

NINTH ANNUAL REPORT

**Arkansas River
Compact
Administration**

(1957)

**For the Report-Year November 1, 1956
to October 31, 1957**

LAMAR, COLORADO

December 10, 1957

Ninth
Annual Report
ARKANSAS RIVER COMPACT
ADMINISTRATION
(1957)

For the Report-Year November 1, 1956, to October 31, 1957

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December 10, 1957

THE ADMINISTRATION

CARL G. PAULSEN, *Chairman and Representative of the United States*
HARRY C. NEVIUS, *Secretary and Treasurer*

IVAN C. CRAWFORD, DAVID JENKINS AND HACKET SMART
for Colorado

R. V. SMRHA, LOGAN N. GREEN AND CARL E. BENTRUP
for Kansas

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Annual Report of
ARKANSAS RIVER COMPACT ADMINISTRATION
(1957)

Report - Year November 1, 1956, to October 31, 1957

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

Sirs:

Pursuant to Article VIII of the Arkansas River Compact, the Arkansas River Compact Administration submits its report for the report-year November 1, 1956, through October 31, 1957 as follows:

1. Members of the Administration

Representative of the United States:

Hans Kramer (Brig. General U.S.A.—Ret.) (Nov. 1, 1956-Feb. 16, 1957)

Carl G. Paulsen (Aug. 14, 1957-Oct. 31, 1957)

Colorado Representatives:

Ivan C. Crawford, Denver, Colorado (Nov. 1, 1956-Oct. 31, 1957)

Harry B. Mendenhall, Rocky Ford, Colorado (Nov. 1, 1956-June 28, 1957)

Harry C. Nevius, Lamar, Colorado (Nov. 1, 1956-June 28, 1957)

David Jenkins, Las Animas, Colorado (July 16, 1957-Oct. 31, 1957)

Hacket Smartt, Lamar, Colorado (July 16, 1957-Oct. 31, 1957)

Kansas Representatives:

William E. Leavitt, Garden City, Kansas (Nov. 1, 1956-June 7, 1957)

Roland H. Tate, Garden City, Kansas (Nov. 1, 1956-June 7, 1957)

Carl E. Bentrup, Deerfield, Kansas (June 7, 1957-Oct. 31, 1957)

Logan N. Green, Garden City, Kansas (June 7, 1957-Oct. 31, 1957)

R. V. Smrha, Topcka, Kansas (Nov. 1, 1956-Oct. 31, 1957)

2. Officers of the Administration

Chairman:

Hans Kramer (Brig. General U.S.A.—Ret.) (Nov. 1, 1956-Feb. 16, 1957)

Carl G. Paulsen (Aug. 14, 1957-Oct. 31, 1957)

Vice-Chairman:

Roland H. Tate of Garden City, Kansas, (Nov. 1, 1956-June 7, 1957)

Logan N. Green of Garden City, Kansas (July 23, 1957-Oct. 31, 1957)

Secretary:
 Harry C. Nevius of Lamar, Colorado (Nov. 1, 1956-Oct. 31, 1957)
 Treasurer:
 Harry C. Nevius of Lamar, Colorado (Nov. 1, 1956-Oct. 31, 1957)

3. Standing Committees

Administrative and Legal Committee:
 Roland H. Tate of Kansas (Chairman) (Nov. 1, 1956-June 7, 1957)
 Harry C. Nevius of Colorado (Nov. 1, 1956-June 28, 1957)
 Logan N. Green of Kansas (Chairman) (Oct. 22, 1957-Oct. 31, 1957)
 David Jenkins of Colorado (Oct. 22, 1957-Oct. 31, 1957)
 Engineering Committee:
 R. V. Smrha of Kansas, (Chairman) (Nov. 1, 1956-Oct. 31, 1957)
 Ivan C. Crawford of Colorado (Nov. 1, 1956-Oct. 31, 1957)
 Operations Committee:
 Harry B. Mendenhall of Colorado (Chairman) (Nov. 1, 1956-June 28, 1957)
 William E. Leavitt of Kansas (Nov. 1, 1956-June 7, 1957)
 Hacket Smartt of Colorado (Chairman) (July 23, 1957-Oct. 31, 1957)
 Carl E. Bentrup of Kansas (July 23, 1957-Oct. 31, 1957)
 Carl G. Paulsen, Representative of the United States, is ex-officio member of all standing committees.

4. Meetings

| | | |
|-------------------|-----------------|--------------------|
| December 11, 1956 | Lamar, Colorado | Annual Meeting |
| March 29, 1957 | Lamar, Colorado | Regular Meeting |
| April 18, 1957 | | Telephonic Meeting |
| May 16, 1957 | | Telephonic Meeting |
| July 23, 1957 | Lamar, Colorado | Regular Meeting |
| July 25, 1957 | | Telephonic Meeting |
| October 22, 1957 | Lamar, Colorado | Special Meeting |

5. Fiscal

| | |
|--|------------|
| (a) Balance on hand October 31, 1956, Auditor's Report....\$ | 971.73 |
| (b) Receipts | |
| Call authorized October 26, 1956 | \$3,000.00 |
| Colorado 60% December 19, 1956.... | \$1,800.00 |
| Kansas 40% January 4, 1957..... | 1,200.00 |
| | 3,000.00 |
| | \$3,971.73 |

(c) Disbursements by the Administration--November 1, 1956 to October 31, 1957:

| Voucher No. | Date | Payee and Purpose | Amount |
|-------------|----------|---|-------------------|
| 195 | 12-31-56 | Robert W. Rollins, Audit and Service..... | \$ 65.00 |
| 196 | | Secretary Salary, November and December (less \$4.00 F.I.C.A.) | 196.00 |
| 197 | | Outwest Printing Co., Printing Vouchers..... | 30.39 |
| 198 | | Mtn. States T. & T. Co., November and December Service and Tolls..... | 24.40 |
| 199 | | Treasurer of U. S. Deposits by States..... | 8.00 |
| 201 | 2-28-57 | H. R. Meininger Co., Ozalid Paper..... | 4.50 |
| 202 | | Peerless Printing Co., Annual Reports..... | 516.00 |
| 203 | | Secretary Salary, January and February (less \$4.50 F.I.C.A.) | 195.50 |
| 204 | | Treasurer of U. S. Deposits by States..... | 9.00 |
| 205 | | Mtn. States T. & T. Co., January and February Service and Tolls..... | 16.90 |
| 206 | 4-30-57 | U. S. Geological Survey, Cooperative Stream Gaging | 392.81 |
| 207 | | Secretary Salary, March and April (less \$4.50 F.I.C.A.) | 195.50 |
| 208 | | Mtn. States T. & T. Co., March and April Service and Tolls | 34.80 |
| 209 | | Secretary, Stamps, 10.00; Mileage 37.60..... | 47.60 |
| 210 | | Treasurer of U. S. Deposits by States..... | 9.00 |
| 211 | 6-30-57 | U. S. Geological Survey, Bal. Cooperative-Stream Gaging | 107.19 |
| 212 | | Mtn. States T. & T. Co., May and June Service and Tolls | 32.85 |
| 213 | | Secretary Salary, May and June (less \$4.50 F.I.C.A.) | 195.50 |
| 214 | | Treasurer of U. S. Deposits by States..... | 9.00 |
| 215 | 9- 3-57 | Nat. Surety Corp. Treasurers Bond..... | 25.00 |
| 216 | | Mtn. States T. & T. Co., July Service and Tolls.... | 26.10 |
| 217 | | Secretary Salary, July and August (less \$4.50 F.I.C.A.) | 195.50 |
| 218 | | Treasurer of U. S. Deposits by States..... | 9.00 |
| 219 | 9- 4-57 | Mtn. States T. & T. Co., August Service and Tolls | 33.60 |
| 220 | 10-15-57 | Mtn. States T. & T. Co., September Service and Tolls | 17.05 |
| 221 | | Secretary, Stamps 11.50; Mileage 35.44; Supplies 5.75 | 52.69 |
| 222 | | Secretary Salary, September (less \$2.25 F.I.C.A.).. | 97.75 |
| 223 | | Treasurer of U. S. Deposits by States..... | 4.50 |
| 224 | 10-31-57 | Secretary Salary, October (less \$2.25 F.I.C.A.).... | 97.75 |
| 225 | | Mtn. States T. & T. Co., October Service and Tolls | 19.15 |
| 226 | | Treasurer of U. S. Deposits by States..... | 4.50 |
| | | Total Disbursements | <u>\$2,672.53</u> |

(d) Balance on hand October 31, 1957.....\$1,299.20

(e) On October 22, 1957, the Administration approved a budget for the fiscal year July 1, 1958 to June 30, 1959, for transmittal to the Governor of each of the States of Colorado and Kansas in accordance with Article VII-E (2) of the Compact as follows:

| | | |
|--|------------|-------------------|
| Personal Service | | \$1,825.00 |
| Secretary Salary | \$1,200.00 | |
| Social Security | 50.00 | |
| Gage Reports | 500.00 | |
| Audit of Accounts..... | 75.00 | |
| Capital Outlay | | 300.00 |
| Maintenance and Operation..... | | 1,675.00 |
| Bond | 25.00 | |
| Printing | 600.00 | |
| Official Publication | 100.00 | |
| Travel | 150.00 | |
| Typing and Mailing..... | 200.00 | |
| Investigation and Inspection..... | 150.00 | |
| Telephone and Telegraph..... | 300.00 | |
| Office Supplies | 150.00 | |
| Total Budget proposed for 1958-59..... | | 3,800.00 |
| Estimated Carry-over as of June 30, 1958..... | | 800.00 |
| Total to be appropriated by Colorado and Kansas..... | | \$3,000.00 |
| To be appropriated by Colorado (60%)..... | | 1,800.00 |
| To be appropriated by Kansas (40%)..... | | 1,200.00 |
| | | <u>\$3,000.00</u> |

(f) Pursuant to provisions of the Compact (Article VIII-E (3)) and of the By-Laws of the Administration (Article VII (5)), the receipts and disbursements of the Administration have been audited for the period commencing November 1, 1956 through October 31, 1957, the end of the Report-year. The report of such audit is hereto attached as Appendix "A".

6. Cooperative Studies and Activities

- (a) Article VIII-G (1) of the Arkansas River Compact requires the Administration to cooperate with the Chief Official of each of the States of Colorado and Kansas charged with the administration of water rights in their respective States, and with the Federal agencies in systematically determining and correlating the facts pertaining to the flow and diversion of the 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 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 Corps of Engineers has continued to operate John Martin Reservoir in accordance with the provisions of the Compact. A resurvey by sonic methods of the sediment contents of the John Martin reservoir has been made by the Corps of Engineers during the past season after the reservoir was filled sufficiently with water to make such

a survey. However, a new capacity table of the reservoir, which is needed, has not yet been made because funds to the Corps have not been provided for completing the analyses of the survey. Because of the annual accumulation of sediment in the reservoir, the survey and revised capacity table of the water contents in the reservoir is needed at least every 5 years. The United States Geological Survey has also 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. To assist that agency in defraying the costs of operating the Compact gaging stations, including the radio stage reporting gages, and performing other hydrologic work required in the administration of the Compact, the Administration entered into cooperative agreements with the Geological Survey for the fiscal years ending June 30, 1957, and June 30, 1958. Under the terms of these agreements, \$500 was provided by the Administration and an equal amount by the Geological Survey for the above purposes, in each of these fiscal years.

7. Water Supply, Reservoir Operation and Hydrologic Data

At the beginning of the Compact year on November 1, 1956, John Martin Reservoir was empty. Passage of river flow up to 100 c.f.s. continued until the storage of winter flows was started at 12:00 noon on December 7, 1956. Winter storage continued to the opening of the irrigation season on April 1, 1957, at which time the reservoir contained 3,892 acre feet of water. This was the extreme low winter inflow since administration of the Compact was started and was less than 20% of the mean winter inflow in that time. Rains the first three days of April provided additional inflow. Water in storage totaled 11,855 acre feet on April 13, 1957. The first release of stored water was made at 8:30 a.m. of that date upon the demand of Colorado. Releases were increased to meet the demand of Kansas at 8:45 a.m. on April 17, 1957, and continued for both States until the reservoir was empty at 8:30 p.m. on April 22, 1957.

General rains occurred on May 15, and 16, 1957, averaging 1.5 to 3 inches above the Reservoir and 1 to 1.5 inches below. Flood conditions prevailed and storage began with the gates at John Martin Reservoir being closed at 7:00 a.m. on May 16, 1957. Runoff continued at a rapid rate and by 12:00 p.m. on May 19, 1957, on the basis of the capacity table in effect at that time, an indicated 47,517 acre feet had accumulated in the reservoir. A new capacity table subsequently showed this amount to be 43,325 acre feet. Storage had increased to about 50,500 acre feet when releases of 100 c.f.s. were requested by Colorado at 8:30 a.m. on May 27, 1957. These releases continued to 10:25 a.m. on June 1, 1957. Rains from 1 to 2 inches occurred on May 31 and June 1. The gates were closed at 10:25 a.m. on June 1, 1957, and water in storage increased to nearly 108,000 acre feet by 12:00 p.m. on June 13, 1957. Releases were commenced at 8:45 a.m. on June 14, 1957, to meet demands for water by the State of Colorado, and, with the exception of

three short periods, continued to the end of the irrigation season. Kansas requirements were met by stateline flow until 4:30 p.m. on July 6, 1957. At this time releases from the reservoir were increased to meet Kansas demands which continued to September 15, 1957. Stateline flows met Kansas needs from September 15, 1957, to 8:30 a.m. on October 1 and from October 10, 1957, to the end of the irrigation season. Releases from storage to meet Kansas demands were made from 8:30 a.m. on October 1 to October 10, 1957. Rains occurring below the reservoir necessitated the curtailment of releases many times during the period June 14 to October 31, and, as noted above, caused the gates to be closed from 5:30 p.m. on July 25 to 12:00 noon on July 27, from 7:15 a.m. to 12:00 p.m. on August 1, and from 3:00 p.m. on October 8, to 10:30 a.m. on October 9.

Colorado requested, in addition to releases of stored water, 100 c.f.s. river flow from 5:30 p.m. on July 16, 1957, to 8:30 a.m. on July 17, 1957. On August 7, 1957, Kansas demands were increased to include 250 c.f.s. river flow. At 9:00 a.m. on August 9, 1957, releases were increased from 1200 c.f.s. to 1300 c.f.s. to provide Kansas 50 c.f.s. river flow, at 11:00 p.m. on August 10, 1957, releases were increased from 1300 c.f.s. to 1450 c.f.s. to provide Kansas 150 c.f.s. river flow. At 9:00 a.m. on August 12, 1957, no water was available for Kansas from river flow. At 3:45 p.m. on August 12, 1957, Colorado requested 100 c.f.s. river flow which was reduced to 50 c.f.s. at 11:00 a.m. on August 15, 1957, and reduced to 0 at 12:00 noon on August 16, 1957.

Storage in the reservoir reached a peak of 290,744 acre feet on August 6, and 7, 1957. Releases from the reservoir during the period April 13, to 22, totaled 13,045 acre feet and during the period May 27, to October 31, totaled 185,660 acre feet. Stateline flow during corresponding periods allowing three days for water released from the reservoir to reach the stateline, amounted to 3,370 acre feet and 119,740 acre feet, respectively. At the end of the irrigation season on October 31, 1957, storage in John Martin Reservoir totaled 220,053 acre feet, the greatest holdover storage since the Compact Administration was established and more than 70% greater than the previous maximum on October 31, 1949.

River flow was passed through the reservoir averaging:

25 c.f.s. from November 1, 1956 to December 6, 1956

1.8 c.f.s. from December 7, 1956 to April 12, 1957

443 c.f.s. from April 22, 1957 to May 16, 1957.

Stateline flow for corresponding periods, disregarding local runoff on April 27, and 28, averaged 40 c.f.s., 48 c.f.s., and 143 c.f.s., respectively.

The total discharge for the year at Garden City was 62,200 acre feet. About 45,000 acre feet occurred during the period May 17, thru June 30, and included five storm periods of local runoff. With this exception, the average discharge was about 27 second feet. Total diversions by Kansas ditches during the irrigation season amounted to 118,720 acre feet, 72% of the water which crossed the stateline in this time.

8. Gaging Stations

Stream-flow records of satisfactory accuracy were obtained at all the Compact gaging stations. However, shifting of the channels on the Arkansas and Purgatoire Rivers near Las Animas has increased the difficulty of maintaining current stage-discharge relations for operation. These two sites will be investigated for possible improvement of the unstable conditions.

Although the radio stage reporting equipment operated satisfactorily this year, the equipment is now obsolete as well as seriously worn. The equipment should be replaced in the 1960 fiscal year. No definite action has been taken to install stage reporting equipment at the two inflow gages. This action should be considered again when the old radio equipment is replaced.

The Administration has continued to contribute \$500 annually to assist the U. S. Geological Survey in operating the compact gaging stations.

9. Findings of Fact by the Administration

(a) The Administration, in accordance with Article IV, Section 3 (b) of the By-Laws, considered by telephone on April 18th, 1957, the question of finding the Reservoir empty of winter stored water and giving Notice to the State Engineer of Colorado that priority administration would commence on April 20, 1957. As a result of affirmative action taken this date, the State Engineer of Colorado was notified that, on April 20, 1957, unless a change of conditions justified cancellation or modification of that notice, priority administration should commence, and decreed rights of water users in Colorado would be administered by Colorado under Article V F of the Arkansas River Compact.

The Reservoir was emptied April 22, 1957 at 8:30 p.m.

(b) General rains throughout the Arkansas Valley on May 15th and 16th caused flood conditions in many of the side streams from Pueblo to Lamar. Reports by the Water Commissioner in District No. 17 were to the effect that 24,000 c.f.s. had passed the Oxford Dam. Streams below Caddoa were furnishing water to District No. 67 and to Kansas. The gates on Caddoa Dam were closed at 6:45 a.m., May 16th, 1957.

A special telephonic meeting of the Administration was held on May 16, 1957 in accordance with Article IV, Section 3 (b) of the By-Laws. On this date the Administration found that there was water in the conservation pool available for release to Water District 67 and to Kansas and notice was given to the State Engineer of Colorado as provided for in Article V F of the Arkansas River Compact.

The above Findings and Notifications were in form similar to those published in the Fifth Annual Arkansas River Compact Administration Report of 1953, Appendix C.

10. Changes in Personnel

Hans Kramer, Brig. Gen., U.S.A., Ret., who had served as Chairman of the Compact Commission during the drafting of the Arkansas River Compact, and as Chairman and Representative of the United

States on the Administration since it was organized in 1949, died February 16, 1957.

The sentiments of the Administration were expressed in a Resolution adopted March 29, 1957, which is incorporated in this report, Appendix "C".

The Chairmanship remained vacant until August 14, 1957, when President Eisenhower appointed Carl G. Paulsen, 4000 Cathedral Avenue N. W., Washington, D. C., former chief hydraulic engineer of U. S. Geological Survey to serve as Representative of the United States.

The terms of four members expired during the year, Roland H. Tate and William E. Leavitt representing Kansas and Harry B. Mendenhall and Harry C. Nevius representing Colorado. All four had served since the Administration was organized in 1949 and the first three had also served on the Kansas-Colorado Compact Commission during the drafting of the Compact. The fourth member had served as Administration Secretary from the organization date.

A resolution was adopted October 22, 1957 expressing gratitude for the services of the members of the Administration who retired during the Compact-Year, and is included in this report as Appendix "D".

On May 20, 1957, Governor Docking of Kansas appointed Logan N. Green of Garden City to succeed Roland H. Tate and Carl E. Bentrup of Deerfield to succeed William E. Leavitt effective June 7, 1957.

On July 16, 1957, Governor McNichols of Colorado appointed David Jenkins of Las Animas in Water Districts No. 14 and No. 17 to succeed Harry B. Mendenhall and Hacket Smartt of Lamar in Water District No. 67 to succeed Harry C. Nevius.

Respectfully submitted,

ARKANSAS RIVER COMPACT ADMINISTRATION

CARL G. PAULSEN,
Chairman and Representative of the United States

IVAN C. CRAWFORD,
DAVID JENKINS,
HACKET SMARTT,

Colorado Members of the Administration

R. V. SMRHA,
LOGAN N. GREEN,
CARL E. BENTRUP,

Kansas Members of the Administration.

Lamar, Colorado
December 10, 1957.

APPENDICES

for

Annual Report of the Arkansas River Compact Administration

For the Report-Year November 1, 1956 to October 31, 1957

- APPENDIX "A" —Auditor's Report.
- APPENDIX "B-1" —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 Colorado-Kansas Stateline.
- APPENDIX "B-8" —Daily Discharges, Arkansas River at Garden City, Kansas.
- APPENDIX "B-9" —Demands by Colorado for Water.
- APPENDIX "B-10"—Demands by Kansas for Water.
- APPENDIX "B-11"—Stateline Flow on Days of Kansas Demand.
- APPENDIX "B-12"—Diversions by Ditches in Colorado Water Districts 14 and 17.
- APPENDIX "B-13"—Diversions by Ditches in Colorado Water District 67.
- APPENDIX "B-14"—Diversions by Ditches in Kansas, Stateline to Garden City.
- APPENDIX "B-15"—Summary Tabulation.
- APPENDIX "C" —Resolution concerning Hans Kramer.
- APPENDIX "D" —Resolution concerning retiring members of the Administration.
- PLATE I—Graphs showing inflow, outflow and storage at John Martin Reservoir and Stateline Flow for Report-Year.

APPENDIX "A"

* * * *

AUDITOR'S REPORT

ROBERT W. ROLLINS

* * * *

Certified Public Accountant
La Junta, Colorado

December 7, 1957

To the Representatives
Arkansas River Compact Administration
Lamar, Colorado

Gentlemen:

In accordance with your request, an examination has been made of the financial transactions of the Arkansas River Compact Administration for its 8th "Report-Year" - November 1, 1956 to October 31, 1957. The results of the audit are expressed in the attached statement of cash receipts and disbursements, Schedule I, Page No. 4. The remarks that follow are offered as additional information and tend to describe the extent of the audit work performed.

General Comments

Schedule I, reflects the beginning balance of cash in bank, revenue assessments received from the States of Colorado and Kansas, expenditures by classification and the ending balance of cash in bank.

As provided for in the budget of the Administration's Meeting of October 28, 1955 and authorized for call in the Minutes of the Meeting of October 26, 1956, funds due from Colorado (60% share) of \$1,800.00 and Kansas (40% share) of \$1,200.00 were received for the budget year ending June 30, 1957 and placed on deposit with the First National Bank in Lamar, Colorado, on the respective dates of December 19, 1956 and January 4, 1957.

All disbursements were made by checks drawn on the Administration's account at the First National Bank in Lamar, Colorado. The individual checks were examined for amount, signature, and endorsement. Amounts so expended were substantiated by verification to payees' statements, authorization of payment as evidenced in minutes of the Compacts' meeting, or other supporting documents.

Consistent with prior years practices, the Secretary's salary for the current year of \$1,200.00 has been reduced by the Old-Age and Survivor's Insurance deductions amounting to \$26.50. Effective January 1, 1957, the 2% rate was raised to 2.25%, producing an increase of \$2.50 in the amount deducted from the employee. This figure of \$26.50 together with the Administration's contribution of like amount (note

similar increase in rate) are shown under the classification of taxes on Schedule. I.

Travel expense of the Secretary for the fiscal year ending October 31, 1957 amounted to \$73.04 or 913 miles at \$0.08 per mile.

Payments made to the U. S. Treasurer totaling \$53.00 during the year were accompanied by related returns referring to Old-Age and Survivor's Insurance information on the Secretary.

Cash in bank at October 31, 1957, per Schedule I, amounting to \$1,299.20 was reconciled to the amount directly confirmed by the First National Bank in Lamar, Colorado.

The following summary compares the Administration's financial position at October 31, 1957 with that of a year ago.

ARKANSAS RIVER COMPACT ADMINISTRATION
Lamar, Colorado

COMPARATIVE BALANCE SHEET

| | October 31, 1957 | October 31, 1956 | Increase (Decrease) |
|--|---------------------|---------------------|------------------------|
| ASSETS | | | |
| Cash in Bank..... | \$1,299.20 | \$ 971.73 | \$ 327.47 |
| Equipment (Portable typewriter).... | 92.50 | 92.50 | —0— |
| Total Assets | <u>\$1,391.70</u> | <u>\$1,064.23</u> | <u>\$ 327.47</u> |
| CAPITAL | | | |
| Unexpended fund balance..... | \$1,299.20 | \$ 971.73 | \$ 327.47 |
| Expended fund balance for equipment | 92.50 | 92.50 | —0— |
| Total Capital | <u>\$1,391.70</u> | <u>\$1,064.23</u> | <u>\$ 327.47</u> |

Because the "Budget Year" covers the period July 1, 1956 to June 30, 1957, it has been necessary to combine related months of the last two "Report Years" in order to compare actual expenditures with the related budgeted items. Such a comparison is set forth for your review in the following summary.

COMPARISON OF DISBURSEMENTS WITH BUDGET
Budget Year July 1, 1956 to June 30, 1957

| <i>Classification</i> | <i>Disbursements</i> | <i>Budget</i> |
|---|----------------------|---------------|
| PERSONAL SERVICES | | |
| Secretary's salary | \$1,200.00 | \$1,200.00 |
| Taxes—O.A. and S.I.—Administration's share | 25.50 | 50.00 |
| Gage reports | 500.00 | 500.00 |
| Professional services (audit of accounts)..... | 65.00 | 75.00 |
| Capital Outlay | —0— | 300.00 |

MAINTENANCE AND OPERATION

| | | |
|-----------------------------------|-------------------|-------------------|
| Bond—Treasurer | 25.00 | 25.00 |
| Printing | 516.00 | 600.00 |
| Office publications | —0— | 100.00 |
| Travel expense—Secretary | 100.00 | 150.00 |
| Typing and mailing..... | 10.00 | 200.00 |
| Investigation and inspection..... | —0— | 150.00 |
| Telephone and telegraph..... | 208.35 | 300.00 |
| Office supplies and repairs..... | 42.71 | 150.00 |
| Totals | <u>\$2,692.56</u> | <u>\$3,800.00</u> |

The Secretary-Treasurer advises the Administration's Budget for the fiscal year July 1, 1957 to June 30, 1958, as approved in the Minutes of the Meeting of October 26, 1956, provides for expenditures totaling \$3,800.00. Of this amount, \$800.00 is to come from the excess of funds at June 30, 1957, supplemented by an appropriation of \$3,000.00 from the States of Colorado and Kansas in the respective amounts of \$1,800.00 and \$1,200.00.

Respectfully submitted,

ROBERT W. ROLLINS,
 Certified Public Accountant.

ARKANSAS RIVER COMPACT ADMINISTRATION
Lamar, Colorado

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
NOVEMBER 1, 1956 TO OCTOBER 31, 1957
(Refer to comments in text of audit)

CASH IN BANK AT NOVEMBER 1, 1956 (Per Audit).....\$ 971.73

RECEIPTS

| | |
|----------------------------|-------------------|
| Revenue from assessments | |
| Colorado portion 60% | \$1,800.00 |
| Kansas portion 40% | <u>1,200.00</u> |
| Total Receipts | 3,000.00 |
| Total Available Funds..... | <u>\$3,971.73</u> |

DISBURSEMENTS

| | |
|---|-----------------|
| Salary of secretary..... | \$1,200.00 |
| Less: O.A. and S.I. deductions..... | <u>26.50</u> |
| Sub-total | 1,173.50 |
| Printing—Annual report | 516.00 |
| Telephone and telegraph..... | 204.85 |
| Travel expense of secretary..... | 73.04 |
| Audit fee (fiscal year ended October 31, 1956)..... | 65.00 |
| Taxes—O.A. and S.I. Payments | |
| Deductions from employees.. | \$26.50 |
| Administration's portion | <u>26.50</u> |
| Premium on secretary-treasurer bond..... | 25.00 |
| Typing and mailing..... | 21.50 |
| Office supplies, stationery, etc..... | 40.64 |
| Stream-gaging expense of U. S. Geological Survey | <u>500.00</u> |
| Total Disbursements | <u>2,672.53</u> |

CASH IN BANK AT OCTOBER 31, 1957..... \$1,299.20

CASH ON DEPOSIT AT THE FIRST NATIONAL BANK IN LAMAR

| | |
|---|-------------------|
| Per direct confirmation at October 31, 1957.... | \$1,425.10 |
| Less: Outstanding checks of | |
| No. 223 Treasurer of the U.S... \$ 4.50 | |
| 224 Harry C. Nevius..... | 97.75 |
| 225 Mt. St. T. & T. Co... 19.15 | |
| 226 Treasurer of the U.S... 4.50 | |
| Total outstanding checks..... | <u>125.90</u> |
| Adjusted bank balance..... | <u>\$1,299.20</u> |

ARKANSAS RIVER NEAR PUEBLO, COLORADO

Report-Year Ending October 31, 1957
 U S G S Records—Provisional, subject to revision
 (Colorado State Engineer)

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|--|-------|-------|-------|-------|------|-------|-------|--------|--------|--------|-------|-------|
| 1 | 127 | 75 | 70 | 278 | 113 | 89 | 407 | 2510 | 8380 | 5120 | 1690 | 777 |
| 2 | 123 | 69 | 61 | 291 | 96 | 273 | 375 | 2780 | 8140 | 4920 | 1850 | 767 |
| 3 | 127 | 69 | 73 | 285 | 133 | 332 | 360 | 2110 | 7890 | 4560 | 1640 | 570 |
| 4 | 115 | 56 | 73 | 243 | 159 | 276 | 468 | 2430 | 7540 | 3940 | 1490 | 331 |
| 5 | 144 | 65 | 75 | 231 | 138 | 209 | 567 | 3080 | 7540 | 4340 | 1430 | 288 |
| 6 | 158 | 65 | 55 | 219 | 124 | 240 | 633 | 3640 | 7230 | 3470 | 1400 | 266 |
| 7 | 169 | 58 | 126 | 201 | 96 | 290 | 653 | 4130 | 6680 | 3780 | 798 | 288 |
| 8 | 137 | 43 | 126 | 195 | 52 | 350 | 1160 | 4430 | 6740 | 3810 | 656 | 851 |
| 9 | 115 | 66 | 162 | 226 | 42 | 357 | 1310 | 5030 | 6490 | 2720 | 726 | 452 |
| 10 | 81 | 125 | 206 | 238 | 40 | 414 | 2000 | 5050 | 6390 | 2680 | 646 | 433 |
| 11 | 71 | 159 | 206 | 244 | 42 | 422 | 2730 | 5080 | 6140 | 2590 | 561 | 467 |
| 12 | 67 | 151 | 178 | 232 | 22 | 397 | 2460 | 5150 | 6140 | 2370 | 552 | 408 |
| 13 | 50 | 131 | 172 | 232 | 29 | 356 | 2040 | 4650 | 5930 | 2750 | 515 | 383 |
| 14 | 26 | 114 | 188 | 213 | 34 | 318 | 1680 | 4880 | 6150 | 2180 | 588 | 434 |
| 15 | 30 | 118 | 195 | 212 | 32 | 358 | 3160 | 4840 | 6010 | 2120 | 597 | 408 |
| 16 | 56 | 98 | 208 | 224 | 43 | 387 | 4250 | 4210 | 4840 | 1620 | 551 | 400 |
| 17 | 83 | 103 | 219 | 224 | 36 | 439 | 2570 | 3880 | 4540 | 3300 | 418 | 451 |
| 18 | 104 | 102 | 224 | 219 | 44 | 474 | 2350 | 3080 | 4540 | 2880 | 384 | 461 |
| 19 | 120 | 87 | 237 | 224 | 51 | 438 | 2030 | 2660 | 4560 | 1760 | 392 | 460 |
| 20 | 138 | 90 | 225 | 224 | 35 | 356 | 1990 | 2820 | 4590 | 1350 | 369 | 523 |
| 21 | 141 | 98 | 231 | 182 | 35 | 295 | 1650 | 3620 | 4620 | 1370 | 401 | 496 |
| 22 | 206 | 79 | 256 | 151 | 37 | 289 | 1500 | 4580 | 4990 | 1820 | 469 | 460 |
| 23 | 151 | 98 | 267 | 145 | 59 | 317 | 1390 | 3740 | 5350 | 1730 | 469 | 468 |
| 24 | 114 | 91 | 263 | 121 | 79 | 296 | 1230 | 3520 | 4620 | 1950 | 469 | 468 |
| 25 | 79 | 138 | 223 | 102 | 35 | 242 | 1070 | 4150 | 4620 | 1700 | 426 | 460 |
| 26 | 80 | 147 | 147 | 93 | 23 | 230 | 942 | 5410 | 4550 | 1630 | 409 | 468 |
| 27 | 101 | 92 | 196 | 88 | 43 | 242 | 877 | 6680 | 4550 | 1730 | 435 | 486 |
| 28 | 93 | 90 | 242 | 125 | 43 | 359 | 845 | 7590 | 5480 | 2250 | 716 | 451 |
| 29 | 87 | 98 | 279 | | 34 | 375 | 836 | 8510 | 4620 | 1510 | 757 | 417 |
| 30 | 86 | 89 | 251 | | 29 | 407 | 1090 | 8410 | 4540 | 1500 | 757 | 383 |
| 31 | | 84 | 314 | | 37 | | 1310 | | 4660 | 1570 | | 376 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 3179 | 2948 | 5748 | 5662 | 1815 | 9827 | 45933 | 132650 | 179060 | 81020 | 22561 | 14351 |
| ac. ft. | 6310 | 5850 | 11400 | 11230 | 3600 | 19490 | 91110 | 263100 | 355200 | 160700 | 44750 | 28460 |
| (a) ac. ft. | | | | | | | | | 6910 | 10900 | 8740 | 2400 |
| (b) ac. ft. | 4100 | 6630 | 1490 | | | | | | | | | |
| (c) ac. ft. | 10410 | 12480 | 12890 | 11230 | 3600 | 19490 | 91110 | 263100 | 348290 | 149800 | 36010 | 26060 |
| (a) Less upstream reservoir and transmountain water. | | | | | | | | | | | | |
| (b) Plus Bessemer waste below Pueblo gage. | | | | | | | | | | | | |
| (c) Corrected total Ac. Ft. | | | | | | | | | | | | |

ARKANSAS RIVER NEAR PUEBLO, COLORADO

APPENDIX "B-1"

THE YEAR 1,001,000 Acre Feet
 CORRECTED 984,470 Acre Feet

ARKANSAS RIVER AT LAS ANIMAS, COLORADO

Report-Year Ending October 31, 1957
U S G S Records—Provisional, subject to revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|-------|-------|-------|-------|-------|---------|--------|--------|---------|--------|-------|---------|
| 1 | 12 | 7.9 | 9.2 | 10 | 8.2 | 8.7 | 215 | 350 | 3,430 | 3,320 | 29 | 7.8 |
| 2 | 9.6 | 7.9 | 9.2 | 11 | 8.2 | 622 | 202 | 1,280 | 3,510 | 2,300 | 17 | 17 |
| 3 | 6.9 | 7.9 | 9.2 | 12 | 8.2 | 242 | 198 | 1,580 | 4,140 | 2,280 | 32 | 25 |
| 4 | 5.6 | 7.7 | 9.2 | 12 | 10 | 19 | 225 | 460 | 4,700 | 2,650 | 32 | 19 |
| 5 | 5.1 | 7.7 | 9.2 | 9.2 | 9.6 | 12 | 275 | 162 | 3,320 | 2,210 | 25 | 28 |
| 6 | 4.5 | 7.4 | 8.7 | 9.2 | 9.6 | 9.4 | 312 | 360 | 3,170 | 2,010 | 25 | 18 |
| 7 | 4.2 | 7.9 | 8.7 | 8.7 | 9.2 | 12 | 485 | 887 | 3,210 | 910 | 22 | 24 |
| 8 | 4.2 | 7.4 | 8.7 | 8.2 | 9.2 | 9.4 | 500 | 1,750 | 2,070 | 650 | 20 | 2,130 |
| 9 | 4.5 | 7.2 | 8.7 | 7.9 | 9.2 | 8.5 | 547 | 2,120 | 2,700 | 1,070 | 17 | 1,110 |
| 10 | 4.9 | 7.4 | 9.2 | 7.7 | 8.2 | 8.5 | 510 | 2,310 | 3,610 | 1,430 | 16 | 125 |
| 11 | 5.1 | 7.4 | 9.2 | 7.7 | 7.9 | 11 | 660 | 2,360 | 3,660 | 532 | 35 | 82 |
| 12 | 5.1 | 7.4 | 9.2 | 7.7 | 7.9 | 18 | 510 | 5,330 | 2,810 | 234 | 24 | 61 |
| 13 | 5.1 | 7.4 | 8.7 | 7.7 | 7.9 | 15 | 371 | 3,570 | 3,230 | 131 | 25 | 93 |
| 14 | 4.9 | 7.9 | 8.7 | 7.7 | 7.9 | 14 | 485 | 2,210 | 3,470 | 63 | 30 | 147 |
| 15 | 4.5 | 7.7 | 8.7 | 7.4 | 7.7 | 8.5 | 596 | 1,780 | 3,320 | 96 | 44 | 110 |
| 16 | 4.5 | 7.7 | 8.7 | 7.4 | 7.7 | 8.2 | 5,430 | 1,990 | 3,260 | 30 | 22 | 74 |
| 17 | 4.2 | 7.9 | 9.2 | 7.4 | 7.7 | 8.5 | 15,700 | 1,530 | 2,890 | 24 | 34 | 63 |
| 18 | 4.3 | 7.7 | 9.2 | 7.2 | 7.4 | 7.3 | 2,050 | 1,090 | 1,790 | 85 | 21 | 182 |
| 19 | 4.3 | 7.4 | 9.2 | 6.9 | 7.4 | 6.8 | 421 | 657 | 1,640 | 764 | 4.6 | 230 |
| 20 | 4.0 | 7.7 | 8.2 | 6.9 | 7.4 | 6.9 | 432 | 556 | 2,750 | 250 | 7.0 | 140 |
| 21 | 4.5 | 7.7 | 7.9 | 7.2 | 7.4 | 42 | 416 | 526 | 3,920 | 113 | 9.4 | 110 |
| 22 | 4.5 | 7.4 | 7.9 | 7.2 | 7.4 | 328 | 145 | 246 | 3,080 | 42 | 14 | 144 |
| 23 | 4.5 | 7.4 | 8.2 | 7.7 | 6.6 | 380 | 112 | 310 | 2,850 | 44 | 20 | 78 |
| 24 | 4.5 | 7.4 | 7.9 | 7.4 | 5.2 | 440 | 94 | 490 | 2,900 | 51 | 7.4 | 69 |
| 25 | 4.7 | 8.2 | 7.9 | 7.9 | 6.6 | 335 | 78 | 158 | 2,090 | 20 | 9.8 | 59 |
| 26 | 4.9 | 8.2 | 7.6 | 7.7 | 6.1 | 252 | 148 | 51 | 2,720 | 35 | 24 | 85 |
| 27 | 5.1 | 8.2 | 7.4 | 7.7 | 6.4 | 250 | 72 | 480 | 2,630 | 52 | 14 | 88 |
| 28 | 4.9 | 8.7 | 7.0 | 7.7 | 6.4 | 252 | 30 | 2,110 | 2,710 | 32 | 16 | 80 |
| 29 | 4.9 | 8.7 | 7.2 | | 6.1 | 134 | 17 | 2,140 | 2,850 | 521 | 14 | 88 |
| 30 | 5.2 | 8.7 | 8.0 | | 8.7 | 222 | 23 | 3,030 | 2,650 | 276 | 9.0 | 104 |
| 31 | | 8.7 | 9.0 | | 11 | | 82 | | 2,420 | 38 | | 88 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 155.2 | 241.9 | 265.0 | 230.4 | 244.4 | 3,690.7 | 31,341 | 41,873 | 93,500 | 22,263 | 619.2 | 5,678.8 |
| ac. ft. | 308 | 480 | 526 | 457 | 485 | 7,320 | 62,160 | 83,050 | 185,500 | 44,160 | 1,230 | 11,260 |

THE YEAR 396,900 Acre Feet.

ARKANSAS RIVER AT LAS ANIMAS, COLORADO

* * * * *

PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

Report Year ending October 31, 1957
 U S G S Records--Provisional, subject to revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|------|-------|-------|-------|------|---------|---------|--------|--------|-------|-------|---------|
| 1 | 1.5 | 2.3 | 3.9 | 11 | 2.9 | 4.4 | 365 | 248 | 72 | 468 | 155 | 11 |
| 2 | 1.8 | 2.2 | 3.8 | 11 | 2.7 | 1,190 | 332 | 2,170 | 48 | 516 | 106 | 11 |
| 3 | 2.0 | 2.3 | 3.2 | 9.0 | 2.9 | 1,210 | 276 | 1,470 | 50 | 330 | 56 | 13 |
| 4 | 2.3 | 2.6 | 3.1 | 10 | 3.8 | 252 | 224 | 631 | 48 | 284 | 34 | 11 |
| 5 | 2.6 | 2.7 | 2.7 | 10 | 4.9 | 135 | 170 | 456 | 40 | 188 | 102 | 11 |
| 6 | 2.9 | 2.6 | 2.4 | 7.0 | 4.6 | 36 | 95 | 167 | 67 | 223 | 85 | 13 |
| 7 | 3.4 | 2.7 | 2.2 | 11 | 3.8 | 20 | 48 | 122 | 75 | 275 | 58 | 24 |
| 8 | 3.9 | 2.7 | 2.6 | 8.0 | 3.8 | 63 | 36 | 216 | 53 | 330 | 46 | 877 |
| 9 | 3.5 | 2.7 | 2.4 | 2.6 | 3.6 | 6.0 | 46 | 266 | 56 | 132 | 44 | 181 |
| 10 | 3.4 | 2.7 | 2.7 | 2.4 | 3.5 | 6.0 | 46 | 390 | 48 | 141 | 42 | 61 |
| 11 | 3.2 | 3.4 | 4.2 | 2.4 | 3.4 | 6.0 | 34 | 480 | 136 | 146 | 72 | 42 |
| 12 | 3.1 | 5.6 | 5.5 | 2.2 | 2.9 | 6.0 | 32 | 302 | 380 | 99 | 67 | 32 |
| 13 | 2.9 | 3.6 | 5.5 | 2.2 | 2.7 | 5.8 | 34 | 370 | 174 | 32 | 64 | 8.6 |
| 14 | 2.9 | 3.9 | 5.6 | 2.2 | 2.6 | 5.8 | 63 | 444 | 136 | 13 | 755 | 9.6 |
| 15 | 3.1 | 3.9 | 5.5 | 2.1 | 2.3 | 5.8 | 71 | 390 | 61 | 78 | 239 | 29 |
| 16 | 3.1 | 3.9 | 5.0 | 2.2 | 2.1 | 5.8 | 1,020 | 160 | 127 | 34 | 102 | 23 |
| 17 | 3.1 | 4.1 | 5.2 | 2.0 | 1.8 | 5.8 | 1,180 | 257 | 340 | 141 | 56 | 20 |
| 18 | 3.1 | 4.1 | 5.6 | 2.0 | 1.7 | 5.6 | 2,130 | 432 | 195 | 18 | 36 | 34 |
| 19 | 3.1 | 4.1 | 6.4 | 2.0 | 2.0 | 5.6 | 1,150 | 370 | 85 | 50 | 27 | 27 |
| 20 | 3.4 | 4.2 | 7.8 | 2.0 | 2.2 | 5.8 | 458 | 380 | 136 | 132 | 29 | 24 |
| 21 | 3.2 | 4.2 | 7.2 | 2.1 | 2.4 | 9.6 | 339 | 239 | 540 | 85 | 32 | 102 |
| 22 | 3.2 | 4.1 | 6.0 | 2.2 | 2.2 | 29 | 380 | 230 | 1,220 | 30 | 30 | 155 |
| 23 | 3.2 | 4.2 | 6.0 | 2.3 | 2.3 | 24 | 306 | 330 | 644 | 24 | 36 | 92 |
| 24 | 3.2 | 4.2 | 5.4 | 2.6 | 2.3 | 41 | 185 | 230 | 340 | 38 | 17 | 67 |
| 25 | 3.1 | 4.6 | 5.0 | 2.7 | 2.3 | 19 | 155 | 113 | 320 | 30 | 14 | 58 |
| 26 | 2.9 | 4.1 | 6.0 | 2.6 | 2.3 | 12 | 140 | 92 | 540 | 24 | 19 | 64 |
| 27 | 2.8 | 5.8 | 7.6 | 2.6 | 2.7 | 53 | 43 | 99 | 504 | 28 | 30 | 67 |
| 28 | 2.8 | 4.2 | 9.2 | 2.6 | 2.9 | 36 | 86 | 96 | 216 | 11 | 61 | 46 |
| 29 | 2.6 | 3.9 | 8.0 | | 2.9 | 46 | 29 | 75 | 266 | 61 | 67 | 34 |
| 30 | 2.4 | 4.7 | 9.2 | | 3.8 | 288 | 5.1 | 70 | 444 | 181 | 21 | 40 |
| 31 | | 3.9 | 9.8 | | 4.6 | | 60 | | 151 | 202 | | 36 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 87.7 | 114.2 | 164.5 | 123.0 | 90.9 | 3,538.0 | 9,538.1 | 11,295 | 7,512 | 4,344 | 2,502 | 2,223.2 |
| ac. ft. | 174 | 227 | 326 | 244 | 180 | 7,020 | 18,920 | 22,400 | 14,900 | 8,620 | 4,960 | 4,410 |

THE YEAR 82.380 Acre Feet.

PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

APPENDIX "B-3"

* * *

20

INFLOW INTO JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1957

U S G S Records—Provisional, subject to revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|--------------|-------|-------|------|-------|-------|--------|--------|---------|---------|--------|-------|--------|
| 1 | 14 | 10 | 13 | 21 | 11 | 13 | 580 | 598 | 3,500 | 3,790 | 184 | 19 |
| 2 | 11 | 10 | 13 | 22 | 11 | 1,810 | 534 | 3,450 | 3,560 | 2,820 | 123 | 28 |
| 3 | 8.9 | 10 | 12 | 21 | 11 | 1,450 | 474 | 3,050 | 4,190 | 2,610 | 88 | 38 |
| 4 | 7.9 | 10 | 12 | 22 | 14 | 271 | 449 | 1,090 | 4,750 | 2,930 | 66 | 30 |
| 5 | 7.7 | 10 | 12 | 19 | 14 | 147 | 445 | 618 | 3,360 | 2,400 | 127 | 39 |
| 6 | 7.4 | 10 | 11 | 16 | 14 | 45 | 407 | 527 | 3,240 | 2,230 | 110 | 31 |
| 7 | 7.6 | 11 | 11 | 20 | 13 | 32 | 533 | 1,010 | 3,280 | 1,180 | 80 | 48 |
| 8 | 8.1 | 10 | 11 | 16 | 13 | 72 | 536 | 1,970 | 2,120 | 980 | 66 | 3,010 |
| 9 | 8.0 | 9.9 | 11 | 10 | 13 | 14 | 593 | 2,390 | 2,760 | 1,200 | 61 | 1,290 |
| 10 | 8.3 | 10 | 12 | 10 | 12 | 14 | 556 | 2,700 | 3,660 | 1,570 | 58 | 186 |
| 11 | 8.3 | 11 | 13 | 10 | 11 | 17 | 694 | 2,840 | 3,800 | 678 | 107 | 124 |
| 12 | 8.2 | 13 | 15 | 9.9 | 11 | 24 | 542 | 5,630 | 3,190 | 333 | 91 | 93 |
| 13 | 8.0 | 11 | 14 | 9.9 | 11 | 21 | 405 | 3,940 | 3,400 | 163 | 89 | 102 |
| 14 | 7.8 | 12 | 14 | 9.9 | 10 | 20 | 548 | 2,650 | 3,610 | 76 | 785 | 157 |
| 15 | 7.6 | 12 | 14 | 9.5 | 10 | 14 | 667 | 2,170 | 3,380 | 174 | 283 | 139 |
| 16 | 7.6 | 12 | 14 | 9.6 | 9.8 | 14 | 6,450 | 2,150 | 3,390 | 64 | 124 | 97 |
| 17 | 7.3 | 12 | 14 | 9.4 | 9.5 | 14 | 16,900 | 1,790 | 3,230 | 165 | 90 | 83 |
| 18 | 7.4 | 12 | 15 | 9.2 | 9.1 | 13 | 4,180 | 1,520 | 1,980 | 103 | 57 | 216 |
| 19 | 7.4 | 12 | 16 | 8.9 | 9.4 | 12 | 1,570 | 1,030 | 1,720 | 814 | 32 | 257 |
| 20 | 7.4 | 12 | 16 | 8.9 | 9.6 | 13 | 890 | 936 | 2,890 | 382 | 36 | 164 |
| 21 | 7.7 | 12 | 15 | 9.3 | 9.8 | 52 | 755 | 765 | 4,460 | 198 | 41 | 212 |
| 22 | 7.7 | 12 | 14 | 9.4 | 9.6 | 357 | 525 | 476 | 4,300 | 72 | 44 | 299 |
| 23 | 7.7 | 12 | 14 | 10 | 8.9 | 404 | 418 | 640 | 3,490 | 68 | 56 | 170 |
| 24 | 7.7 | 12 | 13 | 10 | 7.5 | 481 | 279 | 720 | 3,240 | 89 | 24 | 136 |
| 25 | 7.8 | 13 | 13 | 11 | 8.9 | 354 | 233 | 271 | 2,410 | 50 | 24 | 117 |
| 26 | 7.8 | 12 | 14 | 10 | 8.4 | 264 | 288 | 143 | 3,260 | 59 | 43 | 149 |
| 27 | 7.9 | 14 | 15 | 10 | 9.1 | 303 | 115 | 579 | 3,130 | 80 | 44 | 155 |
| 28 | 7.7 | 13 | 16 | 10 | 9.3 | 288 | 116 | 2,210 | 2,930 | 43 | 77 | 126 |
| 29 | 7.5 | 13 | 15 | | 9.0 | 180 | 46 | 2,220 | 3,120 | 582 | 81 | 122 |
| 30 | 7.6 | 13 | 17 | | 12 | 510 | 28 | 3,100 | 3,090 | 457 | 30 | 144 |
| 31 | | 13 | 19 | | 16 | | 142 | | 2,570 | 240 | | 124 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 243.0 | 358.9 | 428 | 351.9 | 334.9 | 7,223 | 40,898 | 53,183 | 101,010 | 26,600 | 3,121 | 7,905 |
| ac. ft. | 482 | 712 | 849 | 698 | 664 | 14,330 | 81,120 | 105,500 | 200,400 | 52,760 | 6,190 | 15,680 |

THE YEAR 479,400 Acre Feet.

INFLOW INTO JOHN MARTIN RESERVOIR

APPENDIX "B-1"

* * * *

CONTENTS OF JOHN MARTIN RESERVOIR

Report Year ending October 31, 1957
 Corps of Engineers records—Provisional, subject to revision
 Midnight contents in Acre Feet from capacity table dated December 1, 1956 (Nov. 1-May 19)
 and
 Midnight contents in Acre Feet from capacity table dated March 1, 1956 (May 20-Oct. 31)

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|-----|------|------|------|------|------|-------|-------|--------|--------|--------|--------|--------|
| 1 | 0 | 0 | 780 | 1854 | 2966 | 3901 | 0 | 51179 | 145410 | 277685 | 246686 | 223819 |
| 2 | 0 | 0 | 827 | 1903 | 2999 | 5555 | 0 | 58702 | 150753 | 281332 | 244776 | 222201 |
| 3 | 0 | 0 | 874 | 1959 | 3033 | 9782 | 0 | 62930 | 157632 | 283956 | 242875 | 220589 |
| 4 | 0 | 0 | 912 | 2035 | 3066 | 10690 | 0 | 65678 | 166916 | 286490 | 240795 | 218985 |
| 5 | 0 | 0 | 959 | 2098 | 3099 | 11005 | 0 | 66640 | 172522 | 288399 | 238819 | 217034 |
| 6 | 0 | 0 | 1006 | 2154 | 3149 | 11186 | 0 | 68511 | 177484 | 290744 | 236946 | 215271 |
| 7 | 0 | 0 | 1044 | 2224 | 3199 | 11447 | 0 | 69502 | 181368 | 290744 | 234896 | 213517 |
| 8 | 0 | 40 | 1078 | 2273 | 3232 | 11624 | 0 | 73094 | 183253 | 290316 | 233319 | 218541 |
| 9 | 0 | 63 | 1115 | 2322 | 3290 | 11660 | 0 | 77171 | 186903 | 289463 | 231657 | 222201 |
| 10 | 0 | 87 | 1148 | 2363 | 3315 | 11677 | 0 | 82982 | 191414 | 289250 | 230737 | 222291 |
| 11 | 0 | 148 | 1176 | 2391 | 3348 | 11749 | 0 | 87221 | 195341 | 289037 | 229636 | 222201 |
| 12 | 0 | 178 | 1204 | 2419 | 3367 | 11855 | 0 | 98951 | 198321 | 287125 | 228903 | 221931 |
| 13 | 0 | 210 | 1242 | 2461 | 3396 | 11482 | 0 | 107637 | 202092 | 285010 | 228173 | 221842 |
| 14 | 0 | 230 | 1277 | 2482 | 3416 | 10806 | 0 | 112975 | 206765 | 282905 | 228538 | 221662 |
| 15 | 0 | 260 | 1306 | 2503 | 3426 | 10030 | 0 | 117539 | 210210 | 280600 | 228720 | 221662 |
| 16 | 0 | 288 | 1311 | 2550 | 3464 | 9188 | 9449 | 122104 | 213342 | 277893 | 228355 | 221304 |
| 17 | 0 | 315 | 1346 | 2592 | 3474 | 7861 | 32341 | 125791 | 215888 | 275304 | 228173 | 221126 |
| 18 | 0 | 347 | 1386 | 2600 | 3513 | 6258 | 44033 | 127913 | 216770 | 273347 | 227990 | 221036 |
| 19 | 0 | 375 | 1415 | 2633 | 3532 | 4201 | 47517 | 129298 | 217477 | 272014 | 227808 | 221036 |
| 20 | 0 | 392 | 1450 | 2700 | 3571 | 2329 | 46626 | 129931 | 220322 | 269970 | 227534 | 221036 |
| 21 | 0 | 410 | 1496 | 2708 | 3600 | 582 | 47675 | 130503 | 227079 | 268037 | 227352 | 221215 |
| 22 | 0 | 435 | 1530 | 2725 | 3620 | 0 | 48544 | 130312 | 230737 | 265608 | 227079 | 221394 |
| 23 | 0 | 452 | 1565 | 2766 | 3649 | 0 | 49129 | 130122 | 234989 | 263393 | 226897 | 221126 |
| 24 | 0 | 465 | 1600 | 2799 | 3649 | 0 | 49817 | 130249 | 239100 | 261089 | 226715 | 221036 |
| 25 | 0 | 510 | 1617 | 2849 | 3678 | 0 | 50081 | 129931 | 243825 | 258696 | 226534 | 220857 |
| 26 | 0 | 543 | 1646 | 2882 | 3697 | 0 | 50445 | 129425 | 249862 | 256416 | 226352 | 220768 |
| 27 | 0 | 588 | 1692 | 2907 | 3726 | 0 | 50611 | 129298 | 254937 | 254053 | 226170 | 220589 |
| 28 | 0 | 647 | 1727 | 2949 | 3755 | 0 | 50678 | 132225 | 259393 | 252486 | 225989 | 220411 |
| 29 | 0 | 683 | 1761 | | 3804 | 0 | 50511 | 135323 | 264398 | 251511 | 225626 | 220232 |
| 30 | 0 | 719 | 1784 | | 3882 | 0 | 50511 | 140977 | 268138 | 250056 | 225083 | 220143 |
| 31 | | 745 | 1807 | | 3891 | | 50678 | | 271297 | 248222 | | 220054 |

CONTENTS OF JOHN MARTIN RESERVOIR

* * * * *

APPENDIX "B-5"

OUTFLOW FROM JOHN MARTIN RESERVOIR

Report Year ending October 31, 1957
U S G S Records—Provisional, Subject to Revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|-------|-------|------|------|------|----------|---------|---------|--------|--------|--------|--------|
| 1 | 24 | 21 | 2.0 | 1.1 | 2.0 | 1.8 | 400 | 138 | 562 | 430 | 976 | 592 |
| 2 | 28 | 24 | 2.0 | 1.0 | 2.0 | 3.2 | 390 | 115 | 623 | 610 | 936 | 775 |
| 3 | 24 | 22 | 2.0 | 1.0 | 2.0 | 2.2 | 358 | 22 | 682 | 1,000 | 976 | 796 |
| 4 | 24 | 22 | 2.0 | 1.0 | 2.0 | 1.8 | 362 | 4.4 | 701 | 1,280 | 1,070 | 810 |
| 5 | 24 | 22 | 2.0 | 1.6 | 1.8 | 1.6 | 318 | 2.2 | 694 | 1,280 | 1,040 | 810 |
| 6 | 26 | 15 | 1.8 | 1.3 | 1.8 | 1.6 | 300 | 2.0 | 810 | 1,010 | 1,020 | 810 |
| 7 | 25 | 5.2 | 1.8 | 1.3 | 1.6 | 2.2 | 400 | 1.8 | 1,130 | 880 | 936 | 810 |
| 8 | 22 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 490 | 2.0 | 1,120 | 1,220 | 838 | 495 |
| 9 | 25 | 6 | 1.5 | 1.8 | 1.8 | 1.6 | 550 | 1.8 | 1,080 | 1,310 | 775 | 163 |
| 10 | 27 | 1.8 | 1.3 | 1.8 | 1.5 | 1.6 | 727 | 1.8 | 1,080 | 1,310 | 688 | 322 |
| 11 | 26 | 2.2 | 1.3 | 2.0 | 1.5 | 1.8 | 740 | 2.0 | 1,150 | 740 | 538 | 322 |
| 12 | 25 | 2.0 | 1.3 | 2.0 | 1.5 | 2.0 | 694 | 1.8 | 1,200 | 1,240 | 390 | 322 |
| 13 | 26 | 2.0 | 1.5 | 2.0 | 1.5 | 220 | 430 | 1.6 | 1,220 | 1,370 | 385 | 283 |
| 14 | 30 | 2.0 | 1.5 | 2.0 | 2.0 | 395 | 446 | 69 | 1,220 | 1,320 | 243 | 219 |
| 15 | 31 | 2.0 | 1.6 | 2.0 | 1.8 | 420 | 474 | 129 | 1,220 | 1,260 | 168 | 177 |
| 16 | 28 | 2.0 | 1.5 | 2.2 | 1.8 | 474 | 438 | 115 | 1,250 | 1,310 | 165 | 174 |
| 17 | 30 | 2.0 | 1.3 | 2.3 | 1.6 | 734 | 5.2 | 95 | 1,260 | 1,280 | 159 | 174 |
| 18 | 31 | 2.3 | 1.3 | 2.5 | 1.5 | 936 | 2.8 | 95 | 1,250 | 880 | 126 | 174 |
| 19 | 25 | 3.2 | 1.5 | 2.5 | 1.3 | 944 | 2.8 | 165 | 1,240 | 1,050 | 100 | 174 |
| 20 | 20 | 2.8 | 1.6 | 2.3 | 1.3 | 936 | 2.8 | 283 | 1,240 | 1,240 | 100 | 174 |
| 21 | 28 | 2.8 | 1.6 | 2.3 | 1.5 | 936 | 2.8 | 400 | 1,250 | 1,200 | 102 | 174 |
| 22 | 26 | 2.8 | 2.0 | 2.3 | 1.1 | 888 | 2.5 | 490 | 1,240 | 1,180 | 102 | 174 |
| 23 | 24 | 2.8 | 1.8 | 2.3 | 1.1 | 538 | 2.3 | 474 | 1,250 | 1,230 | 102 | 174 |
| 24 | 26 | 2.5 | 1.8 | 2.3 | 1.0 | 520 | 2.5 | 435 | 1,280 | 1,220 | 105 | 180 |
| 25 | 27 | 2.5 | 1.8 | 2.2 | 1.3 | 446 | 2.0 | 425 | 366 | 1,180 | 105 | 180 |
| 26 | 28 | 2.0 | 1.8 | 1.8 | 1.1 | 385 | 2.0 | 425 | 12 | 1,220 | 105 | 180 |
| 27 | 31 | 2.0 | 1.8 | 2.0 | 1.3 | 372 | 71 | 420 | 202 | 1,220 | 105 | 180 |
| 28 | 28 | 1.8 | 2.0 | 2.0 | 1.3 | 336 | 115 | 474 | 610 | 1,020 | 123 | 180 |
| 29 | 24 | 1.8 | 2.0 | | 1.3 | 304 | 156 | 508 | 720 | 880 | 138 | 180 |
| 30 | 21 | 1.8 | 1.5 | | 1.3 | 358 | 177 | 502 | 701 | 1,170 | 285 | 180 |
| 31 | | 1.8 | 1.3 | | 1.3 | | 165 | | 675 | 1,080 | | 174 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 784 | 182.3 | 51.8 | 52.5 | 47.5 | 10,165.0 | 8,228.7 | 5,800.4 | 29,038 | 34,620 | 12,901 | 10,532 |
| ac. ft. | 1,560 | 362 | 103 | 104 | 94 | 20,160 | 16,320 | 11,500 | 57,600 | 68,670 | 25,590 | 20,890 |

THE YEAR 223,000 Acre Feet.

OUTFLOW FROM JOHN MARTIN RESERVOIR

* * * * *

APPENDIX "B-6"

23

ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

Report Year ending October 31, 1957
U S G S Records—Provisional, Subject to Revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1 | 24 | 38 | 41 | 50 | 43 | 57 | 141 | 345 | 107 | 714 | 543 | 77 |
| 2 | 33 | 36 | 41 | 56 | 43 | 73 | 125 | 524 | 89 | 591 | 500 | 77 |
| 3 | 38 | 35 | 41 | 60 | 43 | 75 | 111 | 503 | 70 | 410 | 501 | 160 |
| 4 | 40 | 33 | 41 | 54 | 44 | 65 | 115 | 791 | 57 | 440 | 561 | 273 |
| 5 | 40 | 32 | 41 | 61 | 46 | 57 | 106 | 442 | 52 | 789 | 602 | 315 |
| 6 | 43 | 33 | 41 | 61 | 52 | 48 | 96 | 298 | 48 | 708 | 621 | 341 |
| 7 | 43 | 43 | 43 | 64 | 48 | 50 | 86 | 254 | 45 | 989 | 660 | 370 |
| 8 | 43 | 36 | 48 | 67 | 52 | 48 | 73 | 218 | 114 | 641 | 653 | 411 |
| 9 | 42 | 33 | 38 | 67 | 50 | 52 | 83 | 320 | 260 | 593 | 610 | 1170 |
| 10 | 42 | 33 | 50 | 62 | 48 | 46 | 111 | 242 | 326 | 537 | 640 | 565 |
| 11 | 38 | 32 | 56 | 57 | 44 | 43 | 202 | 227 | 254 | 1780 | 839 | 349 |
| 12 | 42 | 36 | 66 | 57 | 44 | 41 | 186 | 832 | 292 | 581 | 636 | 318 |
| 13 | 43 | 36 | 59 | 55 | 48 | 41 | 227 | 442 | 347 | 579 | 485 | 310 |
| 14 | 43 | 35 | 48 | 50 | 46 | 41 | 206 | 246 | 393 | 667 | 452 | 286 |
| 15 | 43 | 38 | 45 | 52 | 46 | 50 | 147 | 340 | 423 | 605 | 432 | 272 |
| 16 | 51 | 43 | 47 | 50 | 46 | 53 | 5100 | 286 | 404 | 565 | 342 | 239 |
| 17 | 47 | 51 | 51 | 53 | 46 | 41 | 4300 | 206 | 392 | 570 | 315 | 196 |
| 18 | 48 | 48 | 46 | 52 | 46 | 39 | 1100 | 154 | 445 | 646 | 298 | 168 |
| 19 | 47 | 46 | 42 | 50 | 46 | 80 | 1000 | 115 | 468 | 654 | 262 | 172 |
| 20 | 37 | 43 | 40 | 55 | 46 | 180 | 824 | 96 | 529 | 386 | 242 | 173 |
| 21 | 33 | 41 | 42 | 50 | 52 | 219 | 906 | 80 | 539 | 510 | 214 | 171 |
| 22 | 36 | 41 | 45 | 37 | 50 | 263 | 486 | 79 | 542 | 500 | 178 | 157 |
| 23 | 38 | 36 | 43 | 43 | 44 | 372 | 351 | 232 | 496 | 474 | 146 | 137 |
| 24 | 41 | 35 | 39 | 57 | 65 | 287 | 286 | 303 | 470 | 483 | 126 | 134 |
| 25 | 43 | 32 | 33 | 50 | 115 | 165 | 251 | 283 | 663 | 536 | 112 | 148 |
| 26 | 43 | 32 | 35 | 46 | 55 | 138 | 276 | 201 | 2470 | 509 | 104 | 157 |
| 27 | 41 | 33 | 35 | 43 | 62 | 1480 | 266 | 156 | 703 | 512 | 105 | 153 |
| 28 | 41 | 41 | 36 | 43 | 67 | 414 | 235 | 131 | 357 | 522 | 89 | 160 |
| 29 | 46 | 41 | 37 | | 70 | 214 | 238 | 130 | 374 | 583 | 81 | 159 |
| 30 | 38 | 38 | 41 | | 62 | 183 | 330 | 135 | 491 | 405 | 82 | 141 |
| 31 | | 38 | 45 | | 60 | | 315 | | 606 | 480 | | 141 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 1227 | 1168 | 1356 | 1502 | 1629 | 4915 | 18279 | 8611 | 12826 | 18959 | 11431 | 7900 |
| ac. ft. | 2430 | 2320 | 2690 | 2980 | 3230 | 9750 | 36260 | 17080 | 25440 | 37600 | 22670 | 15670 |

THE YEAR 178,100 Acre Feet.

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

ARKANSAS RIVER AT THE COLORADO-KANSAS STATELINE

APPENDIX "B-7"

* * * *

24

ARKANSAS RIVER AT GARDEN CITY, KANSAS

Report-Year ending October 31, 1957
 U S G S Records—Provisional, Subject to Revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|-------|-------|-------|-------|-------|------|---------|-------|------|-------|--------|-------|
| 1 | 5.3 | 5.0 | 33 | 13 | 4.4 | 118 | 14 | 622 | 195 | 27 | 43 | 4.2 |
| 2 | 3.0 | 6.1 | 33 | 14 | 3.4 | 116 | 14 | 544 | 173 | 27 | 20 | 3.8 |
| 3 | 3.0 | 7.1 | 34 | 17 | 2.7 | 120 | 16 | 344 | 122 | 30 | 23 | 4.0 |
| 4 | 2.8 | 7.4 | 35 | 22 | 3.9 | 113 | 12 | 190 | 88 | 33 | 20 | 4.8 |
| 5 | 3.6 | 7.6 | 38 | 26 | 4.0 | 110 | 10 | 141 | 75 | 29 | 18 | 4.2 |
| 6 | 3.6 | 3.7 | 37 | 31 | 5.1 | 104 | 9.6 | 384 | 58 | 29 | 25 | 3.5 |
| 7 | 5.9 | 3.2 | 38 | 54 | 5.6 | 108 | 9.6 | 408 | 43 | 51 | 36 | 4.2 |
| 8 | 4.2 | 3.2 | 41 | 68 | 4.7 | 100 | 9.3 | 336 | 38 | 43 | 35 | 4.8 |
| 9 | 5.0 | 3.2 | 37 | 58 | 4.9 | 101 | 11 | 272 | 35 | 38 | 41 | 6.0 |
| 10 | 3.6 | 3.2 | 11 | 39 | 3.7 | 96 | 11 | 276 | 32 | 18 | 49 | 8.2 |
| 11 | 3.3 | 3.2 | 11 | 31 | 5.1 | 93 | 12 | 328 | 34 | 12 | 75 | 7.6 |
| 12 | 3.6 | 4.4 | 16 | 29 | 5.1 | 82 | 10 | 290 | 32 | 8.0 | 67 | 3.6 |
| 13 | 3.9 | 9.0 | 22 | 25 | 4.9 | 71 | 11 | 395 | 25 | 58 | 154 | 2.6 |
| 14 | 3.9 | 12 | 13 | 20 | 5.1 | 58 | 11 | 640 | 16 | 25 | 139 | 5.2 |
| 15 | 3.9 | 22 | 11 | 19 | 4.9 | 54 | 11 | 505 | 24 | 15 | 148 | 4.0 |
| 16 | 3.0 | 20 | 9.3 | 22 | 4.2 | 51 | 24 | 396 | 19 | 16 | 99 | 2.5 |
| 17 | 5.6 | 22 | 9.5 | 18 | 3.9 | 44 | 1000 | 412 | 15 | 12 | 60 | 2.1 |
| 18 | 4.2 | 22 | 9.8 | 16 | 5.3 | 31 | 3290 | 340 | 14 | 10 | 35 | 2.6 |
| 19 | 4.2 | 25 | 13 | 17 | 5.3 | 24 | 1150 | 344 | 13 | 12 | 26 | 2.0 |
| 20 | 4.5 | 26 | 14 | 18 | 5.8 | 20 | 660 | 117 | 26 | 12 | 25 | 3.0 |
| 21 | 4.4 | 29 | 26 | 16 | 6.0 | 18 | 562 | 75 | 17 | 18 | 21 | 3.2 |
| 22 | 3.7 | 29 | 17 | 4.0 | 6.0 | 18 | 441 | 66 | 18 | 11 | 17 | 3.2 |
| 23 | 3.9 | 26 | 10 | 4.2 | 7.8 | 17 | 384 | 1180 | 17 | 4.0 | 17 | 2.6 |
| 24 | 4.5 | 17 | 11 | 22 | 4.2 | 15 | 229 | 2080 | 16 | 11 | 14 | 2.3 |
| 25 | 4.2 | 22 | 10 | 34 | 16 | 19 | 112 | 675 | 10 | 10 | 9.0 | 2.4 |
| 26 | 4.5 | 22 | 9.3 | 17 | 6.5 | 14 | 78 | 465 | 35 | 12 | 6.4 | 2.8 |
| 27 | 3.7 | 26 | 7.2 | 11 | 6.0 | 13 | 62 | 344 | 45 | 14 | 4.0 | 3.5 |
| 28 | 4.7 | 32 | 9.8 | 6.8 | 6.2 | 11 | 55 | 276 | 119 | 14 | 5.4 | 5.8 |
| 29 | 4.7 | 37 | 10 | | 5.8 | 51 | 51 | 212 | 65 | 15 | 6.0 | 7.1 |
| 30 | 4.9 | 36 | 11 | | 7.6 | 36 | 211 | 195 | 43 | 69 | 5.0 | 8.2 |
| 31 | | 34 | 11 | | 120 | | 1550 | | 25 | 76 | | 8.8 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | 123.3 | 525.3 | 598.0 | 672.0 | 352.5 | 1826 | 10030.5 | 12852 | 1487 | 759.0 | 1242.8 | 898.7 |
| ac. ft. | 245 | 1040 | 1190 | 1330 | 699 | 3620 | 19900 | 25490 | 2950 | 1510 | 2470 | 1780 |

THE YEAR 62,220 Acre Feet.

ARKANSAS RIVER AT GARDEN CITY, KANSAS

APPENDIX "B-8"
 * * * * *

DEMANDS BY COLORADO FOR WATER

Report Year Ending October 31, 1957

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|------|------|------|------|------|--------|-----|--------|--------|--------|--------|--------|
| 1 | | | | | | | | 45 | 570 | 50 | 600 | 430 |
| 2 | | | | | | | | | 620 | 185 | 570 | 450 |
| 3 | | | | | | | | | 670 | 625 | 550 | 450 |
| 4 | | | | | | | | | 700 | 700 | 550 | 450 |
| 5 | | | | | | | | | 700 | 700 | 490 | 450 |
| 6 | | | | | | | | | 715 | 600 | 450 | 450 |
| 7 | | | | | | | | | 750 | 640 | 360 | 450 |
| 8 | | | | | | | | | 750 | 640 | 350 | 400 |
| 9 | | | | | | | | | 750 | 720 | 220 | 300 |
| 10 | | | | | | | | | 750 | 720 | 185 | 275 |
| 11 | | | | | | | | | * 810 | 520 | 200 | 400 |
| 12 | | | | | | | | | * 850 | 730 | 200 | 380 |
| 13 | | | | | | 290 | | | * 850 | * 780 | 190 | 340 |
| 14 | | | | | | 450 | | 50 | * 850 | * 850 | 160 | 290 |
| 15 | | | | | | 460 | | 80 | * 850 | * 820 | 160 | 200 |
| 16 | | | | | | 475 | | 80 | * 850 | * 775 | 160 | 180 |
| 17 | | | | | | 510 | | 80 | * 785 | 750 | 160 | 180 |
| 18 | | | | | | * 610 | | 80 | 750 | 700 | 130 | 180 |
| 19 | | | | | | * 650 | | 170 | 750 | 700 | 110 | 180 |
| 20 | | | | | | * 650 | | 270 | 750 | 700 | 110 | 180 |
| 21 | | | | | | * 650 | | 430 | 750 | 700 | 110 | 180 |
| 22 | | | | | | * 555 | | 500 | 750 | 700 | 110 | 180 |
| 23 | | | | | | | | 470 | 750 | 725 | 110 | 180 |
| 24 | | | | | | | | 425 | 750 | 730 | 110 | 180 |
| 25 | | | | | | | | 425 | 20 | 700 | 110 | 180 |
| 26 | | | | | | | | 425 | 0 | 700 | 110 | 180 |
| 27 | | | | | | | 65 | 425 | 0 | 700 | 110 | 180 |
| 28 | | | | | | | 100 | 490 | 150 | 650 | 125 | 180 |
| 29 | | | | | | | 100 | 525 | 250 | 635 | 135 | 180 |
| 30 | | | | | | | 100 | 525 | 250 | 635 | 300 | 180 |
| 31 | | | | | | | 100 | | 220 | 600 | | 165 |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | | | | | | 5,300 | 465 | 5,495 | 18,960 | 20,380 | 7,235 | 8,580 |
| ac. ft. | | | | | | 10,510 | 920 | 10,900 | 37,600 | 40,420 | 14,350 | 17,020 |

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* River Flow and Stored Water.

THE YEAR 131,720 Ac. Ft.

DEMANDS BY COLORADO FOR WATER

APPENDIX "B-9"

DEMANDS BY KANSAS FOR WATER

Report-Year Ending October 31, 1957
(Arkansas River Compact Administration records)

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|------|------|------|------|------|-------|-----|------|--------|--------|--------|-------|
| 1 | | | | | | | | | | 500 | 500 | 225 |
| 2 | | | | | | | | | | 500 | 500 | 350 |
| 3 | | | | | | | | | | 500 | 500 | 350 |
| 4 | | | | | | | | | | 500 | 500 | 350 |
| 5 | | | | | | | | | | 500 | 500 | 350 |
| 6 | | | | | | | | 125 | | 500 | 500 | 350 |
| 7 | | | | | | | | 400 | | 500 | 500 | 350 |
| 8 | | | | | | | | 400 | * | 750 | 500 | 350 |
| 9 | | | | | | | | 400 | * | 750 | 500 | 350 |
| 10 | | | | | | | | 400 | * | 750 | 500 | 100 |
| 11 | | | | | | | | 400 | * | 750 | 500 | |
| 12 | | | | | | | | 400 | | 500 | 425 | |
| 13 | | | | | | | | 400 | | 500 | 350 | |
| 14 | | | | | | | | 400 | | 500 | 350 | |
| 15 | | | | | | | | 400 | | 500 | 125 | |
| 16 | | | | | | | | 430 | | 500 | | |
| 17 | | | | | | 200 | | 500 | | 500 | | |
| 18 | | | | | | 300 | | 500 | | 500 | | |
| 19 | | | | | | 300 | | 500 | | 500 | | |
| 20 | | | | | | 300 | | 500 | | 500 | | |
| 21 | | | | | | 300 | | 500 | | 500 | | |
| 22 | | | | | | 255 | | 500 | | 500 | | |
| 23 | | | | | | | | 500 | | 500 | | |
| 24 | | | | | | | | 500 | | 500 | | |
| 25 | | | | | | | | 500 | | 500 | | |
| 26 | | | | | | | | 500 | | 500 | | |
| 27 | | | | | | | | 500 | | 500 | | |
| 28 | | | | | | | | 500 | | 500 | | |
| 29 | | | | | | | | 500 | | 500 | | |
| 30 | | | | | | | | 500 | | 500 | | |
| 31 | | | | | | | | 500 | | 500 | | |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | | | | | | 1,655 | | | 11,655 | 16,500 | 6,750 | 3,125 |
| ac. ft. | | | | | | 3,280 | | | 23,120 | 32,730 | 13,390 | 6,200 |

* River flow and stored water.

THE YEAR 78,720 Ac. Ft.

DEMANDS BY KANSAS FOR WATER

APPENDIX "B-10"
* * * *

STATELINE FLOW ON DAYS OF KANSAS DEMAND*

Report-Year ending October 31, 1957
 U S G S Records—Provisional, subject to revision

| DAY | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. |
|----------|------|------|------|------|------|-------|-----|-------|--------|--------|--------|-------|
| 1 | | | | | | | | | | 714 | 543 | |
| 2 | | | | | | | | | | 591 | 500 | |
| 3 | | | | | | | | | | 410 | 501 | |
| 4 | | | | | | | | | | 440 | 561 | 273 |
| 5 | | | | | | | | | | 789 | 602 | 315 |
| 6 | | | | | | | | | | 708 | 621 | 341 |
| 7 | | | | | | | | | | 989 | 660 | 370 |
| 8 | | | | | | | | | | 641 | 653 | 411 |
| 9 | | | | | | | | 260 | | 593 | 610 | 1,170 |
| 10 | | | | | | | | 326 | | 537 | 640 | 565 |
| 11 | | | | | | | | 254 | 1,780 | 839 | 349 | |
| 12 | | | | | | | | 292 | | 581 | 636 | 318 |
| 13 | | | | | | | | 347 | | 579 | 485 | 310 |
| 14 | | | | | | | | 393 | | 667 | 452 | |
| 15 | | | | | | | | 423 | | 605 | 432 | |
| 16 | | | | | | | | 404 | | 565 | 342 | |
| 17 | | | | | | | | 392 | | 570 | 315 | |
| 18 | | | | | | | | 445 | | 646 | 298 | |
| 19 | | | | | | | | 468 | | 654 | | |
| 20 | | | | | | 180 | | 529 | | 386 | | |
| 21 | | | | | | 219 | | 539 | | 510 | | |
| 22 | | | | | | 263 | | 542 | | 500 | | |
| 23 | | | | | | 372 | | 496 | | 474 | | |
| 24 | | | | | | 287 | | 470 | | 483 | | |
| 25 | | | | | | 165 | | 663 | | 536 | | |
| 26 | | | | | | | | 2,470 | | 509 | | |
| 27 | | | | | | | | 703 | | 512 | | |
| 28 | | | | | | | | 357 | | 522 | | |
| 29 | | | | | | | | 374 | | 583 | | |
| 30 | | | | | | | | 491 | | 405 | | |
| 31 | | | | | | | | 606 | | 480 | | |
| TOTAL | | | | | | | | | | | | |
| sec. ft. | | | | | | 1,486 | | | 12,244 | 18,959 | 9,690 | 4,422 |
| ac. ft. | | | | | | 2,950 | | | 24,290 | 37,600 | 19,220 | 8,770 |

THE YEAR 92,830 Acre Feet.

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

STATELINE FLOW ON DAYS OF KANSAS DEMAND*

APPENDIX "B-11"
 * * * *

APPENDIX "B-12"

* * * *

DIVERSIONS BY DITCHES IN COLORADO WATER DISTRICTS 14 AND 17

Report-Year Ending October 31, 1957

Source of Information, A.V.D.A. Reports—Reservoir Water is that from upstream reservoirs above Pueblo
(Acre-Feet)

| | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | THE YEAR |
|--------------------------|--------------------|--------------------|--------------------|--------|--------|--------|---------|---------|---------|---------|--------|--------|-----------|
| Bessemer (River) | 8,212 | 10,687 | 3,691 | 1,085 | 3,334 | 2,973 | 8,467 | 11,165 | 18,198 | 17,706 | 5,177 | 4,308 | 95,003 |
| Wasted Below Pueblo | | | | | | | | | | | | | |
| Gage | 4,104 | 6,627 | 1,490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,221 |
| Net to Bessemer..... | 4,108 | 4,060 | 2,201 | 1,085 | 3,334 | 2,973 | 8,467 | 11,165 | 18,198 | 17,706 | 5,177 | 4,308 | 82,782 |
| West Pueblo (River)..... | 109 | 0 | 0 | 0 | 95 | 179 | 184 | 179 | 363 | 365 | 179 | 184 | 1,837 |
| Booth-Orchard Gr. (Riv.) | 0 | 0 | 0 | 323 | 916 | 926 | 871 | 1,063 | 1,192 | 1,139 | 1,071 | 692 | 8,193 |
| Excelsior (River) | 0 | 0 | 0 | 0 | 0 | 0 | 591 | 952 | 1,666 | 1,418 | 0 | 0 | 4,627 |
| Collier (River) | 0 | 0 | 0 | 0 | 0 | 0 | 428 | 595 | 599 | 563 | 0 | 0 | 2,185 |
| Colorado Canal (River).. | 0 | 0 | 0 | 0 | 0 | 0 | 20,543 | 26,156 | 26,654 | 9,501 | 0 | 8,340 | 91,194 |
| Res. or Imported..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,841 | 10,800 | 8,652 | 2,372 | 28,665 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 20,543 | 26,156 | 33,495 | 20,301 | 8,652 | 10,712 | 119,859 |
| Highline (River) | 2,890 | 3,505 | 4,030 | 3,570 | 3,505 | 5,026 | 14,690 | 19,067 | 25,797 | 18,791 | 5,768 | 6,756 | 113,395 |
| Oxford Canal (River).... | 833 | 333 | 738 | 764 | 831 | 1,057 | 2,725 | 2,698 | 6,387 | 5,641 | 4,056 | 1,995 | 28,058 |
| Otero (River) | 0 | 0 | 0 | 0 | 0 | 0 | 801 | 5,615 | 5,625 | 2,162 | 0 | 0 | 14,203 |
| Catlin (River) | ¹ 1,738 | ² 4,262 | ³ 4,019 | 4,725 | 530 | 7,664 | 9,487 | 11,407 | 16,919 | 15,160 | 10,219 | 7,636 | 93,766 |
| Holbrook (River) | 0 | 0 | 0 | 192 | 0 | 577 | 21,287 | 13,394 | 21,602 | 14,995 | 1,448 | 5,681 | 79,176 |
| Rocky Ford (River)..... | 4,665 | 2,777 | 837 | 3,465 | 4,112 | 2,257 | 4,368 | 4,780 | 5,900 | 5,750 | 4,479 | 3,064 | 46,454 |
| Ft. Lyon Storage (River) | 0 | 0 | 0 | 0 | 0 | 0 | 23,566 | 93,334 | 14,164 | 0 | 0 | 534 | 131,598 |
| Ft. Lyon Canal (River).. | 8,263 | 10,157 | 9,610 | 10,566 | 7,236 | 24,089 | 46,848 | 62,031 | 74,926 | 62,108 | 28,310 | 25,492 | 369,636 |
| Las Animas Cons. (River) | 474 | 1,428 | 873 | 1,277 | 924 | 2,836 | 3,870 | 6,182 | 8,648 | 7,375 | 3,566 | 2,521 | 39,974 |
| Las Animas Town (River) | 450 | 0 | 0 | 0 | 177 | 676 | 906 | 1,123 | 1,763 | 1,472 | 1,232 | 932 | 8,731 |
| TOTAL | | | | | | | | | | | | | |
| River | 23,530 | 26,522 | 22,308 | 25,967 | 21,660 | 48,260 | 159,632 | 259,741 | 230,403 | 164,146 | 65,505 | 68,135 | 1,115,809 |
| Res. or Imported..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,841 | 10,800 | 8,652 | 2,372 | 28,665 |
| | 23,530 | 26,522 | 22,308 | 25,967 | 21,660 | 48,260 | 159,632 | 259,741 | 237,244 | 174,946 | 74,157 | 70,507 | 1,144,474 |

¹ Includes 893 Ac. Ft. diverted for Holly Sugar Co.

² Includes 922 Ac. Ft. diverted for Holly Sugar Co.

³ Includes 129 Ac. Ft. diverted for Holly Sugar Co.

APPENDIX "B-13"

* * * *

DIVERSIONS BY DITCHES IN COLORADO WATER DISTRICT 67

Report Year Ending October 31, 1957

Source of Information A.V.D.A. Reports

(Acre-Feet)

| | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | THE YEAR |
|-------------------------|-------|-------|------|------|------|--------|--------|--------|--------|--------|--------|--------|-------------|
| 2 Ft. Bent Canal..... | 651 | 214 | 0 | 0 | 0 | 1,281 | 1,248 | 1,607 | 4,124 | 5,117 | 2,807 | 2,100 | 19,149 |
| Keesee Ditch | 10 | 0 | 0 | 0 | 0 | 337 | 321 | 341 | 815 | 801 | 434 | 0 | 3,059 |
| Amity Canal | 0 | 0 | 0 | 0 | 0 | 9,053 | 9,267 | 4,356 | 17,621 | 24,970 | 7,626 | 11,996 | 84,889 |
| Lamar Canal | 1,055 | 589 | 234 | 0 | 0 | 3,074 | 4,766 | 3,661 | 9,239 | 8,156 | 4,618 | 3,201 | 38,593 |
| Hyde Ditch | 119 | 24 | 0 | 0 | 50 | 119 | 347 | 256 | 169 | 300 | 173 | 133 | 1,690 |
| Manvel Canal | 63 | 182 | 0 | 0 | 77 | 639 | 337 | 40 | 613 | 809 | 647 | 432 | 3,839 |
| X. Y. & Graham Canal... | 492 | 405 | 0 | 0 | 69 | 666 | 589 | 543 | 1,734 | 1,827 | 1,500 | 875 | 8,700 |
| Buffalo Canal | 833 | 712 | 240 | 0 | 401 | 1,577 | 1,617 | 1,884 | 2,906 | 3,283 | 2,214 | 1,589 | 17,256 |
| Sisson Canal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 218 | 105 | 0 | 323 |
| TOTAL | 3,223 | 2,126 | 474 | 0 | 597 | 16,746 | 18,492 | 12,688 | 37,221 | 45,481 | 20,124 | 20,326 | 177,498 |

APPENDIX "B-14"

* * * *

DIVERSIONS BY DITCHES IN KANSAS

Report-Year Ending October 31, 1957

Frontier Ditch, U.S.G.S. Records

Other Ditches, Kansas Division of Water Resources Records

(Acre-Feet)

| | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | THE YEAR |
|--|-------|------|------|-------|-------|-------|--------|-------|--------|--------|--------|--------|-------------|
| Frontier Ditch | 1,040 | 0 | 0 | 0 | 0 | 345 | 1,710 | 454 | 1,680 | 2,650 | 1,030 | 511 | 9,420 |
| Alamo Canal | 123 | 28 | 0 | 0 | 0 | 0 | 129 | 0 | 20 | 397 | 97 | 0 | 794 |
| Ft. Aubrey Canal..... | 518 | 12 | 0 | 0 | 0 | 143 | 272 | 0 | 504 | 2,030 | 490 | 180 | 4,149 |
| Total Stateline to Syracuse | 1,681 | 40 | 0 | 0 | 0 | 488 | 2,111 | 454 | 2,204 | 5,077 | 1,617 | 691 | 14,363 |
| Amazon Canal | 0 | 0 | 0 | 36 | 869 | 0 | 853 | 930 | 5,640 | 3,030 | 5,790 | 3,630 | 20,778 |
| South Side Ditch..... | 0 | 0 | 0 | 2,100 | 1,790 | 2,120 | 1,300 | 3,440 | 3,590 | 4,190 | 4,850 | 3,550 | 26,930 |
| Great Eastern Canal..... | 0 | 0 | 0 | 0 | 113 | 2,200 | 12,000 | 3,120 | 734 | 10,210 | 6,570 | 4,390 | 39,337 |
| Farmer's Ditch | 0 | 0 | 0 | 63 | 522 | 1,470 | 2,390 | 1,640 | 5,580 | 6,200 | 1,640 | 1,640 | 21,145 |
| Garden City Canal..... | 147 | 0 | 0 | 4 | 0 | 0 | 18 | 280 | 1,230 | 581 | 1,105 | 165 | 3,530 |
| Total Syracuse to Garden City | 147 | 0 | 0 | 2,203 | 3,294 | 5,790 | 16,561 | 9,410 | 16,774 | 24,211 | 19,955 | 13,375 | 111,720 |
| Total Stateline to Garden City..... | 1,828 | 40 | 0 | 2,203 | 3,294 | 6,278 | 18,672 | 9,864 | 18,978 | 29,228 | 21,572 | 14,066 | 126,083 |

APPENDIX "B-15"

* * * *

SUMMARY TABULATION

(Acre-Feet)

| | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | THE YEAR | FROM APP. NO. |
|--|------|------|-------|-------|------|-------|--------|--------|---------|--------|--------|--------|----------|---------------|
| Arkansas River at Las Animas, Colo..... | 308 | 480 | 526 | 457 | 485 | 7320 | 62160 | 83050 | 185500 | 44160 | 1230 | 11260 | 396900 | B- 2 |
| Purgatoire River near Las Animas, Colo..... | 174 | 227 | 326 | 244 | 180 | 7020 | 18920 | 22400 | 14900 | 8620 | 4960 | 4410 | 82380 | B- 3 |
| Inflow to John Martin Reservoir | 482 | 712 | 849 | 698 | 664 | 14330 | 81120 | 105500 | 200400 | 52760 | 6190 | 15680 | 479400 | B- 4* |
| Reservoir contents at end of month..... | 0 | 745 | 1807 | 2949 | 3891 | 0 | 50678 | 140977 | 271297 | 248222 | 225083 | 220054 | 220054 | B- 5 |
| Net change in reservoir storage | 0 | +745 | +1062 | +1142 | +942 | -3891 | +50678 | +90299 | +130320 | -23075 | -23139 | -5029 | +220054 | B- 5 |
| Outflow from John Martin Reservoir | 1560 | 362 | 103 | 104 | 94 | 20160 | 16320 | 11500 | 57600 | 68670 | 25590 | 20890 | 223000 | B- 6 |
| Diversions in District 67, Colo. | 3223 | 2126 | 474 | 0 | 597 | 16746 | 18492 | 12688 | 37221 | 45481 | 20124 | 20326 | 177498 | B-13 |
| Flow at Colorado-Kansas Stateline | 2430 | 2320 | 2690 | 2980 | 3230 | 9750 | 36260 | 17080 | 25440 | 37600 | 22670 | 15670 | 178100 | B- 7 |
| Diversions in Kansas..... | 1828 | 40 | 0 | 2203 | 3294 | 6278 | 18672 | 9864 | 18978 | 29288 | 21572 | 14066 | 126083 | B-14 |
| Arkansas River at Garden City, Kansas..... | 245 | 1040 | 1190 | 1330 | 699 | 3620 | 19900 | 25490 | 2950 | 1510 | 2470 | 1780 | 62220 | B- 8 |

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

APPENDIX "C"

IN MEMORIAM TO HANS KRAMER

We pause this morning to impose in the record a testimonial to our departed colleague, Hans Kramer, Brigadier General, U. S. A. (Ret.), the Representative of the United States, who departed this life February 16, 1957.

Pursuant to Public Law 34, 79th Congress, 1st Session, the President of the United States in 1945 appointed General Kramer as the Representative of the United States to participate in negotiations between the States of Colorado and Kansas for the settlement of the then existing water use controversies relating to the Arkansas River and its tributaries. As a result of such negotiations a compact was entered into between the two states on December 14, 1948, at Denver, Colorado, and thereafter the compact was formally ratified by the legislature of each state and by Congress and was approved by the President. The services of General Kramer throughout the negotiation of the compact and in the drafting thereof, as well as toward securing its ratification, were invaluable. Upon ratification of the compact by Congress in 1950, General Kramer was appointed by the President as the Representative of the United States to serve on this Administration, and he participated as such representative with fidelity and honor until his death.

The attempt to preserve any record in writing of an individual's life is a vain task, for in the final analysis, no written record whatever its substance can accurately depict the life of a man. The true testimonial consists of the intangibles of the heart and mind rather than the inscriptions upon parchment. The brief tribute uttered today can give but inadequate expression to General Kramer's qualities of mind and heart. A memorial to him is written best in the hearts and minds of all who have benefited by their fortunate association with him. We do well to reflect upon the life of one who has enriched our lives so much.

A few sentences cannot do justice to all that General Kramer passed on to us, the benefactors of his personal associations, friendship, sincerity, graciousness and affection. Words do not properly produce the effective note of loss which comes when a friend and colleague has left us. Accordingly, we express our deep sorrow over his death, cherish the memories exemplified by his life, and give grateful recognition to his contributions to this Administration and to each of us individually.

AND, NOW BE IT RESOLVED, That this memorial be entered at length in the minutes of this Administration, and that the Secretary forward a copy hereof to the family of General Kramer.

APPENDIX "D"

RESOLUTION

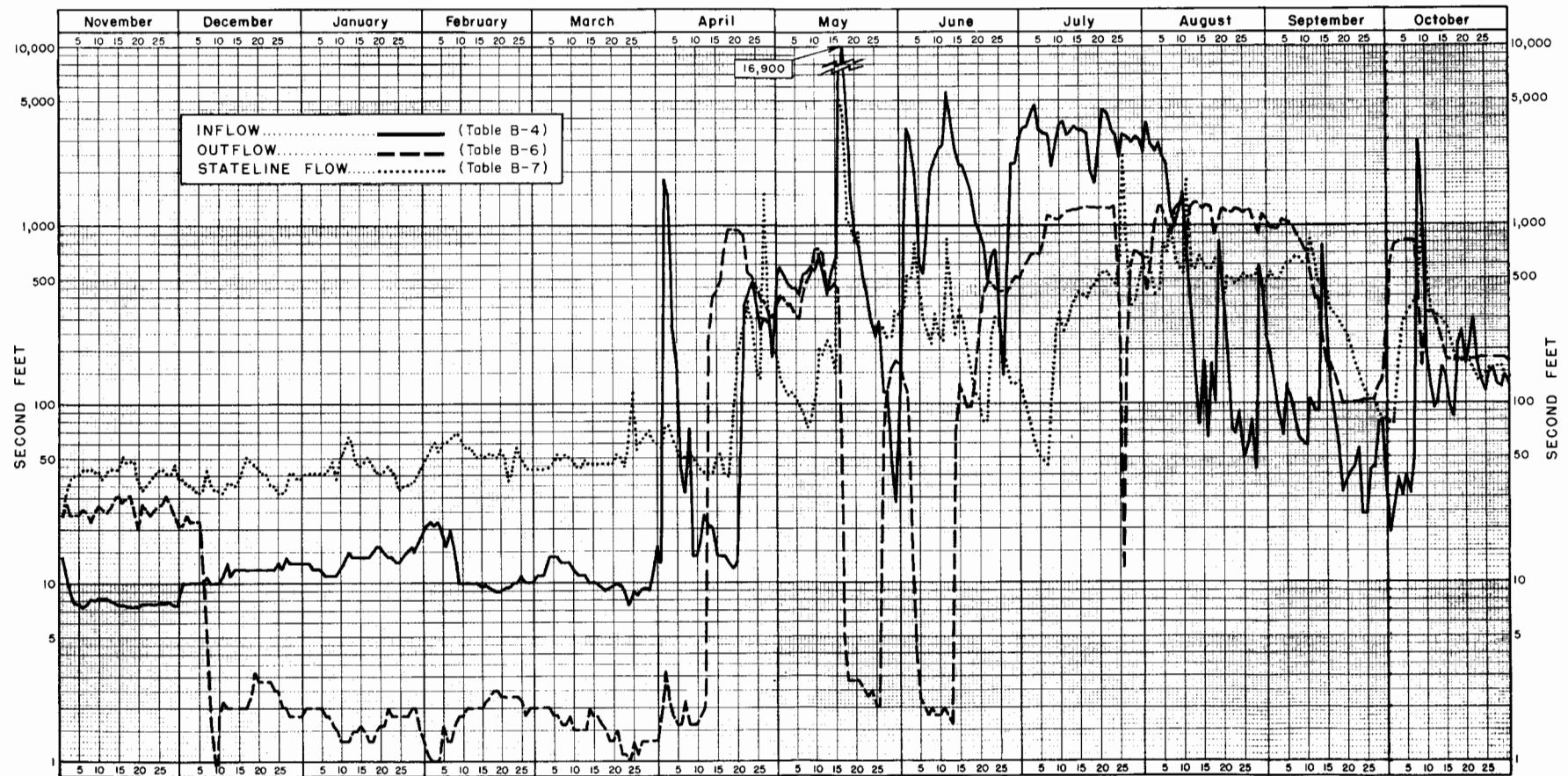
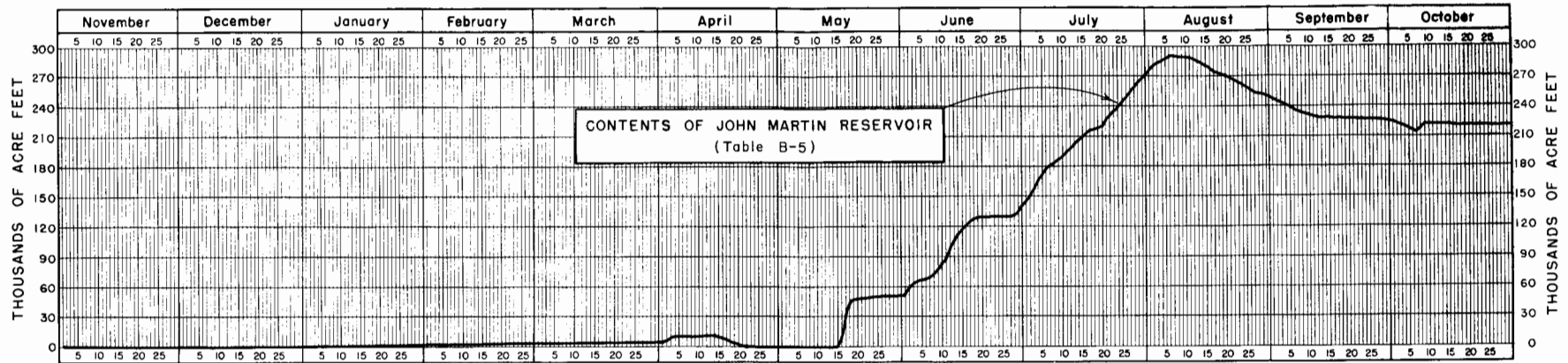
Realizing the gratitude which we, as new members of the Arkansas River Compact Administration, and the public in general should feel toward the members whom we have recently succeeded, it is fitting that we acknowledge the same through the permanent records of our proceedings.

Three of these outgoing members were also members of the Commission which framed the compact. In this connection they have expended freely of their time and talents over a period of many months molding into workable form a compact between the states involved which is a monument to their intellect, perseverance and diplomacy.

All of said members have, since ratification of the compact, pioneered its administration and have worked in harmony and with an unselfish devotion to its success to the end that its fruits have been attained to its highest degree.

BE IT THEREFORE RESOLVED that this administration, in annual meeting assembled, do hereby heartily commend said outgoing members, William E. Leavitt, Garden City, Kansas; Harry C. Nevius, Lamar, Colorado; Harry B. Mendenhall, Rocky Ford, Colorado; and Judge Roland H. Tate, Garden City, Kansas for the fine service which they have so freely rendered.

BE IT FURTHER RESOLVED that this resolution be spread upon the records of this administration and that the secretary be instructed to mail a copy hereof to each of those named herein.



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

Report Year, November 1, 1956 - October 31, 1957