imported	0	0	0	0	0	313	15416	4047	17064	6269	2493	200000
Total Colo Canal	þ		5356	0	0	313	15416	16944	17064	1.434	249	28,50
Highline Canal (River)	6552		2459	4761	5049	3405	4164	18922	6554	15029	2100	8760 78,119
Res or imported	0		0	0	0	993	146	٩	1993	33		0 4 95
Total Highline	6552		2459	4761	5049	4398	5310	18922	8547	15348	2100	3760 82,570
Owford Formers (Riv)	952		184	591	1269	1106	1261	6659	4109	4636	821	862 23,162
Dec on Imported	=		9	٥	0	0	9	0	9	o	ď	0
Total Orford Formore	250	•	184	591	1269	1106	1261	6659	4109	4636	821	862 23,162
Total Diet 14 (Piv.)	13726		7999	5352	9594	9881	10997	51877	17783	43148	11239	10066 204,861
Other Canal (Dinon)			0	0	0	0	0	2411	69	2518	0	0 4,998
Cells Canal (Mines)	4192		1458	3639	7036	6018	8156	16100	15354	14341	8759	5862 93,152
Catall California			2	-	0	0	0	0	1285	9	٩	0 1285
Res. or imported	7 20 4		1458	26.30	7036	18	8156	16100	16639	14341	8759	5862 94,437
Total Catlin Canal	761%		6290	5	2	3	3	11170	986	10395	0	0 33,943
Holbrook Canal (KIV.)	2		2 5	1000	986	E E A 3	6024	5846	6993	53.5	4121	4505 51,871
Rocky Ford Canal (Riv.)	4230		1,31		Coco	100	3	2	3	1703	-	0 1,703
Ft. Lyon Storage (Riv)	0		0	2 5	00091	10060	11960	44191	18178	38109	9919	10413234,515
Ft. Lyon Canal (Riv.)	15503		18230	23201	79001	00607	371	1016	2			
Las Animas Town and	•		•		-	61.10	1000	2100	5601	2005	4624	3159 40.665
Jones Consid. Ditch	2933	20	6		200	2110	20100	3 3	16491	70606	27423	23939460.847
Total Dist. 17 (Riv.)	26858	26927	29690	20817	213	2007	## I 67	1000	T CE	2000		
Total Dists. 14 & 17	AOESA	40126	37689	36269	38772	35521	40141	137911	64274	121754	38662	34005 665,708
Res. or Imported	0	0	0	0	0	1306	16562	4047	21790	10021	7697	0 35,417
						6000	00000	141050	96064	191775	41353	34005722,125
GRAND TOTAL	40584	40126	37689	36269	38772	3005	20.00	006141	5	2 4 2 7		

APPENDIX "B-14"

# DIVERSIONS BY DITCHES IN COLORADO WATER DISTRICT 67

DIVERSION BY DITCHES IN COLORADO WATER DISTRICT #67, DIVISION #2
REPORT YEAR ENDING OCTOBER 31, 1968
SOURCE OF INFORMATION:
WATER COMMISSIONERS SPECIAL REPORT TO DIVISION ENGINEER
Units in Acre Feet

													Compact
NAME OF DITCH	Noy.	Dec.	Jan,	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	ö	Year
Fort Bent Canal	899	208	0	0	319	3210	104	1561	2217	2181	1688	1392	14,548
Keesee Ditch	210	<u>6</u>	0	0	뚕	535	<b>7</b> 99	599	611	748	452	299	4,531
Amity Canal	80g	0	0	0	0	14353	1140	15933	14807	12802	4241	<b>64</b> 3	64,127
Lamar Canal	2104	567	454	1075	1128	6437	3439	5334	6121	5749	4204	2729	39,341
Hyde Ditch	177	115	0	0	0	222	25	167	345	282	232	246	1,838
Manvel Canal	0	0	0	0	0	0	0	0	0	0	0	0	Ö
X.Y. & Graham Canals	781	153	0	0	306	1160	327	1237	926	1487	896	416	8,357
Buffalo Canal	1763	2132	1458	934	1265	3197	3185	1850	2253	2766	2294	2195	25,292
Sisson-Stubbs Canal	0	0	0	0	0	0	0	0	0	0	0	0	
GRAND TOTAL	5911	3254	1912	5003	3648	29114	9911	26681	27280	26015	14079	8220	158,034

APPENDIX "B-15"

# DIVERSIONS BY DITCHES IN KANSAS

DIVERSIONS BY DITCHES IN KANSAS
REPORT YEAR ENDING OCTOBER 31, 1968
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.	Јап.	Feb.	Mar.	ADF.	May	June	July	Aug.	Sept.		Cornpact Year
Frontier Ditch	0	0	0	0	1220	944	2480	1160	2150	2130	2140	0 <u>2</u> 02	*1 4274
Alamo Canal	0	0	0	0	0	0	0	0	0	0	0	0	
Ft. Aubrey Canal	0	0	0	0	0	890	2068	148	1259	537	2063	1527*	*8492
TOTAL State Line to				1						1			٠,
Syracuse	0	0	0	0	1220	1834	4548	1308	3409	2667	4203	3577	22766
Amazon Canal	2535	940	0	456	2614	4163	2473	3269	0	5510	1256	2267	25483
Great Eastern Canal	0	0	0	0	627	5359	2112	0	3622	5486	0	0	17206
South Side Ditch	2918	536	0	0	0	3045	1182	482	1341	2382	0	303	12189
Farmers Ditch	1771	359	0	0	2809	4879	436	1859	1503	2277	1654	785	18332
Garden City Canal	0	0	0	0	234	S	260	70	347	53.	151	0	1946
TOTAL Syracuse to			1										
Garden Čity	7224	1835	0	456	6284	17496	6763	2680	6813	16189	3061	3355	75156
TOTAL State Line to													
Garden City	7224	1835	0	456	7504	19330	11311	8869	10222	18856	7264	6932	97922

\*6030 Acre Feet Returned Directly to River.

APPENDIX "B-16"

# SUMMARY TABULATION

SUMMARY TABULATION (Acre-Feet)

		NOV	DEC.	JAN.	FEB,	MAR.	APR.	MAY	JUNE	TULY	AUG.	SFPT	100	VEAR	, ON
,	Arkansas River at							,							:
	Las Animas, Colo.	3780	3540	2660	1480	1320	1240	2760	20020	20020	9920	8380	2000	77150	4 2
	Purgatoire River near												;		) )
	Las Animas, Colo.	2480	1580	2710	1260	969	336	1180	3880	12810	17920	364	714	45930	<u>بر</u>
	Inflow to John Martin												!		,
	Reservoir	6270	5120	5370	2740	2020	1590	3930	23920	32850	27850	8750	2710	123100	F-4*
	Reservoir contents at														1
	end of month	22726	29096	35874	39907	42949	0	0	0	7506	0	0	0	_	ا د
	Net change in reser-											į	)	•	)
	voir storage	T2774	<b>46370</b>	46778	74033	/3042	-42949	0	0	47506	-7506	0	0	-14999	ď
	Outflow from John											•	•		}
	Martin Reservoir	1170	368	138	178	400	43490	5230	24550	23690	33150	10300	4840	147500	H-6
	Diversions in												:		<b>,</b>
	District 67, Colo.	5911	3254	1912	2003	3648	29114	9911	26681	27280	26015	14079	8220	158034	P-14
	Flow at Colorado-														5
	Kansas Stateline	8460	7890	8450	6950	4790	21590	7610	12300	7920	20330	4610	3870	114800	8
	Diversions in												:		}
	Kansas	7224	1835	0	456	7504	19330	11311	6988	10222	18856	7264	6932	97922	7 12
	Arkansas River at														1
	Garden City, Kansas	6210	7910	10080	8830	2010	1110	1770	6710	1940	1190	512	872	49140	B-9
															1

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

# Appendix "C"

# By-Laws

Of

# Arkansas River Compact Administration

(As Amended November 1, 1958 to October 31, 1968)

# Preamble

Pursuant to Article VIII B (1) of the Arkansas River Compact, these by-laws were adopted by the Arkansas River Compact Administration on the 14th day of November, 1949, namely:

# Article I The Administration

- 1. The Arkansas River Compact Administration is herein referred to as "the Administration."
- 2. Membership of the Administration shall consist of three representatives from each of the States of Colorado and Kansas, designated or appointed as provided by the Arkansas River Compact and the law of each of such States, and, if designated by the President, one representative of the United States of America.
- 3. The credentials of each such representative shall be filed with the Secretary of the Administration.
- 4. Each representative shall advise in writing the Secretary of the Administration as to his address, to which all official notices and other communications of the Administration shall be sent and shall further promptly advise in writing the Secretary as to any change in such address.

# Article II Officers

- 1. The officers of the Administration shall be:
  Chairman
  Vice Chairman
  Secretary
  Treasurer
- 2. The representative of the United States of America shall be the Chairman of the Administration. The Chairman shall preside at meetings of the Administration. His duties shall be such as are usually im-

posed on such an officer and such as may be assigned to him by these by-laws or by the Administration from time to time.

- 3. The Vice-Chairman shall be a member of the Administration. He shall be elected at the annual meeting of the Administration, and shall hold office until the next annual meeting of the Administration and until his successor is elected. In the case of a vacancy in the office of Vice-Chairman, the Administration at its next meeting, whether regular or special, shall elect a Vice-Chairman to serve for the unexpired term; and the election of a Vice-Chairman may be made at any meeting of the Administration prior to the holding of its first annual meeting, and in such case he shall hold office until such annual meeting. The Vice-Chairman shall perform all duties of the Chairman when the latter is unable for any reason to act or when, for any reason, there is a vacancy in the office of the Chairman. In addition, the Vice-Chairman shall perform such other duties as may be assigned to him by these by-laws or by the Administration from time to time.
- 4. The Secretary may or may not be a member of the Administration. He shall be elected by the Administration at its annual meeting and shall serve until the next annual meeting and until his successor is elected, except that he may be elected at any meeting of the Administration prior to the holding of the first annual meeting, and in such case shall hold office until such annual meeting. In the case of a vacancy in the office of Secretary, the Administration shall, at its next meeting, whether regular or special, elect a Secretary to serve for the unexpired term. The Secretary shall perform such duties as are usually imposed on such an officer and such as may be assigned to him by these by-laws or by the Administration from time to time. He shall furnish a bond for the faithful performance of his duties if the Administration so directs. The cost of such bond shall be paid by the Administration.
- 5. The Treasurer may or may not be a member of the Administration; and the office of Secretary and Treasurer may be held by the same person if directed by the Administration. He shall be elected at the annual meeting of the Administration and shall hold office until his successor is elected and shall have qualified, except a treasurer may be elected prior to the first annual meeting of the Administration and in such case shall hold office until such annual meeting. He shall receive, hold, disburse and keep records of all funds of the Administration; and he shall furnish a bond for the faithful performance of his duties in such amount as the Administration may direct. The cost of such bond shall be paid by the Administration. In the case of a vacancy in the office of Treasurer, the Administration shall, at its next meeting, whether regular or special, appoint a successor to serve for the unexpired term.
- 6. The Administration may employ such engineering, legal, clerical, and other personnel as, in its judgment, may be necessary. They shall receive such compensation and perform such duties as may be fixed by the Administration. Such employees shall not be considered as employees of either Colorado or Kansas.

# Article III

# Principal Office

1. The principal office and place of business of the Administration shall be located in the City of Lamar, Colorado.

2. The principal office shall be open for business on such hours

and days as the Administration may from time to time direct.

3. All books and records of the Administration shall be kept in the principal office of the Administration.

# Article IV1

# Meetings

1. The annual meeting of the Administration shall be held on the

second Tuesday in December of each year.

- 2. (a) Special meetings of the Administration may be called by the Chairman or, in the case of a vacancy in the office of Chairman or inability of the Chairman to act, by the Vice-Chairman. Upon the written request of two or more representatives, it shall be the duty of the Chairman, or Vice-Chairman, as the case may be, to call such a meeting.
- (b) Special telephonic meetings of the Administration may be held by telephonic communications between the several members of the Administration in respect to all matters arising under Article VF of the Compact; Provided that such special telephonic meetings may be called by the Chairman, Vice-Chairman or any member of the Operations Committee, and in any case at least two representatives of each State shall participate personally in such special telephonic meetings and concur in the action taken as a result of such meeting. And provided further, that the Secretary of the Administration shall prepare minutes of any special telephonic meeting and such minutes shall be acted upon by the Administration at the next Annual meeting or special meeting held under sub-section (a) hereof.
- 3. Notices of all annual meetings of the Administration shall be sent by the Secretary, or in the case of a vacancy in the office of Secretary, or the inability of the Secretary to act, by the Chairman or Vice-Chairman, as the case may be, to the members of the Administration by ordinary mail at least ten days in advance of such annual meetings. Notice of special meetings shall be given by the Secretary to the members of the Administration by the most expeditious method so as to allow as much time prior to such special meetings as conditions permit.
- 4. All annual meetings of the Administration shall be held at the principal office of the Administration. Unless otherwise agreed to in advance by all members of the Administration, special meetings shall be held at the office of the Administration.
- 5. The Administration shall keep a record of the proceedings of all its meetings. The minutes of such proceedings shall be preserved in a suitable manner as directed by the Administration. Minutes of proceed-

<sup>&</sup>lt;sup>1</sup>As amended March 27, 1962 and September 21, 1962

ings until approved by the Administration shall not be official and shall be furnished only to members of the Administration, its employees, and committees. Distribution of official minutes shall be made by the Sec-

retary in accordance with directives of the Administration.

6. A quorum for any meeting of the Administration and the casting of votes by representatives of the States on the Administration shall be in accord with Paragraph D of Article VIII of the Arkansas River Compact; and any action by the Administration shall be determined by vote as required by such Paragraph D of Article VIII of the Compact. If a quorum is not present at any meeting, the members present, one or more, may adjourn from time to time without further notice until a quorum is obtained.

7. At each meeting of the Administration, the order of business,

unless otherwise agreed, shall be as follows:

Call to order;

Reading of minutes of last meeting; Approval of minutes of last meeting; Report of Chairman;

Report of Secretary;

Report of Treasurer;

Report of Committees; Unfinished business;

New business;

Adjournment.

8. All meetings of the Administration, except executive sessions, shall be open to the public.

9. Any meeting of the Administration may be adjourned or continued from time to time and from the place set for the meeting to another

place.

10. Public notice of all annual and special meetings shall be given in an appropriate manner, determined by the Administration, except in cases where the Administration determines to hold an executive session.

# Article V Committees

- 1. There shall be the following standing committees: Administrative and Legal Committee Engineering Committee Operations Committee
- 2. Each of such committees shall be made up of two representatives of the Administration and the Chairman shall be ex-officio member of all committees. In all committee action a vote shall be taken by States with each State having one vote.

3. The standing committees shall have the following duties:

(a) The Administrative and Legal Committee shall advise the Administration with respect to budgets and accounting office personnel, equipment, records, and legal matters; and shall prepare the draft of the annual report of the Administration.

(b) The Engineering Committee shall advise the Administration

on all engineering matters; and shall compile all pertinent

engineering data and records. -

(c) The Operations Committee shall advise the Administration concerning, and shall have direct supervision over, rules and regulations governing the storage and releases of water from John Martin Reservoir and over such other Arkansas River interstate administration and operation between the States of Colorado and Kansas as come within the purview of the Arkansas River Compact, subject at all times to the provisions of such compact and the directives of the Administration thereunder. This committee shall be responsible for maintaining appropriate relations, under the direction of the Administration, with the chief officials of each of the States of Colorado and Kansas charged with the administration of water rights, and for maintaining appropriate relations with interested Federal agencies. The Operations Committee shall also be responsible, under directives and orders of the Administration, for supervision over employees of the Administration engaged in the interstate administration of the waters of the Arkansas River pursuant to the Arkansas River Compact.

4. The Chairman of each Committee shall be designated by the

Administration.

5. The Administration may, from time to time, create special committees composed of such members of the Administration and others as it may determine and assign to such committees such tasks as the Administration may designate.

6. Each committee shall make a report to the Administration at each annual and regular meeting and shall make such further reports as may be directed by the Administration. Unless otherwise authorized, all such reports shall be in writing and filed with the Secretary of the Administration.

# Article VI Rules And Regulations

 The Administration shall adopt Rules and Regulations necessary for the administration of the Arkansas River Compact, consistent therewith and with these by-laws.

2. All proposals for Rules and Regulations, or for changes in them, shall be presented to the Administration in writing and shall not be acted on at the meeting when first presented, but shall go over for ac-

tion at a designated subsequent meeting of the Administration.

3. Following the presentation to the Administration, public notice of all proposed Rules and Regulations and changes in Rules and Regulations shall be given by two publications, at least one week apart, in some newspaper of general circulation in the area of each State affected by the Arkansas River Compact. The representatives on the Administration from each State shall designate the newspaper in their State in which such publication shall be made. No Rule or Regulation and no change in any Rule or Regulation shall be effective until a date specific-

ally stated in the published notice, which date shall be at least ten days

after the last publication.

4. The provisions, contained in this Article, for Rules and Regulations and notice thereof shall not be effective in the case of any notice which is otherwise required under the Arkansas River Compact or in any case where, in the judgment of the Administration, effective administration and the public interest under the Arkansas River Compact, require more expenditious action.

5. It shall be the duty of the Secretary to see that the necessary

notices are published as herein required.

6. It shall be the duty of the Secretary to compile the Rules and Regulations of the Administration and to prepare copies for distribution to the public under such terms and conditions as the Administration may prescribe.

# Article VII Fiscal

1. All funds of the Administration shall be received by the Treasurer and deposited by him to the credit of the Administration in a depository or depositories designated by the Administration.

2. Disbursement of such Administration funds shall be made by check signed by the Treasurer and countersigned by the Chairman or

Vice-Chairman of the Administration.

3. The Administration shall annually adopt and transmit to the Governor of each State its tudget covering anticipated expenses for the ensuing fiscal year, and the amount thereof payable by each State.  $^2$ 

- 4. The fiscal accounts of the Administration and its employees shall not be subject to the auditing and accounting procedures of either the States of Colorado or Kansas; provided, that each State shall have the right to make an examination and audit of the accounts of the Administration at any time.
- 5. All receipts and disbursements of the Administration shall be audited yearly by a certified public accountant to be selected by the Administration, and the report of audit shall be included in the annual report of the Administration.

6. The Treasurer shall prepare and keep an up-to-date inventory of all the property of the Administration.

7. The fiscal year of the Administration shall begin July 1 of each year and end June 30 of the next succeeding year.

# Article VIII Annual Report

1. The report year referred to in this Article for the making of the annual report shall commence on November 1 and end on the succeeding October 31.

2. The Administration shall make and transmit on or before January

<sup>&</sup>lt;sup>2</sup>As amended December 11, 1956.

first of each year to the Governors of the States of Colorado and Kansas and to the President of the United States a report covering its activities for the preceding report year. The annual report shall include, among other things, the following:

(a) The receipts and expenditures of all funds of the Administra-

tion and all pertinent financial data.

(b) All hydrologic data relating to the Arkansas River which the

Administration deems pertinent.

(c) Statements as to cooperative studies of water supplies made during the preceding year, including cooperative studies and activities with any Federal agency.

(d) All findings of fact made by the Administration during the preceding year.

(e) Such other pertinent matters as the Administration may deem advisable.

# Article IX Seal

1. The official seal of the Administration shall be circular in form with the words "Arkansas River Compact Administration" imprinted around the border and the word "Seal" in the center thereof.

2. The Secretary of the Administration shall have custody of the

seal of the Administration.

# Article X

## Miscellaneous

1. The Administration and its Secretary on request shall furnish to the Governor of each of the States of Colorado and Kansas any information within its possession at any time, and shall always provide free access by the public to its records. Except in the case of the Governor of each of the States of Colorado and Kansas, or interested Federal agencies, the cost of furnishing information shall be paid by the person seeking it at such rates as may be fixed by the Administration.

2. All contracts and other instruments in writing required to be signed for and on behalf of the Administration, except matters relating to the receipt and disbursement of funds, shall be signed by the Chairman or Vice-Chairman and Secretary. The seal of the Administration

shall be affixed thereto.

# Article XI Amendments To By-Laws

1. Amendments to the By-Laws may be made at any meeting of the Administration, provided notice of the proposed amendment shall have been given in the notice of the meeting.

SECOND FEET