

THIRTY-EIGHTH  
ANNUAL REPORT

**ARKANSAS RIVER  
COMPACT  
ADMINISTRATION  
(1986)**

**For The Report-Year  
November 1, 1985 to October 31, 1986**



1000 South Main Street  
Lamar, Colorado 81052

**Thirty-Eighth Annual Report**

**Arkansas River  
Compact  
Administration  
(1986)**

**For The Report-Year**

**November 1, 1985 to October 31, 1986**

**1000 South Main Street  
Lamar, Colorado 81052**

**THE ADMINISTRATION**

**FRANK G. COOLEY  
Chairman and Representative of the United States**

**J. WILLIAM McDONALD,  
CARL G. GENOVA and JIM ROGERS  
for Colorado**

**DAVID POPE, CARL E. BENTRUP,  
and RONALD OLOMON  
for Kansas**

\*\*\*\*\*

**1000 South Main Street  
Lamar, Colorado 81052**

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Plate I

# Thirty-Eighth Annual Report Arkansas River Compact Administration (1986) Errata Sheet

Page 9, Following the 2nd table: Add the word “winter” as shown. “Following the transfer of the stored winter water inflows to John Martin Reservoir into the agreement accounts, the allocation of the reservoir contents at 2400 hours on March 31, 1986, were as follows”:

Page 14, Below the word “Administration” in the title of the table of appendices add “For the Report-year November 1, 1985 to October 31, 1986” to the title.

Page 19, Appendix “A-1”, In the 5th paragraph down of “Operations Committee Report”: Insert spaces at the end of the second sentence and begin the third sentence, “35 percent went into the transit loss account...”

Appendix “B-5a” Under “August”, delete the first “0” shown. Secondly, the value of 642 shown on August 4 should be “0” and the value on August 5 should be 642.

Appendix “B-14a” The value for “June” on the line “River District #14” should be “73,207.73” not the “72,207.73” shown.

Appendix “B-14b” The value for “July” on the line “Native Dist. #14-#17” should be, “169,204.34” not the “169,201.34” shown.

Appendix “B-18” The value for “December” on the line, “Net Change in Reservoir Contents — a.f.” should be “22,600.00” not the “23,600.00” shown.

**Annual Report Of**  
**ARKANSAS RIVER COMPACT**  
**ADMINISTRATION**  
**1986**

Report-Year November 1, 1985 to October 31, 1986

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, 1985 through October 31, 1986, as follows:

1. Members of the Administration

Representative of the United States:

Frank G. Cooley

Colorado Representatives:

J. William McDonald, Denver

Carl G. Genova, Pueblo

James G. Rogers, Lamar

Kansas Representatives:

David L. Pope, Topeka

Carl E. Bentrup, Deerfield

Ronald Olomon, Garden City

2. Officers of the Administration

Chairman:

Frank G. Cooley

Vice Chairman:

Carl E. Bentrup

Recording Secretary and Treasurer:

Leo Idler

**Operations Secretary:**

**Robert Jesse**

**3. Standing Committees:**

**Administrative and Legal Committee:**

**Carl E. Bentrup**  
**J. William McDonald (Chairman)**

**Engineering Committee:**

**David Pope**  
**Carl C. Genova (Chairman)**

**Operations Committee:**

**Ronald Olomon**  
**James G. Rogers (Chairman)**

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

**4. Meetings:**

|                          |                                         |
|--------------------------|-----------------------------------------|
| <b>December 10, 1985</b> | <b>Annual Meeting, Pueblo, Colorado</b> |
| <b>February 4, 1986</b>  | <b>Special Telephonic Meeting</b>       |

The minutes of the December 10, 1985, annual meeting and the February 4, 1986 special meeting are not included in this annual report. Transcripts of the meeting minutes have been provided to the Compact Administration and to each state. Copies of the minutes are available upon request from the Compact Administration office in Lamar.

**5. Fiscal**

**ADOPTED FY 1987-88 BUDGET**  
**(July 1, 1987-June 30, 1988)**

**EXHIBIT H**

**EXPENDITURES**

**A. SALARIES AND CONTRACTUAL SERVICES:**

|                                     |                 |
|-------------------------------------|-----------------|
| <b>1. Treasurer.....</b>            | <b>\$ 1,000</b> |
| <b>2. Operations Secretary.....</b> | <b>6,100</b>    |
| <b>3. Recording Secretary.....</b>  | <b>1,000</b>    |
| <b>4. Auditor.....</b>              | <b>450</b>      |
| <b>5. Court Reporter.....</b>       | <b>1,500</b>    |
| <b>6. Payroll Taxes.....</b>        | <b>350</b>      |
|                                     | <hr/>           |
|                                     | <b>\$10,400</b> |

**B. GAGING STATIONS:**

|                                          |                 |
|------------------------------------------|-----------------|
| <b>1. U.S. Geological Survey</b>         |                 |
| <b>Cooperative Agreements</b>            |                 |
| <b>for federal FY 1987.....</b>          | <b>\$10,290</b> |
| <b>2. Colorado Satellite System.....</b> | <b>7,000</b>    |
|                                          | <hr/>           |
|                                          | <b>\$17,290</b> |

C. OPERATING EXPENSES:

|                                       |          |
|---------------------------------------|----------|
| 1. Treasurer's Bond.....              | \$ 100   |
| 2. 1986 Annual Report (Printing)..... | 3,000    |
| 3. Telephone.....                     | 2,000    |
| 4. Office Supplies/Postage.....       | 300      |
| 5. Printing/Copying.....              | 300      |
| 6. Meetings.....                      | 100      |
| 7. Travel.....                        | 0        |
|                                       | <hr/>    |
|                                       | \$ 5,800 |
| D. OFFICE EQUIPMENT:                  | \$ 2,000 |
| E. CONTINGENCY:                       | 0        |
|                                       | <hr/>    |
|                                       | \$35,490 |

INCOME

A. ASSESSMENTS

|                        |          |
|------------------------|----------|
| 1. Colorado (60%)..... | \$12,000 |
| 2. Kansas (40%).....   | 8,000    |
|                        | <hr/>    |
|                        | \$20,000 |

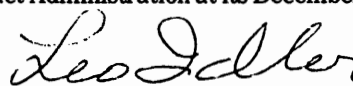
B. INTEREST EARNINGS..... 3,500

C. MISCELLANEOUS..... 0

D. TOTAL.....\$23,500

EXPENDITURES FROM SURPLUS.....\$11,990

Adopted by the Arkansas River Compact Administration at its December 9, 1986, Annual Meeting.

  
Treasurer

ARKANSAS RIVER COMPACT ADMINISTRATION  
STATEMENT OF CASH RECEIPTS AND  
DISBURSEMENTS AND CHANGES IN CASH BALANCE  
FROM JULY 1, 1986, TO DEC. 1, 1986

CASH BALANCE, JULY 1, 1986.....\$51,879

RECEIPTS:

|                                               |           |
|-----------------------------------------------|-----------|
| Colorado.....                                 | 16,800    |
| Kansas.....                                   | 11,200    |
| Interest on Savings Account Since July 1..... | 1,848.12  |
| Miscellaneous.....                            | 47.82     |
| TOTAL RECEIPTS.....                           | 29,895.94 |

DISBURSEMENTS:

|                                |          |
|--------------------------------|----------|
| Treasurer's Bond.....          | 100      |
| U.S. Geological Survey.....    | 11,185   |
| Professional Fees.....         | 450      |
| Office Supplies & Postage..... | 205.56   |
| Printing.....                  | 105.40   |
| Secretary's Salary.....        | 1,392.75 |
| Payroll Taxes.....             | 214.50   |
| Telephone.....                 | 445.30   |

|                                                |                    |
|------------------------------------------------|--------------------|
| Annual Report.....                             | 3,026.64           |
| Operations Secretary's Account.....            | 2,657.23           |
| <b>TOTAL DISBURSEMENTS.....</b>                | <b>19,781.38</b>   |
| <b>EXCESS RECEIPTS OVER DISBURSEMENTS.....</b> | <b>10,114.56</b>   |
| <b>CASH BALANCE, DEC. 1, 1986.....</b>         | <b>61,993.56</b>   |
| <b>CASH IN BANK.....</b>                       | <b>110.97</b>      |
| <b>SAVINGS ACCOUNT.....</b>                    | <b>18,097.09</b>   |
| <b>CERTIFICATE OF DEPOSIT.....</b>             | <b>40,000.00</b>   |
| <b>INTEREST ON C.D. TO DEC. 1.....</b>         | <b>3,785.50</b>    |
|                                                | <b>\$61,993.56</b> |

**ARKANSAS COMPACT ADMINISTRATION  
STATEMENT OF CASH RECEIPTS AND  
DISBURSEMENTS AND CHANGES IN CASH BALANCE  
FOR YEAR ENDED JUNE 30, 1986**

|                                                   |                 |
|---------------------------------------------------|-----------------|
| <b>CASH BALANCE, JULY 1, 1985.....</b>            | <b>\$57,432</b> |
| <b>RECEIPTS:</b>                                  |                 |
| Colorado.....                                     | 16,800          |
| Kansas.....                                       | 11,200          |
| Interest.....                                     | 4,869           |
| Miscellaneous Income.....                         | 64              |
| <b>TOTAL RECEIPTS.....</b>                        | <b>32,933</b>   |
| <b>DISBURSEMENTS:</b>                             |                 |
| Treasurer's Bond.....                             | 100             |
| U.S. Geological Survey.....                       | 12,400          |
| Equipment.....                                    | 5,680           |
| Professional Fees.....                            | 400             |
| Office Supplies.....                              | 128             |
| Printing.....                                     | 158             |
| Secretary's Salary.....                           | 3,344           |
| Payroll Taxes.....                                | 512             |
| Telephone.....                                    | 1,780           |
| Annual Report.....                                | 4,809           |
| Recording Secretary & Court Reporter.....         | 6,860           |
| Travel & Meetings.....                            | 2,515           |
| <b>TOTAL DISBURSEMENTS.....</b>                   | <b>38,486</b>   |
| <b>EXCESS OF DISBURSEMENTS OVER RECEIPTS.....</b> | <b>(5,553)</b>  |
| <b>CASH BALANCE, JUNE 30, 1986.....</b>           | <b>\$51,879</b> |



#### 6. Facts about the John Martin Project:

The John Martin Reservoir Project was built by the Corps of Engineers, United States Army. The project was authorized by Congress in the Flood Control Act of June 22, 1936, when the federal responsibility for flood control throughout the country was assigned to the Corps of Engineers. It is located on the Arkansas River, 58 miles upstream from the Colorado-Kansas stateline and 18 miles upstream from the city of Lamar, Colorado. Construction of the project began in the fall of 1939, but work was suspended by World War II from the spring of 1943 to the spring of 1946. The project was completed in October 1948 at a cost of about \$15 million. The War Department Civil Appropriation Act of June 24, 1940, changed the name of the project from Caddoa Reservoir Project to John Martin Reservoir Project, in honor of the late Congressman John A. Martin of Colorado. It is operated by the United States Army Engineer District, Albuquerque, New Mexico. Mr. Russell Smith has been the resident superintendent of the project since October, 1976.

The John Martin Reservoir Project is part of the comprehensive plan for the control of floods and the development of the water resources in the Arkansas River basin. The reservoir provides 270,375 acre-feet of storage capacity for flood control and protection of the fertile Arkansas River Valley below the dam. It also provides 350,951 acre-feet of storage space for conservation and recreation.

John Martin Reservoir supplies water to the irrigated lands below the dam as far downstream as Garden City, Kansas. The top of the conservation pool is 3,851 feet above mean sea level, which provides 350,951 acre-feet of water for irrigation. Upon request of the Arkansas River Compact Administration, irrigation water for downstream water users is released through the outlet works in the base of the dam.

The release of stored flood waters in excess of the conservation and recreation pool or above elevation 3,851 feet are planned so that, when combined with flows originating downstream from the dam, the capacity of the channel will not be exceeded. Downstream flood damages prevented by John Martin dam already exceed the cost of the project and have surpassed the \$92 million mark.

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

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

north wing dam, main dam, and south wing dam. The overall length of the structure is 2.6 miles. Detailed project data are shown below.

#### DAM

|                                           |        |
|-------------------------------------------|--------|
| Total length, feet.....                   | 13,945 |
| Maximum height above streambed, feet..... | 118    |
| Width of roadway on dam, feet.....        | 21     |

#### SPILLWAY

|                                                |         |
|------------------------------------------------|---------|
| Total length, including piers, feet.....       | 1,174   |
| Crest gates, 30' x 64'.....                    | 16      |
| Discharge capacity, cubic feet per second..... | 639,200 |

#### OUTLET WORKS

|                                   |   |
|-----------------------------------|---|
| Sluicing conduits, 6' x 7½'.....  | 4 |
| Regulating conduits, 4' x 4'..... | 2 |

#### RESERVOIR

|                                                                      |         |
|----------------------------------------------------------------------|---------|
| Capacity, acre-feet.....                                             | 621,326 |
| Flood control storage, acre-feet.....                                | 270,375 |
| Conservation (irrigation) and recreation,<br>storage, acre-feet..... | 350,951 |
| Water surface at spillway crest, acres.....                          | 8,960   |
| Water surface at top of conservation pool, acres.....                | 11,655  |
| Water surface at top of flood control pool, acres.....               | 17,630  |
| Drainage areas, square miles.....                                    | 18,915  |

A ½-mile segment of the historic Santa Fe Trail north of the reservoir has been enclosed by a fence. An appropriate sign marks this historic site.

#### 7. Cooperative Studies and Activities:

- (a) Article VIII G (1) of Arkansas River Compact requires the Administration to cooperate with the Chief Official of each of the states of Colorado and Kansas charged with the administration of water rights in their respective States, and with the Federal agencies in systematically determining and correlating the facts pertaining to the flow and diversion of the water of the Arkansas River and to the operation and siltation of John Martin Reservoir and other related structures. Article VIII G (2) requests the Director of the United States Geological Survey, the Commissioner of the United States Bureau of Reclamation, and the Chief of 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 analysis of and compilation of the hydrologic data presented in this report and used in the administration of the Compact.

- (c) 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. A new area capacity table for John Martin Reservoir was issued by the Army Corps of Engineers and put into effect August 12, 1981.

#### 8. Water Supply, Reservoir Operations and Hydrologic Data

The 1986 Arkansas River Compact year and the winter storage season for John Martin Reservoir began at 0001 hour November 1, 1985, with 280,952.00 acre-feet in the reservoir distributed as follows:

|                    |                       |
|--------------------|-----------------------|
| Agreement Accounts | 271,792.27 a.f.       |
| Permanent Pool     | 9,159.73 a.f.         |
|                    | <hr/> 280,952.00 a.f. |

Winter Storage ended at 2400 hour on March 31, 1986, with a total of 76,007.58 acre-feet of winter water stored during this period.

An operating plan adopted April 24, 1980, and last revised December 11, 1984, established a system of water storage accounts in John Martin Reservoir. Water was distributed to the accounts pursuant to that operating plan as follows:

|                                                                              |                 |
|------------------------------------------------------------------------------|-----------------|
| Compact Water (contents of 52,578.42 a.f.<br>& Evaporation of 1,079.16 a.f.) | 53,657.58 a.f.  |
| Winter Water                                                                 | 22,350.00 a.f.* |
| *Amity Canal, Article III water                                              | 16,979.04 a.f.  |
| Ft. Lyon Canal Article III water                                             | 0 a.f.          |
| *Las Animas Consolidated,<br>Article III water                               | 4,943.54 a.f.   |
| Evaporation prior to distribution                                            | 427.42 a.f.     |
|                                                                              | <hr/> 76,007.58 |

\*Transferred to Article III Accounts shown at 2400 hours March 31, 1986.

Following the transfer of the stored water inflows to John Martin Reservoir into the agreement accounts, the allocation of the reservoir contents at 2400 hours on March 31, 1986, were as follows:

|                            |                       |
|----------------------------|-----------------------|
| Compact Water              | 52,578.42 a.f.        |
| Agreement Water            | 241,203.78 a.f.       |
| Article III water          |                       |
| Amity Canal                | 10,985.07 a.f.        |
| Ft. Lyon Canal             | ----                  |
| Las Animas Consolidated    | 3,198.36 a.f.         |
| Golf Course Exchange Water | ----                  |
| Permanent Pool             | 8,864.37 a.f.         |
|                            | <hr/> 316,830.00 a.f. |

This year marked the first time that the State of Kansas had called for releases from their account during a winter storage period. The Kansas release began March 21, 1986, at 2200 hours continuing through the end of the winter storage season and on through April 25, 1986. The total release made to Kansas through the end of the winter storage season at 2400 hours on March 31, 1986, was 10,181.97 acre-feet. Releases from Colorado Accounts during the Winter Storage Season totalled 19,145.19 acre-feet.

The summer storage period began at 0001 hour, April 1, 1986, with a

total reservoir content of 316,830.00 acre-feet. No spills occurred in compact year 1986.

During the summer season inflow to the Conservation Pool totaled 101,986.96 acre-feet which total includes 68 acre-feet put into the Las Animas Golf Course Account. This total, minus evaporation losses, was all released into accounts in accordance with the Operating Plan adopted April 24, 1980, and subsequent revisions. The Conservation Pool was empty at 2400 hour, October 31, 1986. The summer operations of the Conservation Pool only are tabulated as follows:

| Date    | Contents a.f.<br>Beg. Mo. | Inflow<br>a.f. | Evaporation<br>a.f. | Release<br>a.f. | Contents a.f.<br>End Mo. |
|---------|---------------------------|----------------|---------------------|-----------------|--------------------------|
| Apr. 1  | 52578.42                  | 5868.28        | 373.51              | 58073.19        | 0                        |
| May 1   | 0                         | 0              | 0                   | 0               | 0                        |
| June 1  | 0                         | 48125.54       | 66.27               | 48059.27        | 0                        |
| July 1  | 0                         | 11101.90       | 5.80                | 11096.10        | 0                        |
| Aug. 1  | 0                         | 9724.17        | 1.03                | 9723.14         | 0                        |
| Sept. 1 | 0                         | 16696.08       | 1.15                | 16694.93        | 0                        |
| Oct. 1  | 0                         | 10470.99       | .20                 | 10470.79        | 0                        |
| TOTALS  |                           | 101986.96*     | 447.96              | 154117.42       |                          |

\*Includes 68 a.f. of Las Animas Golf Course Water.

During July and September of the summer storage season 198.20 acre-feet was stored in the permanent pool under the Colorado Division of Wildlife's Muddy Creek decree.

During summer storage the Amity Canal stored 23,982.01 acre-feet of Article III water. However, no other Article III water was stored.

Article III water was released during the summer to the various ditches as follows:

|                               |               |
|-------------------------------|---------------|
| Amity Canal                   | 8,456.19 a.f. |
| Ft. Lyon Canal                | 0 a.f.        |
| Las Animas Consolidated Canal | 949.10 a.f.   |

---

|                                  |               |
|----------------------------------|---------------|
| Total Article III Summer Release | 9,405.29 a.f. |
|----------------------------------|---------------|

---

At the end of the compact year the Article III and the Golf Course Accounts were as follows:

|                                 |                |
|---------------------------------|----------------|
| Amity Canal                     | 24,515.18 a.f. |
| Fort Lyon Canal                 | 0              |
| Las Animas Consolidated Canal   | 1,910.12 a.f.  |
| Las Animas Golf Course Exchange | 68.00 a.f.     |

---

|                                        |                |
|----------------------------------------|----------------|
| Total in Article III Accounts 10/31/86 | 26,493.30 a.f. |
|----------------------------------------|----------------|

---

Kansas called for releases on 4 occasions during compact year 1986 totalling 82,015.37 acre-feet. The actual credited delivery was 90,096.00 acre-feet. Thus, 8,080.63 acre-feet was over delivered. Releases to Colorado during the 1986 compact year totalled 128,426.84 acre-feet of which 289.22 acre-feet was well augmentation water.

The operation of the Transit Loss Account during the compact year is shown below:

| <u>Transit Loss Account</u> |                                   |                |                     |                 |                                  |
|-----------------------------|-----------------------------------|----------------|---------------------|-----------------|----------------------------------|
| Month                       | Contents<br>Beg. of<br>Month a.f. | Inflow<br>a.f. | Evaporation<br>a.f. | Release<br>a.f. | Contents<br>End of<br>Month a.f. |
| November                    | 8431.22                           | 0              | 2.33                | 8428.89*        | 0                                |
| December                    | 0                                 | 0              | 0                   | 0               | 0                                |
| January                     | 0                                 | 0              | 0                   | 0               | 0                                |
| February                    | 0                                 | 0              | 0                   | 0               | 0                                |
| March                       | 0                                 | 7672.90        | 34.58               | 338.42          | 7299.90                          |
| Subtotals                   |                                   | 7672.90        | 36.91               | 8767.31         | 7299.90                          |
| April                       | 7299.90                           | 0              | 135.85              | 0               | 7164.05                          |
| May                         | 7164.05                           | 0              | 154.01              | 272.73          | 6737.31                          |
| June                        | 6737.31                           | 0              | 153.04              | 196.30          | 6387.97                          |
| July                        | 6387.97                           | 2799.86        | 241.57              | 752.09          | 8194.17                          |
| August                      | 8194.17                           | 220.88         | 198.78              | 0               | 8216.27                          |
| September                   | 8216.27                           | 1783.55        | 179.34              | 0               | 9820.48                          |
| October                     | 9820.48                           | 3589.41        | 112.48              | 0               | 13297.41                         |
| Subtotals                   |                                   | 8393.70        | 1175.07             | 1221.12         |                                  |
| TOTAL                       |                                   | 16066.60       | 1211.98             | 9988.43         |                                  |

\*Transferred to other accounts according to 1980 operating resolution.

At the close of the compact year on October 31, 1986, at 2400 hours the contents of John Martin Reservoir were allocated as follows:

|                   |                       |
|-------------------|-----------------------|
| Compact Water     | 0 a.f.                |
| Article III Water | 26,425.30 a.f.        |
| Permanent Pool    | 7,817.53 a.f.         |
| Agreement Water   | 192,065.17 a.f.       |
|                   | <hr/> 226,308.00 a.f. |

The technical data for this section were compiled by the Colorado Water Conservation Board staff using data from the Annual Report of the Operations Secretary, Arkansas River Compact Administration, the U.S. Geological Survey, Colorado Division of Water Resources and the minutes and correspondence of the Arkansas River Compact Administration.

#### 9. Gaging Stations

The U.S. Geological Survey operates eight gaging stations as indicated in Appendix B under their "Collection of Basic Records" program and through funding agreements with the U.S. Army Corps of Engineers and the Arkansas River Compact Administration. For the fiscal year October 1, 1985, to September 30, 1986, the compact administration approved a cooperative agreement with the U.S. Geological Survey in the amount of \$22,370--\$11,185 for each party. The compact administration funds were used for supplemental measurements at seven gaging sites, the operation of one station, Arkansas River near Granada, Colorado; operation of a telemark at John Martin Dam, maintenance of radio equipment, and the preparation of records for the annual report.

In general, streamflow records of satisfactory accuracy were obtained at the Compact stations. Emphasis was again placed on obtaining more field data, particularly in the form of discharge measurements at various stages of flow. Several more measurements were made at each site than are required under agreement with the Compact. Measurements made by personnel of the Colorado State Engineer were incorporated into the records.

There were no critical problems at the stations during the year, with the exception of the continuing unstable channels and controls.

#### 10. Findings of Fact by the Administration.

There were no findings of fact made by the Administration during Compact Year 1986.

#### 11. Investigations

The investigations begun under the March 28, 1985, resolution authorizing an investigation pursuant to Article VIII H of the compact of allegations of violations of provisions of the Compact in both Colorado and Kansas continued pursuant to the resolution adopted October 8, 1985. Pursuant to that resolution, the Investigation Committee met on November 19, 1985, in Denver, Colorado, and on December 10, 1985, in Pueblo, Colorado prior to the annual meeting.

The investigation committee met in Denver on November 19, 1985, to discuss the proposed scope of work for the continuation of the investigation. At the annual meeting of the Administration on December 10, 1985, in Pueblo, Colorado the Chairman read a prepared statement concerning the purpose of the Administration and the investigative/arbitration process. Following a report by the investigation committee Kansas and Colorado representatives each proposed a resolution concerning the continuance of the Article VIII H investigation. Both motions failed.

On December 16, 1985, Kansas filed a Motion for Leave to File Complaint against Colorado with the United States Supreme Court. This motion was granted on March 24, 1986. The details of the allegations in the lawsuit are contained in the pleadings on file with the United States Supreme Court.

#### 12. Chronology of Events in Kansas v. Colorado Lawsuit

The following is an informal summary of events in the pending lawsuit during this year:

| Date          | Filed by Kansas<br>Colorado,<br>Supreme Court | Title                                                                                                     |
|---------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Dec. 16, 1985 | Kansas                                        | Motion for leave to File Complaint, Complaint, and Brief in Support of Motion for Leave to File Complaint |
| Feb. 14, 1986 | Colorado                                      | Colorado's Brief in Opposition to [Kansas'] Motion for Leave to File Complaint                            |
| March 3, 1986 | Kansas                                        | Motion for leave to file complaint or alternatively compel compliance with                                |

|                 |               |                                                                                                                                                                                                           |
|-----------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |               | the Administration investigation pursuant to Article VIII H. of the Arkansas River Compact                                                                                                                |
| March 4, 1986   | Kansas        | Reply Brief and Brief in Support of Motion for Leave to File Complaint or Alternatively to Compel Compliance with Administrative Investigation Pursuant to Article VIII (H) of the Arkansas River Compact |
| March 12, 1986  | Colorado      | Colorado's Brief in Opposition to [Kansas'] Motion for Alternative Relief                                                                                                                                 |
| March 18, 1986  | Colorado      | Reply to Colorado's Brief in Opposition to Motion for Alternative Relief                                                                                                                                  |
| March 24, 1986  | Supreme Court | Order Granting Kansas' Motion for Leave to file a Bill of Complaint                                                                                                                                       |
| May 22, 1986    | Colorado      | Colorado's Answer, Counterclaims, and Motion for Appointment of Special Master                                                                                                                            |
| June 10, 1986   | Kansas        | Kansas' Reply to Colorado's Counterclaim                                                                                                                                                                  |
| July 7, 1986    | Supreme Court | Wade H. McCree Jr., appointed Special Master                                                                                                                                                              |
| August 20, 1986 | Supreme Court | Prehearing Conference before Honorable Wade H. McCree, Jr., Special Master                                                                                                                                |

# APPENDICES FOR

## ANNUAL REPORT OF THE

### ARKANSAS RIVER COMPACT

#### ADMINISTRATION

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Plate I



## APPENDIX "A-2"

### Auditor's Report

ARKANSAS RIVER COMPACT ADMINISTRATION  
CASH BASIS FINANCIAL STATEMENTS  
JUNE 30, 1986  
with  
REPORT OF  
INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

CRIMOND, FARMER & COMPANY  
Certified Public Accountants  
203 East Oak, P.O. Box 1173, Lamar, CO 81052

ARKANSAS RIVER COMPACT ADMINISTRATION  
INDEX TO CASH BASIS FINANCIAL STATEMENTS  
JUNE 30, 1986

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CRIMOND, FARMER & COMPANY  
Certified Public Accountants

To the Representatives of  
Arkansas River Compact Administration  
Lamar, Colorado 81052

We have examined the Statement of Assets & Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of June 30, 1986, and the Statement of Cash Receipts and Disbursements, Changes in Cash Balance and the Statement of Cash Receipts and Disbursements with Budget Comparison for the year ended June 30, 1986. Our examination was conducted 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.

As described in Note 1a of the Notes to Cash Basis Statements, the accompanying statements are prepared on the cash basis of accounting and accordingly they are not intended to be presented in conformity with generally accepted accounting principles.

In our opinion, the financial statement presents fairly the Assets and Liabilities Arising from Cash Transactions of the Arkansas River Compact Administration as of June 30, 1986, and the results of Cash Transactions for the year then ended on a basis consistent with the previous year.

/s/ Crimond, Farmer & Co.  
Certified Public Accountants

September 4, 1986  
Lamar, Colorado

**ARKANSAS RIVER COMPACT ADMINISTRATION  
STATEMENT OF ASSETS & LIABILITIES  
ARISING FROM CASH TRANSACTIONS  
June 30, 1986**

|                                                       |                 |
|-------------------------------------------------------|-----------------|
| <b>ASSETS:</b>                                        |                 |
| Cash & Savings.....                                   | \$51,879        |
| Equipment.....                                        | 21,993          |
| Concrete Control.....                                 | 8,000           |
| <b>TOTAL ASSETS.....</b>                              | <b>81,872</b>   |
| <b>LIABILITIES:</b>                                   |                 |
| Liabilities .....                                     | 0               |
| <b>CASH BASIS EQUITY:</b>                             |                 |
| Expended:                                             |                 |
| Equipment.....                                        | 21,993          |
| Concrete Control.....                                 | 8,000           |
| Unexpended:.....                                      | 51,879          |
| <b>TOTAL CASH BASIS EQUITY—NOTE 1a.....</b>           | <b>81,872</b>   |
| <b>TOTAL LIABILITIES &amp; CASH BASIS EQUITY.....</b> | <b>\$81,872</b> |

The accompanying notes are an integral part of the statements.

ARKANSAS RIVER COMPACT ADMINISTRATION  
STATEMENT OF CASH RECEIPTS & DISBURSEMENTS  
& CHANGES IN CASH BALANCE  
FOR YEAR ENDED JUNE 30, 1986

|                                            |          |
|--------------------------------------------|----------|
| CASH BALANCE, JULY 1, 1985.....            | \$57,432 |
| RECEIPTS:                                  |          |
| Revenue from Assessments:                  |          |
| Colorado.....                              | 16,800   |
| Kansas.....                                | 11,200   |
| Interest.....                              | 4,869    |
| Miscellaneous Income.....                  | 64       |
| TOTAL RECEIPTS.....                        | 32,933   |
| DISBURSEMENTS:                             |          |
| Treasurer's Bond.....                      | 100      |
| Geological Survey.....                     | 12,400   |
| Equipment.....                             | 5,680    |
| Professional Fees.....                     | 400      |
| Office Supplies.....                       | 128      |
| Printing.....                              | 158      |
| Secretary's Salary.....                    | 3,344    |
| Payroll Taxes.....                         | 512      |
| Telephone.....                             | 1,780    |
| Annual Report.....                         | 4,609    |
| Recording Secretary & Court Reporter.....  | 6,860    |
| Travel & Meetings.....                     | 2,515    |
| TOTAL DISBURSEMENTS.....                   | 38,486   |
| EXCESS OF DISBURSEMENTS OVER RECEIPTS..... | (5,553)  |
| CASH BALANCE, JUNE 30, 1986.....           | \$51,879 |

The accompanying notes are an integral part of the statements.

ARKANSAS RIVER COMPACT ADMINISTRATION  
STATEMENT OF CASH RECEIPTS & DISBURSEMENTS  
WITH BUDGET COMPARISON FOR THE  
BUDGET YEAR JULY 1, 1985 TO JUNE 30, 1986

|                                 | BUDGET | ACTUAL   | OVER<br>UNDER |
|---------------------------------|--------|----------|---------------|
| CASH BALANCE, JULY 1, 1985..... | \$ 0   | \$57,432 | \$57,432      |
| RECEIPTS:                       |        |          |               |
| Revenues from Assessments:      |        |          |               |
| Colorado—60%.....               | 16,800 | 16,800   | 0             |
| Kansas—40%.....                 | 11,200 | 11,200   | 0             |
| Miscellaneous Income.....       | 0      | 64       | 64            |
| Interest.....                   | 0      | 4,869    | 4,869         |
| TOTAL RECEIPTS.....             | 28,000 | 32,933   | 4,933         |
| TOTAL TO ACCOUNT FOR.....       | 28,000 | 90,365   | 62,365        |

|                                              |                  |                 |                 |
|----------------------------------------------|------------------|-----------------|-----------------|
| <b>DISBURSEMENTS:</b>                        |                  |                 |                 |
| U.S. Geological Survey.....                  | 12,500           | 12,400          | 100             |
| Operations Secretary.....                    | 6,100            | 3,344           | 2,756           |
| Treasurers Bond.....                         | 100              | 100             | 0               |
| Telephone.....                               | 2,000            | 1,780           | 220             |
| Payroll Taxes.....                           | 250              | 512             | (262)           |
| Recording Secretary &<br>Court Reporter..... | 6,600            | 6,860           | (260)           |
| Travel & Meeting.....                        | 100              | 2,515           | (2,415)         |
| Professional Fees.....                       | 400              | 400             | 0               |
| Office Supplies.....                         | 350              | 128             | 222             |
| Printing.....                                | 350              | 158             | 192             |
| Annual Report.....                           | 5,000            | 4,609           | 391             |
| Equipment.....                               | 0                | 5,680           | (5,680)         |
| Contingency.....                             | 2,000            | 0               | 2,000           |
| <b>TOTAL DISBURSEMENTS.....</b>              | <b>35,750</b>    | <b>38,486</b>   | <b>(2,736)</b>  |
| <b>CASH BALANCE, JUNE 30, 1986.....</b>      | <b>\$(7,750)</b> | <b>\$51,879</b> | <b>\$59,629</b> |

The accompanying notes are an integral part of the statements.

**ARKANSAS RIVER COMPACT ADMINISTRATION  
NOTES TO CASH BASIS STATEMENTS  
JUNE 30, 1986**

**Note 1 — Summary of significant accounting policies:**

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

## APPENDIX "A-1"

### OPERATIONS COMMITTEE REPORT

The Operations Committee Report for Compact Year 1986 was read into the record by Jim Rogers at the December 9, 1986 Annual Meeting of the Arkansas River Compact Administration. The following is transcribed from the minutes of that meeting.

The Operations Committee report on December 9th, 1986. It is much too early to tell about the snowpack for 1987. Most reservoirs upstream are full or nearly so. There was not much space to store last year's transmountain water. There was some left on the western slope in 1986 because of lack of storage space.

During the winter of 1985-86 -- November 1, 1985, to April 1, 1986 -- a total of 75,000 acre feet of winter stored water was stored. The Fort Lyon did not store in John Martin Dam in 1985-86 but the Consolidated Ditch did. And its unused water was rolled into the conservation pool on November 1, 1986, according to the operation plan.

There were no flood events during 1985-86. The Pueblo Reservoir is at the bottom of the joint use pool now and the downstream reservoirs have about 50,000 acre feet of space available. And John Martin has less than a hundred thousand acre feet of space available.

Water was stored this summer for the Amity Canal under the Great Plains decrees. This was done under the authorization of the 1980 operation plan with the consent of all upstream users, this water being in addition to the Amity's water and compact water. 35 percent went into the transit loss account, as it has in the past, as called for by the agreement between the two states. The transit loss account will again be quite large.

Kansas has 104,960 acre feet in its account now counting their share of the water that was stored so far this winter. The new table in the operations secretary's report shows the delivery to Kansas by runs instead of by months as was shown last year. All Kansas runs were delivered last year.

There were two storage events on Muddy Creek stored in the permanent pool. The satellite communications system is operating with a total of 45 stations in the Arkansas drainage including the Cheyenne Creek gauge. The computer program for John Martin accounting is now functional. And that concludes our report.

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

Report-Year ending October 31, 1986  
USGS Records--Gaging Station No. 07099400

| DAY      | NOV.  | DEC.  | JAN.  | FEB.  | MAR.  | APR.  | MAY   | JUNE   | JULY   | AUG.  | SEPT. | OCT.  |
|----------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|
| 1        | 545   | 88    | 338   | 321   | 390   | 565   | 794   | 2190   | 3830   | 890   | 605   | 710   |
| 2        | 545   | 88    | 370   | 321   | 390   | 545   | 842   | 2220   | 3490   | 1170  | 635   | 611   |
| 3        | 545   | 88    | 430   | 338   | 386   | 510   | 911   | 2370   | 3180   | 1270  | 515   | 332   |
| 4        | 460   | 88    | 490   | 366   | 425   | 520   | 1010  | 2670   | 2920   | 1060  | 475   | 378   |
| 5        | 435   | 88    | 500   | 366   | 450   | 560   | 1120  | 3120   | 2760   | 854   | 655   | 402   |
| 6        | 460   | 88    | 525   | 398   | 495   | 585   | 1350  | 3500   | 2960   | 806   | 605   | 390   |
| 7        | 410   | 88    | 545   | 425   | 610   | 570   | 1310  | 4030   | 3160   | 806   | 485   | 374   |
| 8        | 370   | 88    | 555   | 430   | 670   | 600   | 1040  | 4690   | 3270   | 794   | 455   | 363   |
| 9        | 338   | 88    | 500   | 430   | 665   | 660   | 830   | 4770   | 3280   | 800   | 450   | 352   |
| 10       | 328   | 88    | 450   | 425   | 620   | 680   | 848   | 4470   | 3100   | 764   | 445   | 338   |
| 11       | 328   | 88    | 435   | 425   | 595   | 680   | 848   | 3740   | 2660   | 716   | 485   | 335   |
| 12       | 328   | 88    | 445   | 420   | 605   | 635   | 932   | 3010   | 2410   | 690   | 570   | 402   |
| 13       | 346   | 88    | 402   | 420   | 490   | 540   | 824   | 2710   | 2230   | 700   | 560   | 510   |
| 14       | 239   | 90    | 296   | 445   | 445   | 490   | 764   | 2730   | 2070   | 722   | 530   | 540   |
| 15       | 86    | 120   | 262   | 490   | 445   | 460   | 884   | 2970   | 1990   | 752   | 500   | 580   |
| 16       | 86    | 190   | 262   | 470   | 425   | 595   | 960   | 3240   | 2040   | 758   | 460   | 650   |
| 17       | 86    | 290   | 321   | 445   | 398   | 655   | 806   | 3330   | 1800   | 794   | 420   | 640   |
| 18       | 86    | 460   | 363   | 445   | 394   | 722   | 842   | 3770   | 1780   | 860   | 386   | 665   |
| 19       | 86    | 555   | 366   | 470   | 360   | 776   | 854   | 4250   | 2020   | 884   | 374   | 665   |
| 20       | 86    | 590   | 366   | 495   | 352   | 806   | 848   | 4610   | 2140   | 830   | 356   | 625   |
| 21       | 86    | 590   | 366   | 495   | 349   | 812   | 806   | 4550   | 2110   | 830   | 332   | 610   |
| 22       | 86    | 590   | 338   | 495   | 374   | 860   | 960   | 4250   | 2390   | 884   | 310   | 585   |
| 23       | 87    | 590   | 324   | 500   | 390   | 866   | 1160  | 3920   | 2070   | 904   | 335   | 560   |
| 24       | 87    | 590   | 338   | 500   | 374   | 848   | 1190  | 3790   | 1650   | 897   | 349   | 580   |
| 25       | 87    | 590   | 366   | 475   | 394   | 800   | 1250  | 3690   | 1590   | 967   | 342   | 590   |
| 26       | 87    | 670   | 366   | 410   | 402   | 854   | 1300  | 3690   | 1430   | 830   | 360   | 590   |
| 27       | 87    | 728   | 335   | 394   | 386   | 911   | 1540  | 3850   | 1260   | 665   | 415   | 565   |
| 28       | 88    | 728   | 321   | 390   | 366   | 878   | 1780  | 4060   | 1180   | 560   | 630   | 535   |
| 29       | 88    | 728   | 321   | ---   | 378   | 818   | 1720  | 4050   | 1060   | 515   | 615   | 540   |
| 30       | 88    | 645   | 321   | ---   | 455   | 788   | 1880  | 3960   | 974    | 535   | 685   | 565   |
| 31       | ---   | 495   | 321   | ---   | 525   | ---   | 2090  | ---    | 932    | 555   | ---   | 565   |
| TOTAL    |       |       |       |       |       |       |       |        |        |       |       |       |
| sec. ft. | 7064  | 10383 | 11938 | 12004 | 14003 | 20589 | 34293 | 108200 | 69736  | 25062 | 14339 | 16147 |
| ac. ft.  | 14011 | 20595 | 23679 | 23810 | 27775 | 40838 | 68020 | 214615 | 138321 | 49710 | 28441 | 32028 |

THE YEAR 681,843 acre-feet

APPENDIX "B-2"  
**ARKANSAS RIVER AT  
LAS ANIMAS, COLORADO**

Report-Year ending October 31, 1966  
USGS Records—Gaging Station No. 07124000

| DAY      | NOV. | DEC.  | JAN.  | FEB.  | MAR. | APR. | MAY  | JUNE  | JULY  | AUG. | SEPT. | OCT.  |
|----------|------|-------|-------|-------|------|------|------|-------|-------|------|-------|-------|
| 1        | 87   | 195   | 266   | 194   | 108  | 32   | 35   | 233   | 207   | 65   | 183   | 67    |
| 2        | 88   | 210   | 241   | 190   | 104  | 33   | 33   | 578   | 127   | 110  | 377   | 64    |
| 3        | 88   | 225   | 209   | 205   | 109  | 36   | 36   | 281   | 290   | 193  | 500   | 66    |
| 4        | 88   | 326   | 185   | 209   | 119  | 38   | 37   | 223   | 516   | 485  | 505   | 64    |
| 5        | 88   | 341   | 176   | 206   | 115  | 37   | 37   | 201   | 698   | 269  | 383   | 70    |
| 6        | 87   | 287   | 185   | 203   | 112  | 38   | 34   | 691   | 396   | 118  | 311   | 72    |
| 7        | 86   | 260   | 185   | 203   | 114  | 40   | 32   | 590   | 353   | 108  | 222   | 73    |
| 8        | 86   | 255   | 177   | 208   | 139  | 40   | 34   | 851   | 313   | 94   | 351   | 64    |
| 9        | 86   | 225   | 180   | 201   | 158  | 37   | 40   | 1900  | 418   | 90   | 377   | 60    |
| 10       | 90   | 202   | 175   | 155   | 167  | 37   | 47   | 1690  | 578   | 103  | 362   | 63    |
| 11       | 89   | 121   | 177   | 110   | 181  | 37   | 50   | 1930  | 465   | 92   | 339   | 73    |
| 12       | 92   | 107   | 203   | 110   | 167  | 39   | 101  | 1400  | 386   | 85   | 337   | 79    |
| 13       | 89   | 100   | 212   | 110   | 156  | 38   | 120  | 761   | 239   | 115  | 355   | 147   |
| 14       | 93   | 100   | 215   | 200   | 153  | 39   | 108  | 416   | 138   | 236  | 362   | 178   |
| 15       | 116  | 100   | 222   | 400   | 114  | 39   | 74   | 252   | 110   | 116  | 361   | 131   |
| 16       | 128  | 100   | 221   | 388   | 80   | 39   | 58   | 194   | 144   | 92   | 365   | 129   |
| 17       | 109  | 100   | 218   | 301   | 73   | 37   | 54   | 168   | 88    | 88   | 299   | 161   |
| 18       | 108  | 130   | 206   | 247   | 88   | 37   | 53   | 136   | 83    | 89   | 260   | 252   |
| 19       | 105  | 200   | 196   | 199   | 68   | 38   | 60   | 97    | 77    | 92   | 231   | 334   |
| 20       | 103  | 400   | 198   | 229   | 60   | 42   | 145  | 210   | 84    | 99   | 207   | 403   |
| 21       | 103  | 600   | 196   | 239   | 66   | 41   | 144  | 396   | 1110  | 100  | 174   | 545   |
| 22       | 104  | 700   | 198   | 241   | 59   | 38   | 120  | 505   | 270   | 103  | 127   | 638   |
| 23       | 150  | 600   | 198   | 224   | 53   | 36   | 124  | 562   | 284   | 100  | 101   | 639   |
| 24       | 216  | 449   | 193   | 113   | 53   | 36   | 96   | 738   | 480   | 431  | 85    | 634   |
| 25       | 221  | 337   | 196   | 106   | 49   | 37   | 92   | 454   | 440   | 190  | 82    | 618   |
| 26       | 222  | 288   | 190   | 104   | 44   | 42   | 113  | 386   | 221   | 236  | 77    | 626   |
| 27       | 213  | 258   | 197   | 106   | 43   | 42   | 142  | 193   | 94    | 166  | 67    | 661   |
| 28       | 219  | 247   | 212   | 103   | 41   | 38   | 120  | 104   | 74    | 141  | 64    | 692   |
| 29       | 223  | 266   | 211   | ---   | 38   | 37   | 105  | 81    | 72    | 126  | 68    | 753   |
| 30       | 209  | 271   | 206   | ---   | 34   | 37   | 235  | 158   | 62    | 120  | 66    | 724   |
| 31       | ---  | 274   | 200   | ---   | 33   | ---  | 234  | ---   | 59    | 109  | ---   | 655   |
| TOTAL    |      |       |       |       |      |      |      |       |       |      |       |       |
| sec. ft. | 3786 | 8274  | 6244  | 5504  | 2898 | 1137 | 2713 | 16379 | 8876  | 4561 | 7598  | 9735  |
| ac. ft.  | 7510 | 16411 | 12385 | 10917 | 5748 | 2255 | 5381 | 32488 | 17606 | 9047 | 15071 | 19309 |

THE YEAR 154,128 acre-feet

# APPENDIX "B-3"

## PURGATOIRE RIVER NEAR LAS ANIMAS, COLORADO

Report-Year ending October 31, 1986  
USGS Records—Gaging Station No. 07128500

| DAY      | NOV. | DEC. | JAN. | FEB.  | MAR.  | APR.  | MAY   | JUNE   | JULY   | AUG.   | SEPT.  | OCT. |
|----------|------|------|------|-------|-------|-------|-------|--------|--------|--------|--------|------|
| 1        | 58   | 30   | 43   | 16    | 11    | 7.0   | 6.6   | 7.2    | 23     | 2.9    | 179    | 18   |
| 2        | 54   | 28   | 42   | 12    | 10    | 7.0   | 36    | 12     | 20     | 3.2    | 549    | 12   |
| 3        | 51   | 32   | 38   | 10    | 9.7   | 6.8   | 170   | 1460   | 216    | 221    | 409    | 21   |
| 4        | 96   | 32   | 40   | 8.2   | 8.3   | 14    | 23    | 858    | 91     | 352    | 224    | 37   |
| 5        | 85   | 30   | 35   | 8.9   | 7.5   | 9.9   | 26    | 303    | 36     | 58     | 150    | 39   |
| 6        | 82   | 27   | 30   | 7.5   | 8.5   | 6.2   | 24    | 176    | 22     | 21     | 130    | 37   |
| 7        | 72   | 25   | 30   | 8.3   | 8.5   | 6.4   | 13    | 222    | 17     | 26     | 106    | 44   |
| 8        | 65   | 25   | 30   | 9.0   | 8.5   | 7.0   | 9.0   | 104    | 14     | 13     | 100    | 43   |
| 9        | 62   | 30   | 30   | 9.0   | 7.3   | 6.5   | 9.0   | 169    | 45     | 18     | 65     | 38   |
| 10       | 56   | 30   | 30   | 8.0   | 11    | 8.4   | 11    | 446    | 25     | 42     | 51     | 39   |
| 11       | 59   | 25   | 35   | 7.5   | 8.4   | 6.6   | 9.0   | 301    | 14     | 9.6    | 66     | 54   |
| 12       | 56   | 20   | 38   | 7.5   | 7.3   | 6.6   | 8.4   | 150    | 8.1    | 18     | 58     | 68   |
| 13       | 55   | 20   | 33   | 8.0   | 7.0   | 8.4   | 7.5   | 120    | 11     | 7.0    | 46     | 68   |
| 14       | 58   | 20   | 34   | 9.0   | 7.9   | 13    | 7.4   | 85     | 15     | 73     | 32     | 52   |
| 15       | 57   | 20   | 33   | 10    | 28    | 25    | 7.0   | 60     | 29     | 37     | 36     | 61   |
| 16       | 46   | 20   | 36   | 10    | 35    | 7.1   | 7.0   | 40     | 26     | 245    | 39     | 51   |
| 17       | 42   | 25   | 35   | 11    | 50    | 6.8   | 7.0   | 30     | 18     | 304    | 31     | 45   |
| 18       | 49   | 30   | 35   | 14    | 43    | 7.0   | 6.9   | 20     | 16     | 115    | 26     | 43   |
| 19       | 48   | 30   | 32   | 17    | 21    | 6.9   | 6.6   | 16     | 12     | 69     | 23     | 44   |
| 20       | 48   | 31   | 32   | 11    | 19    | 6.6   | 6.6   | 14     | 8.7    | 55     | 17     | 51   |
| 21       | 48   | 28   | 30   | 15    | 21    | 6.6   | 5.8   | 12     | 562    | 45     | 16     | 59   |
| 22       | 46   | 30   | 26   | 15    | 15    | 6.6   | 5.8   | 10     | 688    | 44     | 14     | 155  |
| 23       | 43   | 30   | 26   | 15    | 11    | 6.4   | 5.8   | 25     | 193    | 467    | 18     | 203  |
| 24       | 40   | 30   | 27   | 15    | 8.0   | 6.2   | 5.8   | 15     | 134    | 787    | 15     | 112  |
| 25       | 43   | 30   | 24   | 13    | 7.5   | 6.8   | 5.8   | 7.1    | 60     | 280    | 18     | 86   |
| 26       | 40   | 30   | 23   | 12    | 7.5   | 8.0   | 5.9   | 12     | 200    | 194    | 12     | 72   |
| 27       | 37   | 29   | 22   | 12    | 7.8   | 7.8   | 6.2   | 40     | 150    | 192    | 13     | 75   |
| 28       | 35   | 29   | 21   | 11    | 7.9   | 6.9   | 6.2   | 20     | 65     | 129    | 8.5    | 74   |
| 29       | 35   | 28   | 22   | ---   | 6.8   | 6.4   | 6.1   | 16     | 28     | 93     | 8.5    | 68   |
| 30       | 35   | 32   | 18   | ---   | 10    | 6.4   | 6.3   | 20     | 11     | 101    | 12     | 58   |
| 31       | ---  | 37   | 18   | ---   | 7.0   | ---   | 9.4   | ---    | 3.9    | 92     | ---    | 53   |
| TOTAL    |      |      |      |       |       |       |       |        |        |        |        |      |
| sec. ft. | 1601 | 863  | 948  | 309.9 | 426.4 | 241.3 | 470.1 | 4770.3 | 2761.7 | 4113.7 | 2472.0 | 1880 |
| ac. ft.  | 3176 | 1712 | 1880 | 615   | 846   | 479   | 932   | 9462   | 5478   | 8160   | 4903   | 3729 |

THE YEAR 41,372 acre-feet



# APPENDIX "B-4"

## RIVER FLOW INTO

### JOHN MARTIN RESERVOIR

| Report-Year ending October 31, 1986<br>USGS Records |       |       |       |        |        |        |        |         |         |        |       |       |
|-----------------------------------------------------|-------|-------|-------|--------|--------|--------|--------|---------|---------|--------|-------|-------|
| DAY                                                 | NOV.  | DEC.  | JAN.  | FEB.   | MAR.   | APR.   | MAY    | JUNE    | JULY    | AUG.   | SEPT. | OCT.  |
| 1                                                   | 145   | 225   | 309   | 210    | 119    | 39     | 41.6   | 240.2   | 230     | 67.9   | 362   | 85    |
| 2                                                   | 142   | 238   | 283   | 202    | 114    | 40     | 69     | 590     | 147     | 113.2  | 926   | 76    |
| 3                                                   | 139   | 257   | 247   | 215    | 118.7  | 42.8   | 206    | 1741    | 506     | 414    | 909   | 87    |
| 4                                                   | 184   | 358   | 225   | 217.2  | 127.3  | 52     | 60     | 1081    | 607     | 837    | 729   | 101   |
| 5                                                   | 173   | 371   | 211   | 214.9  | 122.5  | 46.9   | 63     | 504     | 734     | 327    | 533   | 109   |
| 6                                                   | 169   | 314   | 215   | 210.5  | 120.5  | 44.2   | 58     | 867     | 418     | 139    | 441   | 109   |
| 7                                                   | 158   | 285   | 215   | 211.3  | 122.5  | 46.4   | 45     | 812     | 370     | 134    | 328   | 117   |
| 8                                                   | 151   | 280   | 207   | 217    | 147.5  | 47     | 43     | 955     | 327     | 107    | 451   | 107   |
| 9                                                   | 148   | 255   | 210   | 210    | 165.3  | 43.5   | 49     | 2069    | 463     | 108    | 442   | 98    |
| 10                                                  | 146   | 232   | 205   | 163    | 178    | 45.4   | 58     | 2136    | 603     | 145    | 413   | 102   |
| 11                                                  | 148   | 146   | 212   | 117.5  | 189.4  | 43.6   | 59     | 2231    | 479     | 101.6  | 405   | 127   |
| 12                                                  | 148   | 127   | 241   | 117.5  | 174.3  | 45.6   | 109.4  | 1550    | 394.1   | 103    | 395   | 147   |
| 13                                                  | 144   | 120   | 245   | 118    | 163    | 46.4   | 127.5  | 881     | 250     | 122    | 401   | 215   |
| 14                                                  | 151   | 120   | 249   | 209    | 160.9  | 52     | 115.4  | 501     | 153     | 309    | 394   | 230   |
| 15                                                  | 173   | 120   | 255   | 410    | 142    | 64     | 81     | 312     | 139     | 153    | 397   | 192   |
| 16                                                  | 174   | 120   | 257   | 398    | 115    | 46.1   | 65     | 234     | 170     | 337    | 404   | 180   |
| 17                                                  | 151   | 125   | 253   | 312    | 123    | 43.8   | 61     | 198     | 106     | 392    | 330   | 206   |
| 18                                                  | 157   | 160   | 241   | 261    | 131    | 44     | 59.9   | 156     | 99      | 204    | 286   | 295   |
| 19                                                  | 153   | 230   | 228   | 216    | 89     | 44.9   | 66.6   | 113     | 89      | 161    | 254   | 378   |
| 20                                                  | 151   | 431   | 230   | 240    | 79     | 48.6   | 151.6  | 224     | 92.7    | 154    | 224   | 454   |
| 21                                                  | 151   | 628   | 226   | 254    | 87     | 47.6   | 149.8  | 408     | 1672    | 145    | 190   | 604   |
| 22                                                  | 150   | 730   | 224   | 256    | 74     | 44.6   | 125.8  | 515     | 958     | 147    | 141   | 793   |
| 23                                                  | 193   | 630   | 224   | 239    | 64     | 42.4   | 129.8  | 587     | 477     | 567    | 119   | 842   |
| 24                                                  | 256   | 479   | 220   | 128    | 61     | 42.2   | 101.8  | 753     | 614     | 1218   | 100   | 746   |
| 25                                                  | 264   | 367   | 220   | 119    | 56.5   | 43.8   | 97.8   | 461.1   | 500     | 470    | 100   | 704   |
| 26                                                  | 262   | 318   | 213   | 116    | 51.5   | 50     | 118.9  | 398     | 421     | 430    | 89    | 698   |
| 27                                                  | 250   | 287   | 219   | 118    | 50.8   | 49.8   | 148.2  | 233     | 244     | 358    | 80    | 736   |
| 28                                                  | 254   | 276   | 233   | 114    | 48.9   | 44.9   | 126.2  | 124     | 139     | 270    | 72.5  | 766   |
| 29                                                  | 258   | 294   | 233   | —      | 44.8   | 43.4   | 111.1  | 97      | 100     | 219    | 76.5  | 821   |
| 30                                                  | 244   | 303   | 224   | —      | 44     | 43.4   | 241.3  | 178     | 73      | 221    | 78    | 782   |
| 31                                                  | —     | 311   | 218   | —      | 40     | —      | 243.4  | —       | 62.9    | 201    | —     | 708   |
| TOTAL                                               |       |       |       |        |        |        |        |         |         |        |       |       |
| sec. ft.                                            | 5387  | 9137  | 7192  | 5813.9 | 3324.4 | 1378.3 | 3183.1 | 21149.3 | 11637.7 | 8674.7 | 10070 | 11615 |
| ac. ft.                                             | 10685 | 18123 | 14265 | 11532  | 6594   | 2734   | 6314   | 41950   | 23083   | 17206  | 19974 | 23038 |
| THE YEAR 195,498 acre-feet                          |       |       |       |        |        |        |        |         |         |        |       |       |

The Riverflow into JMR is the sum of the daily flows of the Arkansas River near Las Animas (Appendix B-2) and the Purgatoire River near Las Animas (Appendix B-3)

## Report-Year ending October 31, 1986

## Corps of Engineers Records

(Midnight contents in acre-feet from capacity table based on April/June 1980 hydrographic surveys and November 1980 aerial photographs used since August 12, 1981)

| DAY | NOV.   | DEC.   | JAN.   | FEB.   | MAR.   | APR.   | MAY    | JUNE   | JULY   | AUG.   | SEPT.  | OCT.   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1   | 280952 | 287259 | 310298 | 325759 | 336679 | 313987 | 257761 | 216167 | 235569 | 202629 | 200189 | 211457 |
| 2   | 281054 | 287666 | 310833 | 326207 | 336679 | 311369 | 256811 | 217029 | 234120 | 200840 | 202223 | 211290 |
| 3   | 281054 | 288276 | 311476 | 326654 | 337022 | 310084 | 256241 | 219356 | 233033 | 199375 | 205313 | 210871 |
| 4   | 281156 | 288886 | 312018 | 326878 | 337136 | 306873 | 255102 | 221339 | 232057 | 200270 | 206778 | 210453 |
| 5   | 281359 | 289904 | 312456 | 327326 | 337022 | 304517 | 253962 | 222201 | 231615 | 200596 | 207773 | 210034 |
| 6   | 280952 | 290723 | 312784 | 327773 | 336907 | 302377 | 252727 | 223838 | 230819 | 200596 | 208610 | 209783 |
| 7   | 280952 | 291352 | 313550 | 327996 | 336793 | 299833 | 251587 | 225424 | 229669 | 200270 | 209364 | 209448 |
| 8   | 280850 | 291666 | 314206 | 328220 | 336793 | 297320 | 250186 | 227900 | 229138 | 200026 | 210285 | 209197 |
| 9   | 280749 | 292399 | 314206 | 328556 | 336793 | 295016 | 249256 | 231438 | 228431 | 199782 | 211123 | 208778 |
| 10  | 280545 | 293132 | 314862 | 329115 | 336793 | 292294 | 247955 | 236839 | 227546 | 199457 | 212043 | 208862 |
| 11  | 280850 | 293446 | 315299 | 329339 | 336793 | 290619 | 246932 | 241007 | 226750 | 199375 | 212462 | 208610 |
| 12  | 281054 | 293550 | 315846 | 329451 | 336907 | 288581 | 245258 | 244421 | 224982 | 198810 | 213384 | 208275 |
| 13  | 280952 | 293969 | 316174 | 329675 | 336793 | 286445 | 242934 | 246839 | 224097 | 198174 | 214053 | 208359 |
| 14  | 281563 | 294388 | 316830 | 330234 | 336907 | 284411 | 240735 | 248048 | 223149 | 198730 | 214640 | 208610 |
| 15  | 281970 | 295016 | 317377 | 331129 | 337022 | 282173 | 238560 | 248792 | 221511 | 198571 | 215310 | 208527 |
| 16  | 282275 | 295435 | 317814 | 331912 | 336679 | 280647 | 236567 | 249163 | 219528 | 198412 | 216167 | 208610 |
| 17  | 282580 | 296273 | 318580 | 332359 | 337022 | 279059 | 234664 | 248885 | 217115 | 198492 | 216425 | 208527 |
| 18  | 282682 | 297216 | 319127 | 333366 | 336907 | 277380 | 232322 | 248327 | 214640 | 198412 | 217029 | 208610 |
| 19  | 282987 | 298158 | 319674 | 333929 | 336564 | 275109 | 230554 | 247397 | 212378 | 197935 | 217029 | 208694 |
| 20  | 283088 | 299100 | 320111 | 334387 | 336449 | 273430 | 229050 | 245909 | 210453 | 197379 | 217029 | 210285 |
| 21  | 283291 | 300461 | 320330 | 334845 | 335762 | 272245 | 227458 | 245072 | 212378 | 196664 | 217029 | 211625 |
| 22  | 283495 | 302163 | 320877 | 335418 | 334387 | 269791 | 225689 | 244236 | 213384 | 196187 | 216770 | 212881 |
| 23  | 283902 | 303768 | 321314 | 335877 | 333143 | 267858 | 223752 | 243678 | 213467 | 196028 | 216425 | 214640 |
| 24  | 284207 | 304839 | 322080 | 336220 | 331576 | 266021 | 222287 | 243492 | 213384 | 197220 | 215736 | 215736 |
| 25  | 284919 | 305695 | 322518 | 336449 | 329451 | 264378 | 221080 | 242748 | 213384 | 197538 | 215058 | 217460 |
| 26  | 285326 | 306338 | 323075 | 336679 | 328108 | 263218 | 220046 | 242004 | 213384 | 198253 | 214472 | 219184 |
| 27  | 285936 | 307087 | 323522 | 336793 | 326319 | 262058 | 218666 | 240644 | 212881 | 199050 | 213718 | 220821 |
| 28  | 286140 | 307729 | 323858 | 336449 | 323858 | 261188 | 217632 | 239105 | 212127 | 199050 | 213132 | 222114 |
| 29  | 286750 | 308158 | 324194 | ---    | 321533 | 260136 | 216770 | 237382 | 210285 | 199132 | 212797 | 223494 |
| 30  | 287056 | 309014 | 324753 | ---    | 319346 | 258806 | 216253 | 236386 | 207521 | 199213 | 212043 | 224893 |
| 31  | ---    | 309656 | 325200 | ---    | 316830 | ---    | 215822 | ---    | 205313 | 199782 | ---    | 225954 |

APPENDIX "B-5"

CONTENTS OF

JOHN MARTIN RESERVOIR

NOTE -- Difference between published U.S. Geological Survey and Compact report figures is due to rounding procedures and/or corrections to the record at times of inspections.

# APPENDIX "B-5a"

## CONTENTS OF JOHN MARTIN RESERVOIR CONSERVATION POOL

Contents of John Martin Reservoir Conservation Pool  
Contents at 2400 hours  
Report Year ending October 31, 1986  
Source: Operations Secretary, Arkansas River Compact Administration  
(rounded to the nearest acre-foot)

| DAY | NOV. | DEC.  | JAN.  | FEB.  | MAR.  | APR.  | MAY | JUNE  | JULY | AUG. | SEPT. | OCT. | DAY |
|-----|------|-------|-------|-------|-------|-------|-----|-------|------|------|-------|------|-----|
| 1   | 381  | 9729  | 21817 | 31807 | 44091 | 50408 | 0   | 12    | 0    | 0    | 0     | 0    | 1   |
| 2   | 858  | 9987  | 22194 | 32180 | 44299 | 48018 | 0   | 0     | 0    | 0    | 0     | 0    | 2   |
| 3   | 1234 | 10374 | 22705 | 32665 | 44762 | 45913 | 0   | 858   | 0    | 0    | 128   | 0    | 3   |
| 4   | 1728 | 10775 | 23045 | 32926 | 45134 | 43650 | 0   | 1242  | 0    | 642  | 1283  | 0    | 4   |
| 5   | 2289 | 11472 | 23307 | 33408 | 45409 | 41368 | 0   | 375   | 0    | 0    | 471   | 0    | 5   |
| 6   | 2228 | 11929 | 23689 | 33889 | 45590 | 39312 | 0   | 285   | 0    | 0    | 0     | 0    | 6   |
| 7   | 2621 | 12258 | 24063 | 34259 | 45805 | 36922 | 0   | 84    | 0    | 0    | 0     | 0    | 7   |
| 8   | 2876 | 12516 | 24441 | 34631 | 46162 | 34570 | 0   | 802   | 0    | 0    | 0     | 0    | 8   |
| 9   | 3126 | 12773 | 24712 | 35000 | 46526 | 32459 | 0   | 2550  | 0    | 0    | 0     | 0    | 9   |
| 10  | 3273 | 13231 | 24970 | 35364 | 46890 | 30088 | 0   | 6091  | 0    | 0    | 0     | 0    | 10  |
| 11  | 3930 | 13439 | 25239 | 35625 | 47254 | 27958 | 0   | 8421  | 0    | 0    | 0     | 0    | 11  |
| 12  | 4375 | 13567 | 25503 | 35776 | 47732 | 25632 | 0   | 10038 | 0    | 0    | 0     | 0    | 12  |
| 13  | 4708 | 13696 | 25741 | 36047 | 47981 | 23207 | 0   | 10655 | 0    | 0    | 0     | 0    | 13  |
| 14  | 5334 | 13929 | 26067 | 36647 | 48458 | 20632 | 0   | 10091 | 0    | 0    | 0     | 0    | 14  |
| 15  | 5818 | 14328 | 26395 | 37552 | 48936 | 18697 | 0   | 9049  | 0    | 0    | 0     | 0    | 15  |
| 16  | 6107 | 14542 | 26604 | 38318 | 48978 | 16996 | 0   | 7914  | 0    | 0    | 0     | 0    | 16  |
| 17  | 6373 | 14976 | 27158 | 39095 | 49708 | 15324 | 0   | 6434  | 0    | 0    | 0     | 0    | 17  |
| 18  | 6682 | 15492 | 27497 | 39779 | 49991 | 13550 | 0   | 4631  | 0    | 0    | 0     | 0    | 18  |
| 19  | 6817 | 16048 | 27854 | 40367 | 50053 | 11678 | 0   | 3108  | 0    | 0    | 0     | 0    | 19  |
| 20  | 7014 | 16464 | 28110 | 40860 | 50343 | 9909  | 0   | 1507  | 0    | 0    | 0     | 417  | 20  |
| 21  | 7217 | 17117 | 28250 | 41350 | 50646 | 8289  | 0   | 555   | 1740 | 0    | 0     | 0    | 21  |
| 22  | 7434 | 18173 | 28501 | 41952 | 50750 | 6509  | 0   | 0     | 1970 | 0    | 0     | 0    | 22  |
| 23  | 7751 | 18905 | 28758 | 42439 | 50985 | 4814  | 0   | 0     | 1458 | 0    | 0     | 0    | 23  |
| 24  | 7980 | 19381 | 29352 | 42852 | 51327 | 3199  | 0   | 0     | 305  | 519  | 0     | 0    | 24  |
| 25  | 8488 | 19727 | 29623 | 43163 | 51354 | 1313  | 0   | 0     | 0    | 0    | 0     | 0    | 25  |
| 26  | 8794 | 19856 | 30013 | 43555 | 51721 | 0     | 0   | 0     | 0    | 0    | 0     | 0    | 26  |
| 27  | 8992 | 20156 | 30298 | 43833 | 52034 | 0     | 0   | 0     | 0    | 0    | 0     | 0    | 27  |
| 28  | 9098 | 20489 | 30468 | 43881 | 52058 | 0     | 0   | 0     | 0    | 0    | 0     | 0    | 28  |
| 29  | 9302 | 20851 | 30618 | --    | 52206 | 0     | 0   | 0     | 0    | 0    | 0     | 0    | 29  |
| 30  | 9602 | 21180 | 31002 | --    | 52492 | 0     | 0   | 0     | 0    | 0    | 0     | 0    | 30  |
| 31  | --   | 21503 | 31273 | --    | 52578 | --    | 0   | --    | 0    | 0    | 0     | 0    | 31  |

# APPENDIX "B-6"

## OUTFLOW FROM JOHN MARTIN RESERVOIR

### ARKANSAS RIVER BELOW

### JOHN MARTIN RESERVOIR

Report-Year ending October 31, 1966  
USGS Records--Gaging Station No. 07130500

| DAY      | NOV.   | DEC.  | JAN.  | FEB.  | MAR.  | APR.  | MAY   | JUNE    | JULY  | AUG.  | SEPT.  | OCT.   |
|----------|--------|-------|-------|-------|-------|-------|-------|---------|-------|-------|--------|--------|
| 1        | 138    | 5.3   | 3.6   | 6.8   | 61    | 1270  | 568   | 443     | 768   | 1290  | 83     | 318    |
| 2        | 134    | 5.3   | 3.6   | 6.4   | 61    | 1260  | 562   | 310     | 777   | 985   | 82     | 308    |
| 3        | 134    | 5.3   | 3.6   | 5.8   | 70    | 1250  | 562   | 169     | 818   | 795   | 8.6    | 307    |
| 4        | 138    | 5.3   | 3.6   | 5.8   | 83    | 1230  | 564   | 124     | 849   | 433   | 6.2    | 305    |
| 5        | 143    | 5.3   | 3.6   | 5.8   | 93    | 1250  | 555   | 82      | 852   | 229   | 6.4    | 305    |
| 6        | 148    | 4.7   | 3.6   | 5.8   | 103   | 1240  | 559   | 14      | 845   | 229   | 4.6    | 282    |
| 7        | 149    | 4.0   | 3.6   | 5.8   | 122   | 1260  | 570   | 14      | 926   | 234   | 4.4    | 265    |
| 8        | 146    | 4.0   | 6.4   | 6.1   | 134   | 1250  | 579   | 12      | 945   | 253   | 4.7    | 256    |
| 9        | 146    | 4.0   | 6.7   | 6.3   | 134   | 1240  | 585   | 11      | 919   | 269   | 3.8    | 252    |
| 10       | 146    | 4.0   | 14    | 6.3   | 134   | 1220  | 586   | 8.3     | 901   | 269   | 3.2    | 253    |
| 11       | 146    | 3.6   | 9.9   | 5.9   | 134   | 1070  | 588   | 7.4     | 897   | 266   | 3.0    | 253    |
| 12       | 120    | 3.2   | 9.8   | 5.6   | 134   | 984   | 836   | 7.3     | 923   | 235   | 2.8    | 253    |
| 13       | 101    | 3.3   | 9.8   | 6.2   | 134   | 981   | 1200  | 7.3     | 920   | 229   | 3.2    | 259    |
| 14       | 99     | 2.9   | 9.8   | 6.3   | 134   | 983   | 1140  | 7.3     | 891   | 241   | 2.8    | 252    |
| 15       | 39     | 2.5   | 9.3   | 6.3   | 134   | 967   | 1120  | 6.3     | 1010  | 249   | 43     | 241    |
| 16       | 5.5    | 2.5   | 9.3   | 6.3   | 134   | 952   | 1040  | 127     | 1140  | 242   | 70     | 237    |
| 17       | 5.5    | 3.0   | 9.0   | 6.3   | 132   | 946   | 989   | 288     | 1210  | 245   | 70     | 235    |
| 18       | 5.5    | 3.8   | 8.6   | 6.1   | 134   | 948   | 983   | 312     | 1290  | 245   | 70     | 237    |
| 19       | 5.5    | 3.5   | 8.3   | 5.7   | 137   | 949   | 946   | 644     | 1310  | 323   | 118    | 236    |
| 20       | 5.5    | 3.6   | 8.1   | 5.8   | 143   | 949   | 892   | 842     | 1280  | 371   | 165    | 221    |
| 21       | 5.4    | 3.6   | 7.3   | 5.8   | 439   | 968   | 945   | 840     | 979   | 378   | 164    | 170    |
| 22       | 5.4    | 3.6   | 7.3   | 5.8   | 686   | 995   | 994   | 834     | 678   | 378   | 251    | 107    |
| 23       | 5.4    | 3.6   | 7.3   | 5.8   | 685   | 988   | 971   | 812     | 556   | 377   | 317    | 78     |
| 24       | 5.3    | 3.6   | 7.3   | 5.8   | 874   | 980   | 816   | 801     | 564   | 373   | 327    | 55     |
| 25       | 5.3    | 3.6   | 7.3   | 38    | 1020  | 808   | 802   | 798     | 534   | 323   | 229    | 43     |
| 26       | 5.3    | 3.6   | 7.3   | 61    | 826   | 680   | 805   | 814     | 516   | 205   | 339    | 43     |
| 27       | 5.3    | 3.6   | 7.3   | 61    | 997   | 677   | 800   | 852     | 517   | 68    | 348    | 41     |
| 28       | 5.3    | 3.6   | 9.1   | 61    | 1200  | 613   | 694   | 873     | 521   | 109   | 347    | 38     |
| 29       | 5.3    | 3.6   | 6.8   | ---   | 1200  | 565   | 563   | 873     | 945   | 123   | 338    | 38     |
| 30       | 5.3    | 3.6   | 6.8   | ---   | 1200  | 568   | 495   | 809     | 1300  | 134   | 324    | 25     |
| 31       | ---    | 3.6   | 6.8   | ---   | 1240  | ---   | 445   | ---     | 1340  | 113   | ---    | 5.3    |
| TOTAL    |        |       |       |       |       |       |       |         |       |       |        |        |
| sec. ft. | 2007.8 | 118.7 | 224.8 | 365.6 | 12712 | 30041 | 23754 | 11741.9 | 27921 | 10213 | 3838.7 | 5918.3 |
| ac. ft.  | 3982   | 235   | 446   | 725   | 25214 | 59586 | 47116 | 23290   | 55381 | 20257 | 7614   | 11739  |

THE YEAR 255,585 acre-feet

# APPENDIX "B-7"

## ARKANSAS RIVER AT

### LAMAR, COLORADO

Report-Year ending October 31, 1966  
USGS Records—Gaging Station No. 07133000

| DAY      | NOV.  | DEC. | JAN. | FEB.  | MAR.   | APR.  | MAY   | JUNE  | JULY  | AUG.  | SEPT.  | OCT. |
|----------|-------|------|------|-------|--------|-------|-------|-------|-------|-------|--------|------|
| 1        | 16    | 22   | 36   | 16    | 1.6    | 683   | 50    | 58    | 373   | 841   | 36     | 21   |
| 2        | 13    | 29   | 36   | 16    | 1.5    | 683   | 48    | 96    | 361   | 947   | 46     | 21   |
| 3        | 12    | 40   | 36   | 24    | 7.6    | 691   | 43    | 96    | 342   | 518   | 731    | 20   |
| 4        | 11    | 46   | 37   | 33    | 8.8    | 690   | 32    | 89    | 309   | 438   | 92     | 20   |
| 5        | 9.7   | 42   | 41   | 33    | 6.7    | 690   | 30    | 87    | 320   | 100   | 47     | 19   |
| 6        | 22    | 40   | 39   | 35    | 7.4    | 700   | 20    | 116   | 317   | 108   | 19     | 20   |
| 7        | 32    | 39   | 37   | 34    | 8.6    | 701   | 16    | 87    | 355   | 73    | 16     | 20   |
| 8        | 33    | 40   | 37   | 31    | 9.9    | 704   | 13    | 53    | 593   | 53    | 13     | 20   |
| 9        | 32    | 40   | 38   | 28    | 24     | 706   | 13    | 37    | 399   | 178   | 11     | 20   |
| 10       | 31    | 34   | 40   | 25    | 36     | 715   | 14    | 33    | 363   | 114   | 6.9    | 23   |
| 11       | 46    | 22   | 41   | 25    | 13     | 673   | 13    | 34    | 401   | 88    | 6.4    | 23   |
| 12       | 56    | 21   | 44   | 25    | 20     | 510   | 16    | 34    | 338   | 68    | 6.4    | 36   |
| 13       | 42    | 22   | 43   | 28    | 20     | 498   | 504   | 33    | 339   | 62    | 6.6    | 30   |
| 14       | 38    | 25   | 42   | 30    | 20     | 483   | 573   | 34    | 334   | 248   | 6.7    | 30   |
| 15       | 41    | 25   | 40   | 34    | 20     | 466   | 580   | 36    | 338   | 231   | 8.2    | 28   |
| 16       | 58    | 35   | 40   | 37    | 20     | 425   | 537   | 36    | 519   | 84    | 9.5    | 27   |
| 17       | 52    | 35   | 40   | 33    | 20     | 413   | 456   | 35    | 548   | 60    | 8.9    | 28   |
| 18       | 47    | 37   | 39   | 31    | 19     | 400   | 425   | 37    | 610   | 46    | 11     | 35   |
| 19       | 44    | 39   | 39   | 29    | 20     | 402   | 341   | 87    | 655   | 40    | 11     | 50   |
| 20       | 41    | 40   | 38   | 27    | 24     | 399   | 322   | 441   | 690   | 46    | 11     | 84   |
| 21       | 38    | 40   | 38   | 28    | 48     | 407   | 322   | 489   | 670   | 45    | 12     | 80   |
| 22       | 33    | 40   | 37   | 28    | 461    | 433   | 303   | 484   | 350   | 50    | 15     | 79   |
| 23       | 32    | 40   | 37   | 27    | 516    | 443   | 227   | 469   | 200   | 62    | 16     | 84   |
| 24       | 32    | 40   | 36   | 27    | 510    | 398   | 198   | 428   | 150   | 154   | 16     | 92   |
| 25       | 33    | 39   | 36   | 13    | 521    | 358   | 183   | 414   | 130   | 117   | 16     | 94   |
| 26       | 33    | 38   | 37   | 2.0   | 691    | 125   | 155   | 428   | 110   | 302   | 13     | 85   |
| 27       | 32    | 37   | 32   | 2.6   | 575    | 109   | 208   | 433   | 100   | 320   | 19     | 79   |
| 28       | 33    | 36   | 33   | 1.9   | 707    | 105   | 203   | 444   | 90    | 85    | 20     | 77   |
| 29       | 32    | 36   | 35   | ---   | 730    | 63    | 128   | 438   | 250   | 64    | 21     | 67   |
| 30       | 24    | 36   | 35   | ---   | 730    | 63    | 105   | 425   | 600   | 38    | 22     | 66   |
| 31       | ---   | 36   | 25   | ---   | 715    | ---   | 79    | ---   | 756   | 37    | ---    | 63   |
| TOTAL    |       |      |      |       |        |       |       |       |       |       |        |      |
| sec. ft. | 998.7 | 1091 | 1164 | 703.5 | 6512.1 | 14125 | 6157  | 6011  | 11910 | 5617  | 1273.6 | 1436 |
| ac. ft.  | 1981  | 2164 | 2309 | 1395  | 12917  | 28017 | 12212 | 11923 | 23623 | 11141 | 2526   | 2848 |

THE YEAR 113,056 acre-feet

# APPENDIX "B-8"

## ARKANSAS RIVER NEAR GRANADA, COLORADO

Report-Year ending October 31, 1986  
USGS Records—Gaging Station No. 07134180

| DAY      | NOV. | DEC. | JAN. | FEB  | MAR.  | APR.  | MAY   | JUNE  | JULY  | AUG.  | SEPT. | OCT. |
|----------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|
| 1        | 98   | 123  | 143  | 113  | 87    | 622   | 82    | 138   | 369   | 751   | 152   | 44   |
| 2        | 97   | 123  | 142  | 113  | 88    | 645   | 77    | 150   | 335   | 1360  | 134   | 48   |
| 3        | 98   | 131  | 141  | 119  | 87    | 638   | 70    | 135   | 356   | 954   | 737   | 49   |
| 4        | 103  | 148  | 138  | 131  | 89    | 667   | 64    | 114   | 343   | 800   | 573   | 50   |
| 5        | 105  | 151  | 131  | 135  | 90    | 655   | 62    | 107   | 323   | 434   | 305   | 49   |
| 6        | 96   | 155  | 141  | 135  | 87    | 658   | 54    | 127   | 319   | 320   | 229   | 44   |
| 7        | 96   | 153  | 136  | 133  | 84    | 661   | 51    | 146   | 315   | 278   | 204   | 44   |
| 8        | 97   | 153  | 133  | 122  | 85    | 639   | 47    | 189   | 385   | 219   | 180   | 41   |
| 9        | 100  | 154  | 134  | 119  | 89    | 636   | 44    | 240   | 560   | 245   | 160   | 37   |
| 10       | 113  | 146  | 137  | 114  | 106   | 656   | 45    | 193   | 430   | 246   | 144   | 40   |
| 11       | 121  | 141  | 137  | 111  | 81    | 660   | 43    | 168   | 450   | 191   | 133   | 55   |
| 12       | 139  | 119  | 139  | 109  | 47    | 549   | 42    | 145   | 418   | 170   | 127   | 60   |
| 13       | 145  | 130  | 139  | 112  | 28    | 494   | 126   | 118   | 385   | 161   | 118   | 63   |
| 14       | 138  | 134  | 137  | 125  | 28    | 475   | 413   | 110   | 384   | 138   | 113   | 58   |
| 15       | 142  | 137  | 138  | 134  | 28    | 455   | 458   | 105   | 364   | 366   | 108   | 59   |
| 16       | 149  | 143  | 135  | 139  | 28    | 418   | 455   | 95    | 458   | 208   | 95    | 55   |
| 17       | 152  | 148  | 133  | 135  | 28    | 404   | 411   | 74    | 535   | 160   | 81    | 52   |
| 18       | 146  | 151  | 131  | 129  | 27    | 379   | 400   | 63    | 550   | 120   | 74    | 57   |
| 19       | 136  | 152  | 132  | 126  | 23    | 375   | 391   | 62    | 578   | 91    | 68    | 70   |
| 20       | 132  | 155  | 132  | 119  | 25    | 377   | 383   | 154   | 618   | 77    | 59    | 90   |
| 21       | 140  | 159  | 130  | 117  | 25    | 378   | 354   | 335   | 689   | 76    | 52    | 142  |
| 22       | 150  | 159  | 125  | 115  | 137   | 390   | 379   | 391   | 686   | 82    | 48    | 139  |
| 23       | 151  | 155  | 127  | 112  | 352   | 412   | 405   | 415   | 348   | 623   | 45    | 138  |
| 24       | 153  | 149  | 128  | 107  | 410   | 388   | 380   | 398   | 194   | 304   | 44    | 141  |
| 25       | 156  | 146  | 125  | 106  | 417   | 392   | 298   | 369   | 153   | 234   | 44    | 152  |
| 26       | 156  | 147  | 122  | 102  | 568   | 276   | 288   | 376   | 140   | 226   | 48    | 149  |
| 27       | 152  | 144  | 121  | 106  | 620   | 194   | 287   | 377   | 126   | 646   | 42    | 140  |
| 28       | 151  | 142  | 121  | 92   | 604   | 161   | 279   | 387   | 115   | 334   | 46    | 135  |
| 29       | 148  | 140  | 121  | ---  | 630   | 124   | 245   | 390   | 95    | 230   | 46    | 128  |
| 30       | 138  | 143  | 120  | ---  | 649   | 96    | 175   | 390   | 284   | 188   | 44    | 128  |
| 31       | ---  | 142  | 119  | ---  | 656   | ---   | 151   | ---   | 566   | 166   | ---   | 125  |
| TOTAL    |      |      |      |      |       |       |       |       |       |       |       |      |
| sec. ft. | 3898 | 4473 | 4088 | 3330 | 6303  | 13874 | 6959  | 6461  | 11871 | 10398 | 4253  | 2582 |
| ac. ft.  | 7732 | 8872 | 8109 | 6605 | 12502 | 27519 | 13803 | 12815 | 23546 | 20624 | 8436  | 5121 |

THE YEAR 155,684 acre-feet

# APPENDIX "B-9"

## ARKANSAS RIVER AT THE

### COLORADO-KANSAS STATELINE

| Report-Year ending October 31, 1986<br>USGS Records |         |       |       |      |       |       |       |         |          |          |        |        |
|-----------------------------------------------------|---------|-------|-------|------|-------|-------|-------|---------|----------|----------|--------|--------|
| DAY                                                 | NOV.    | DEC   | JAN.  | FEB. | MAR.  | APR.  | MAY   | JUNE    | JULY     | AUG.     | SEPT.  | OCT.   |
| 1                                                   | 193     | 150   | 169   | 162  | 157   | 709   | 239   | 314     | 729      | 720      | 377    | 227    |
| 2                                                   | 186     | 150   | 170   | 156  | 152   | 688   | 226   | 364.01  | 453      | 2047     | 358    | 233    |
| 3                                                   | 198     | 159   | 169   | 148  | 151   | 691   | 216   | 343     | 415      | 1620.8   | 591    | 234    |
| 4                                                   | 183     | 165   | 166   | 152  | 146   | 666   | 205   | 324     | 395      | 1290.75  | 1030   | 231    |
| 5                                                   | 183     | 177   | 168   | 159  | 145   | 649   | 195   | 295     | 369      | 1030.08  | 504    | 227    |
| 6                                                   | 183     | 185   | 175   | 165  | 140   | 650   | 189   | 232     | 366      | 670      | 390    | 223    |
| 7                                                   | 204.5   | 191   | 163   | 166  | 136   | 656   | 172   | 227.13  | 365      | 517      | 344    | 221    |
| 8                                                   | 195.3   | 186   | 157   | 158  | 137   | 649   | 164   | 444     | 623      | 445      | 347    | 207.2  |
| 9                                                   | 186.02  | 183   | 163   | 160  | 146   | 648   | 164   | 432     | 674      | 490      | 333    | 193    |
| 10                                                  | 197     | 175   | 166   | 151  | 156   | 653   | 169   | 531     | 557      | 503      | 316    | 186    |
| 11                                                  | 197     | 170   | 169   | 140  | 172   | 648   | 165   | 433     | 523      | 483      | 301    | 179    |
| 12                                                  | 217     | 164   | 162   | 140  | 146   | 597   | 161   | 303     | 544      | 418      | 264    | 219    |
| 13                                                  | 213     | 165   | 165   | 152  | 129   | 526   | 169   | 267     | 452      | 453      | 257    | 242    |
| 14                                                  | 207     | 160   | 167   | 157  | 129   | 541   | 325   | 246     | 455      | 399      | 247    | 246.2  |
| 15                                                  | 228     | 158   | 168   | 166  | 128   | 542   | 492   | 227     | 442      | 428      | 235    | 248.4  |
| 16                                                  | 233     | 162   | 168   | 170  | 129   | 510   | 550   | 216     | 431      | 451      | 237    | 259.5  |
| 17                                                  | 259     | 172   | 161   | 172  | 130   | 502   | 559   | 203     | 549      | 354      | 226    | 250.3  |
| 18                                                  | 225     | 177   | 162   | 169  | 131   | 474   | 558   | 192     | 582      | 296      | 208    | 244.4  |
| 19                                                  | 201     | 183   | 167   | 155  | 126   | 478   | 576   | 192     | 623      | 262      | 198    | 239    |
| 20                                                  | 179     | 186   | 167   | 154  | 116   | 457   | 556   | 211     | 715      | 232      | 191    | 269    |
| 21                                                  | 171     | 186   | 157   | 157  | 110   | 455   | 470   | 304     | 780      | 230      | 187    | 441    |
| 22                                                  | 179     | 185   | 151   | 159  | 102   | 458   | 427   | 405     | 1515.6   | 241      | 191    | 403    |
| 23                                                  | 189     | 179   | 155   | 155  | 229   | 472   | 489   | 469     | 766.48   | 753      | 195    | 403    |
| 24                                                  | 189     | 179   | 159   | 148  | 373   | 464   | 529   | 492     | 414      | 866      | 190    | 372    |
| 25                                                  | 187     | 183   | 159   | 148  | 442   | 444   | 447   | 440     | 343      | 463      | 202    | 335    |
| 26                                                  | 182     | 177   | 159   | 156  | 487   | 445   | 386   | 413     | 316      | 404      | 201    | 311    |
| 27                                                  | 179     | 165   | 159   | 147  | 693   | 370   | 395   | 516.6   | 281      | 564      | 202    | 287    |
| 28                                                  | 179     | 170   | 161   | 143  | 602   | 336   | 400   | 374     | 257      | 581      | 217.2  | 273    |
| 29                                                  | 177     | 171   | 157   | ---  | 614   | 304   | 383   | 492     | 233      | 423      | 228    | 242    |
| 30                                                  | 160     | 173   | 156   | ---  | 697   | 265   | 336   | 534     | 243      | 408      | 226    | 228    |
| 31                                                  | ---     | 169   | 160   | ---  | 689   | ---   | 301   | ---     | 503      | 386      | ---    | 237    |
| TOTAL                                               |         |       |       |      |       |       |       |         |          |          |        |        |
| sec. ft.                                            | 5859.82 | 5355  | 5055  | 4365 | 7840  | 15947 | 10613 | 10534.7 | 15914.08 | 18428.63 | 8993.2 | 8111.0 |
| ac. ft.                                             | 11623   | 10622 | 10027 | 8658 | 15551 | 31631 | 21051 | 20896   | 31566    | 36553    | 17838  | 16088  |
| THE YEAR 232,104 acre feet                          |         |       |       |      |       |       |       |         |          |          |        |        |

The daily discharges are the sum of the flows of the Arkansas River near Coolidge, Kansas, USGS Gaging Station No. 07137500 and the Frontier Ditch, USGS Gaging Station No. 07137000.

# APPENDIX "B-10"

## TRANSFER OF COMPACT WATER FROM THE JOHN MARTIN RESERVOIR CONSERVATION POOL INTO AGREEMENT ACCOUNTS

Transfer of Compact Water from the John Martin Reservoir Conservation Pool Into Agreement Accounts 1 /  
Report Year ending October 31, 1986  
Source: Operations Secretary, Arkansas River Compact Administration  
(acre-feet)

| DAY   | NOV. | DEC. | JAN. | FEB. | MAR. | APR.      | MAY  | JUNE      | JULY      | AUG.     | SEPT.     | OCT.      | DAY |
|-------|------|------|------|------|------|-----------|------|-----------|-----------|----------|-----------|-----------|-----|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,239.69  | 0.00      | 0.00     | 650.94    | 0.00      | 1   |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,560.76  | 0.00      | 0.00     | 1,983.50  | 0.00      | 2   |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 1,983.50  | 0.00      | 3   |
| 4     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 1,322.33 | 1,983.50  | 0.00      | 4   |
| 5     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 1,165.59 | 1,226.54  | 0.00      | 5   |
| 6     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 602.83    | 0.00      | 6   |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 780.48    | 0.00      | 7   |
| 8     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 894.87    | 0.00      | 8   |
| 9     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 685.15    | 0.00      | 9   |
| 10    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 765.66    | 0.00      | 10  |
| 11    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 424.16    | 0.00      | 11  |
| 12    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 614.30    | 0.00      | 12  |
| 13    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 502.89    | 0.00      | 13  |
| 14    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,479.38  | 0.00 | 1,983.50  | 0.00      | 0.00     | 432.08    | 35.55     | 14  |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,149.00  | 0.00 | 1,983.50  | 0.00      | 0.00     | 503.64    | 0.00      | 15  |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 0.00      | 0.00     | 816.02    | 0.00      | 16  |
| 17    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 0.00      | 0.00     | 256.94    | 0.00      | 17  |
| 18    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 0.00      | 0.00     | 549.73    | 0.00      | 18  |
| 19    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 0.00      | 0.00     | 136.26    | 0.00      | 19  |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 0.00      | 0.00     | 283.88    | 1,239.69  | 20  |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,983.50  | 1,983.50  | 0.00     | 387.78    | 1,589.19  | 21  |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,587.03  | 1,983.50  | 0.00     | 230.28    | 810.60    | 22  |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,236.07  | 1,983.50  | 0.00     | 0.00      | 1,251.70  | 23  |
| 24    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,522.93  | 1,983.50  | 1,239.69 | 0.00      | 570.59    | 24  |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,983.50  | 0.00 | 1,064.96  | 978.76    | 1,626.32 | 0.00      | 1,091.06  | 25  |
| 26    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,377.87  | 0.00 | 1,076.70  | 714.65    | 1,229.49 | 0.00      | 992.19    | 26  |
| 27    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 0.00 | 616.17    | 659.70    | 1,080.08 | 0.00      | 771.63    | 27  |
| 28    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 0.00 | 468.46    | 520.14    | 355.52   | 0.00      | 364.48    | 28  |
| 29    | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00      | 0.00 | 0.00      | 288.85    | 414.30   | 0.00      | 461.48    | 29  |
| 30    | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00      | 0.00 | 0.00      | 0.00      | 424.57   | 0.00      | 717.63    | 30  |
| 31    | ---  | 0.00 | 0.00 | ---  | 0.00 | ---       | 0.00 | ---       | 0.00      | 865.25   | ---       | 575.00    | 31  |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 58,073.19 | 0.00 | 48,059.27 | 11,096.10 | 9,723.14 | 16,694.93 | 10,470.79 |     |

THE YEAR 154,117.42 acre-feet

1 / All conservation pool water was apportioned as follows in Colorado and Kansas Accounts:

40% to Kansas and 60% to Colorado, as described in the 1980 Colorado-Kansas Storage Resolution, and 35% of all "other water" delivered to John Martin Reservoir to the Kansas transit loss account.



Demands by Colorado for Agreement Account Water in John Martin Reservoir  
Report-Year ending October 31, 1986  
Source: Operations Secretary, Arkansas River Compact Administration  
(acre-feet)

| DAY   | NOV.     | DEC. | JAN. | FEB.   | MAR.      | APR.      | MAY       | JUNE      | JULY      | AUG.     | SEPT.    | OCT.     | Day |
|-------|----------|------|------|--------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|-----|
| 1     | 305.80   | 0.00 | 0.00 | 0.00   | 108.91    | 1,543.46  | 774.22    | 735.13    | 0.00      | 495.29   | 131.94   | 501.00   | 1   |
| 2     | 305.80   | 0.00 | 0.00 | 0.00   | 108.91    | 1,327.71  | 782.46    | 632.17    | 361.15    | 679.81   | 126.45   | 374.80   | 2   |
| 3     | 305.80   | 0.00 | 0.00 | 0.00   | 133.36    | 1,327.71  | 594.26    | 348.19    | 392.87    | 664.90   | 0.00     | 259.30   | 3   |
| 4     | 305.80   | 0.00 | 0.00 | 0.00   | 158.74    | 1,297.01  | 481.34    | 245.84    | 411.91    | 577.52   | 0.00     | 259.30   | 4   |
| 5     | 305.80   | 0.00 | 0.00 | 0.00   | 178.83    | 1,278.60  | 882.82    | 134.10    | 411.91    | 538.30   | 0.00     | 259.30   | 5   |
| 6     | 305.80   | 0.00 | 0.00 | 0.00   | 198.69    | 1,278.60  | 882.82    | 0.00      | 411.91    | 0.00     | 0.00     | 186.40   | 6   |
| 7     | 305.80   | 0.00 | 0.00 | 0.00   | 231.92    | 1,319.41  | 889.04    | 0.00      | 631.32    | 73.52    | 0.00     | 148.92   | 7   |
| 8     | 305.80   | 0.00 | 0.00 | 0.00   | 259.75    | 1,343.92  | 918.39    | 0.00      | 0.00      | 110.26   | 0.00     | 152.67   | 8   |
| 9     | 305.80   | 0.00 | 0.00 | 0.00   | 267.20    | 1,332.23  | 933.77    | 0.00      | 132.52    | 110.26   | 0.00     | 121.25   | 9   |
| 10    | 305.80   | 0.00 | 0.00 | 0.00   | 267.20    | 1,262.08  | 933.77    | 0.00      | 662.41    | 110.26   | 0.00     | 102.39   | 10  |
| 11    | 305.80   | 0.00 | 0.00 | 0.00   | 267.20    | 1,219.30  | 933.77    | 0.00      | 572.30    | 89.05    | 0.00     | 102.39   | 11  |
| 12    | 241.51   | 0.00 | 0.00 | 0.00   | 267.20    | 1,214.38  | 1,005.33  | 0.00      | 572.30    | 65.35    | 0.00     | 102.39   | 12  |
| 13    | 202.93   | 0.00 | 0.00 | 0.00   | 267.20    | 1,214.38  | 1,210.78  | 0.00      | 572.30    | 65.35    | 0.00     | 87.43    | 13  |
| 14    | 202.93   | 0.00 | 0.00 | 0.00   | 267.04    | 1,177.07  | 1,236.57  | 0.00      | 214.61    | 0.00     | 0.00     | 29.42    | 14  |
| 15    | 63.42    | 0.00 | 0.00 | 0.00   | 266.96    | 1,103.80  | 1,266.04  | 0.00      | 0.00      | 0.00     | 75.02    | 0.00     | 15  |
| 16    | 0.00     | 0.00 | 0.00 | 0.00   | 266.96    | 1,073.28  | 1,211.71  | 309.94    | 0.00      | 0.00     | 120.04   | 0.00     | 16  |
| 17    | 0.00     | 0.00 | 0.00 | 0.00   | 266.96    | 1,077.12  | 1,155.48  | 524.95    | 546.05    | 0.00     | 120.04   | 0.00     | 17  |
| 18    | 0.00     | 0.00 | 0.00 | 0.00   | 279.44    | 1,079.43  | 1,131.90  | 568.26    | 881.66    | 0.00     | 120.04   | 0.00     | 18  |
| 19    | 0.00     | 0.00 | 0.00 | 0.00   | 286.93    | 1,079.43  | 936.86    | 751.30    | 881.66    | 0.00     | 225.21   | 0.00     | 19  |
| 20    | 0.00     | 0.00 | 0.00 | 0.00   | 286.93    | 1,079.43  | 843.11    | 852.74    | 881.66    | 157.41   | 309.31   | 246.97   | 20  |
| 21    | 0.00     | 0.00 | 0.00 | 0.00   | 404.46    | 1,117.45  | 890.04    | 844.38    | 1,283.70  | 251.87   | 309.31   | 317.29   | 21  |
| 22    | 0.00     | 0.00 | 0.00 | 0.00   | 499.56    | 1,146.48  | 715.94    | 844.38    | 1,195.92  | 251.87   | 473.28   | 202.02   | 22  |
| 23    | 0.00     | 0.00 | 0.00 | 0.00   | 499.56    | 1,158.92  | 321.19    | 815.07    | 1,139.57  | 251.87   | 342.21   | 157.53   | 23  |
| 24    | 0.00     | 0.00 | 0.00 | 0.00   | 929.49    | 1,164.14  | 122.37    | 787.53    | 1,119.67  | 465.88   | 372.61   | 94.84    | 24  |
| 25    | 0.00     | 0.00 | 0.00 | 68.07  | 1,174.65  | 1,164.14  | 105.35    | 781.56    | 1,038.20  | 603.55   | 390.85   | 57.22    | 25  |
| 26    | 0.00     | 0.00 | 0.00 | 108.91 | 778.37    | 1,164.14  | 109.25    | 841.30    | 993.79    | 430.49   | 466.44   | 57.22    | 26  |
| 27    | 0.00     | 0.00 | 0.00 | 108.91 | 964.89    | 1,164.14  | 294.91    | 923.77    | 993.79    | 129.08   | 511.79   | 57.22    | 27  |
| 28    | 0.00     | 0.00 | 0.00 | 108.91 | 1,179.52  | 1,011.66  | 548.49    | 957.06    | 1,031.14  | 206.52   | 511.79   | 57.22    | 28  |
| 29    | 0.00     | 0.00 | 0.00 | ---    | 1,170.01  | 820.18    | 598.35    | 726.47    | 1,281.15  | 225.30   | 511.79   | 57.22    | 29  |
| 30    | 0.00     | 0.00 | 0.00 | ---    | 1,170.01  | 760.48    | 517.04    | 332.51    | 1,426.82  | 236.57   | 511.79   | 21.46    | 30  |
| 31    | ---      | 0.00 | 0.00 | ---    | 1,268.95  | ---       | 485.26    | ---       | 652.39    | 184.25   | ---      | 0.00     | 31  |
| TOTAL | 4,074.59 | 0.00 | 0.00 | 394.80 | 14,675.80 | 35,300.08 | 23,712.63 | 12,956.65 | 20,694.68 | 6,974.53 | 5,629.91 | 4,013.17 |     |

THE YEAR 128,426.84 acre-feet

NOTE: These values include 289.22 acre-feet of well augmentation water.

**APPENDIX "B-11"**  
**DEMANDS BY COLORADO FOR**  
**AGREEMENT ACCOUNT WATER IN**  
**JOHN MARTIN RESERVOIR**

# APPENDIX "B-12"

## DEMANDS BY KANSAS FOR AGREEMENT ACCOUNT WATER IN JOHN MARTIN RESERVOIR

Demands by Kansas for Agreement Account Water in John Martin Reservoir  
(Not including transit loss releases)  
Report Year ending October 31, 1986  
Source: Operations Secretary, Arkansas River Compact Administration  
(acre-feet)

| DAY                          | NOV. | DEC. | JAN. | FEB. | MAR.      | APR.      | MAY       | JUNE     | JULY      | AUG.     | SEPT. | OCT. | Day |
|------------------------------|------|------|------|------|-----------|-----------|-----------|----------|-----------|----------|-------|------|-----|
| 1                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 396.70    | 1,190.10 | 0.00  | 0.00 | 1   |
| 2                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 1,190.10 | 0.00  | 0.00 | 2   |
| 3                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 1,190.10 | 0.00  | 0.00 | 3   |
| 4                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 396.70   | 0.00  | 0.00 | 4   |
| 5                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 5   |
| 6                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 6   |
| 7                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 7   |
| 8                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 495.88    | 0.00     | 0.00  | 0.00 | 8   |
| 9                            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 9   |
| 10                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 1,190.10  | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 10  |
| 11                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 942.16    | 0.00      | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 11  |
| 12                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 363.64    | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 12  |
| 13                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 13  |
| 14                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 793.40    | 0.00     | 0.00  | 0.00 | 14  |
| 15                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 1,024.81  | 0.00     | 0.00  | 0.00 | 15  |
| 16                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 1,190.10  | 0.00     | 0.00  | 0.00 | 16  |
| 17                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 1,190.10  | 0.00     | 0.00  | 0.00 | 17  |
| 18                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 0.00     | 1,190.10  | 0.00     | 0.00  | 0.00 | 18  |
| 19                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 462.82   | 1,190.10  | 0.00     | 0.00  | 0.00 | 19  |
| 20                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00      | 793.40    | 793.40    | 793.40   | 1,140.51  | 0.00     | 0.00  | 0.00 | 20  |
| 21                           | 0.00 | 0.00 | 0.00 | 0.00 | 429.76    | 793.40    | 1,041.34  | 793.40   | 793.40    | 0.00     | 0.00  | 0.00 | 21  |
| 22                           | 0.00 | 0.00 | 0.00 | 0.00 | 793.40    | 793.40    | 1,190.10  | 793.40   | 264.47    | 0.00     | 0.00  | 0.00 | 22  |
| 23                           | 0.00 | 0.00 | 0.00 | 0.00 | 793.40    | 793.40    | 1,041.34  | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 23  |
| 24                           | 0.00 | 0.00 | 0.00 | 0.00 | 793.40    | 793.40    | 793.40    | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 24  |
| 25                           | 0.00 | 0.00 | 0.00 | 0.00 | 793.40    | 297.53    | 793.40    | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 25  |
| 26                           | 0.00 | 0.00 | 0.00 | 0.00 | 793.40    | 0.00      | 793.40    | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 26  |
| 27                           | 0.00 | 0.00 | 0.00 | 0.00 | 1,024.81  | 0.00      | 793.40    | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 27  |
| 28                           | 0.00 | 0.00 | 0.00 | 0.00 | 1,190.10  | 0.00      | 495.88    | 793.40   | 0.00      | 0.00     | 0.00  | 0.00 | 28  |
| 29                           | 0.00 | 0.00 | 0.00 | ---  | 1,190.10  | 0.00      | 0.00      | 793.40   | 791.02    | 0.00     | 0.00  | 0.00 | 29  |
| 30                           | 0.00 | 0.00 | 0.00 | ---  | 1,190.10  | 0.00      | 0.00      | 793.40   | 1,190.10  | 0.00     | 0.00  | 0.00 | 30  |
| 31                           | ---  | 0.00 | 0.00 | ---  | 1,190.10  | 0.00      | 0.00      | ---      | 1,190.10  | 0.00     | 0.00  | 0.00 | 31  |
| TOTAL                        | 0.00 | 0.00 | 0.00 | 0.00 | 10,181.97 | 23,454.89 | 13,653.10 | 9,190.22 | 21,568.19 | 3,967.00 | 0.00  | 0.00 |     |
| THE YEAR 82,015.37 acre-feet |      |      |      |      |           |           |           |          |           |          |       |      |     |

# APPENDIX "B-13"

## STATELINE FLOWS ON DAYS OF KANSAS DEMANDS

| Arkansas River at the State Line<br>Stateline Flows of Days of Kansas Demands<br>Report-Year ending October 31, 1986<br>(cubic feet per second) |      |      |      |      |        |          |           |           |           |           |           |      | Day  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|--------|----------|-----------|-----------|-----------|-----------|-----------|------|------|
| DAY                                                                                                                                             | NOV. | DEC. | JAN. | FEB. | MAR.   | APR.     | MAY       | JUNE      | JULY      | AUG.      | SEPT.     | OCT. |      |
| 1                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 708.85   | 238.97    | 314.09    | 729.01    | 719.94    | ---       | ---  | 1    |
| 2                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 688.18   | ---       | 364.00    | 453.24    | 2,046.89  | ---       | ---  | 2    |
| 3                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 691.20   | ---       | 342.83    | 414.92    | 1,620.87  | ---       | ---  | 3    |
| 4                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 665.99   | ---       | 324.17    | 394.76    | 1,291.15  | ---       | ---  | 4    |
| 5                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 648.85   | ---       | ---       | 369.04    | 1,030.00  | ---       | ---  | 5    |
| 6                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 649.86   | ---       | ---       | 366.02    | 670.03    | ---       | ---  | 6    |
| 7                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 655.91   | ---       | ---       | 365.01    | 516.76    | ---       | ---  | 7    |
| 8                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 648.85   | ---       | ---       | 623.14    | 445.17    | ---       | ---  | 8    |
| 9                                                                                                                                               | ---  | ---  | ---  | ---  | ---    | 647.84   | ---       | ---       | 674.06    | 490.04    | ---       | ---  | 9    |
| 10                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 652.89   | ---       | ---       | 557.10    | 503.15    | ---       | ---  | 10   |
| 11                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 647.84   | ---       | ---       | 522.81    | 482.98    | ---       | ---  | 11   |
| 12                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 596.92   | 160.83    | ---       | 543.99    | ---       | ---       | ---  | 12   |
| 13                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 525.84   | 168.89    | ---       | 452.23    | ---       | ---       | ---  | 13   |
| 14                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 540.96   | 325.18    | ---       | 454.75    | ---       | ---       | ---  | 14   |
| 15                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 541.97   | 492.06    | ---       | 442.15    | ---       | ---       | ---  | 15   |
| 16                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 510.21   | 550.04    | ---       | 431.06    | ---       | ---       | ---  | 16   |
| 17                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 502.14   | 559.11    | ---       | 549.03    | ---       | ---       | ---  | 17   |
| 18                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 473.91   | 558.10    | ---       | 581.80    | ---       | ---       | ---  | 18   |
| 19                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 477.94   | 575.75    | 192.08    | 623.14    | ---       | ---       | ---  | 19   |
| 20                                                                                                                                              | ---  | ---  | ---  | ---  | ---    | 456.77   | 556.09    | 211.24    | 714.90    | ---       | ---       | ---  | 20   |
| 21                                                                                                                                              | ---  | ---  | ---  | ---  | 109.91 | 454.75   | 469.88    | 304.01    | 779.93    | ---       | ---       | ---  | 21   |
| 22                                                                                                                                              | ---  | ---  | ---  | ---  | 101.84 | 457.78   | 427.02    | 404.84    | 1,516.01  | ---       | ---       | ---  | 22   |
| 23                                                                                                                                              | ---  | ---  | ---  | ---  | 228.89 | 471.89   | 490.04    | 468.87    | 765.82    | ---       | ---       | ---  | 23   |
| 24                                                                                                                                              | ---  | ---  | ---  | ---  | 373.08 | 463.83   | 528.86    | 492.06    | 413.91    | ---       | ---       | ---  | 24   |
| 25                                                                                                                                              | ---  | ---  | ---  | ---  | 442.15 | 444.16   | 447.19    | 440.13    | 342.83    | ---       | ---       | ---  | 25   |
| 26                                                                                                                                              | ---  | ---  | ---  | ---  | 487.02 | 445.17   | 386.19    | 412.91    | 316.11    | ---       | ---       | ---  | 26   |
| 27                                                                                                                                              | ---  | ---  | ---  | ---  | 693.22 | 370.05   | 394.76    | 516.76    | 280.82    | ---       | ---       | ---  | 27   |
| 28                                                                                                                                              | ---  | ---  | ---  | ---  | 601.97 | 335.77   | 399.80    | 472.90    | 257.12    | ---       | ---       | ---  | 28   |
| 29                                                                                                                                              | ---  | ---  | ---  | ---  | 614.07 | 304.01   | 383.16    | 492.06    | 232.92    | ---       | ---       | ---  | 29   |
| 30                                                                                                                                              | ---  | ---  | ---  | ---  | 696.75 | 265.19   | 335.77    | 533.90    | 243.00    | ---       | ---       | ---  | 30   |
| 31                                                                                                                                              | ---  | ---  | ---  | ---  | 689.19 | ---      | 300.98    | ---       | 503.15    | ---       | ---       | ---  | 31   |
| TOTAL                                                                                                                                           |      |      |      |      |        |          |           |           |           |           |           |      |      |
| cfs                                                                                                                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00   | 5,038.06 | 15,945.55 | 8,748.68  | 6,286.87  | 15,913.79 | 9,816.99  | 0.00 | 0.00 |
| ac. ft.                                                                                                                                         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00   | 9,993.00 | 31,628.00 | 17,353.00 | 12,470.00 | 31,565.00 | 19,472.00 | 0.00 | 0.00 |

THE YEAR: 122,481.00 acre-feet

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

Diversion by Ditches in Colorado  
 Water District 14  
 Report Year ending October 31, 1986  
 Source: Water Commissioner's Monthly Reports  
 (acre-feet)

| NAME OF CANAL            | NOV.      | DEC.     | JAN.      | FEB.      | MAR.      | APR.      | MAY       | JUNE      | JULY      | AUG.      | SEPT.     | OCT.      | YEAR       |
|--------------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Bessemer (River)         | 2,655.91  | 0.00     | 0.00      | 0.00      | 2,370.48  | 4,111.99  | 5,357.47  | 13,640.53 | 14,913.94 | 6,831.57  | 7,937.57  | 4,454.55  | 62,274.01  |
| Res. or Imported         | 0.00      | 0.00     | 0.00      | 0.00      | 0.00      | 3,315.02  | 3,837.67  | 51.99     | 213.62    | 5,195.38  | 433.00    | 0.00      | 13,046.68  |
| Total Bessemer           | 2,655.91  | 0.00     | 0.00      | 0.00      | 2,370.48  | 7,427.01  | 9,195.14  | 13,692.52 | 15,127.56 | 12,026.95 | 8,370.57  | 4,454.55  | 75,320.69  |
| Minnequa-Ft. Union       | 7,382.59  | 2,606.72 | 6,438.64  | 5,017.26  | 5,624.41  | 5,221.96  | 7,275.68  | 6,245.05  | 6,148.45  | 7,019.61  | 4,410.51  | 7,383.78  | 70,774.66  |
| West Pueblo (River)      | 0.00      | 0.00     | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00       |
| Excelsior (River)        | 0.00      | 0.00     | 0.00      | 0.00      | 0.00      | 249.92    | 47.60     | 357.03    | 333.23    | 226.12    | 0.00      | 0.00      | 1,213.90   |
| Collier                  | 0.00      | 0.00     | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 396.70    | 0.00      | 0.00      | 0.00      | 0.00      | 396.70     |
| Colorado Canal           | 613.87    | 0.00     | 6,733.51  | 7,380.35  | 1,289.75  | 0.00      | 24.93     | 22,758.95 | 8,667.89  | 3,469.68  | 5,437.47  | 303.95    | 56,680.35  |
| Res. or Imported         | 0.00      | 0.00     | 0.00      | 0.00      | 0.00      | 8,648.72  | 10,562.51 | 8,616.66  | 14,520.91 | 10,944.82 | 1,097.47  | 996.75    | 55,387.84  |
| Total: Colo. Canal       | 613.87    | 0.00     | 6,733.51  | 7,380.35  | 1,289.75  | 8,648.72  | 10,587.44 | 31,375.61 | 23,188.80 | 14,414.50 | 6,534.94  | 1,300.70  | 112,068.19 |
| Highline (River)         | 3,392.18  | 0.00     | 0.00      | 860.84    | 5,475.27  | 5,809.39  | 8,211.29  | 24,438.29 | 25,523.50 | 14,087.43 | 9,411.81  | 7,581.67  | 104,791.67 |
| Res. or Imported         | 0.00      | 0.00     | 0.00      | 0.00      | 2,656.09  | 5,645.52  | 2,207.64  | 1,101.20  | 1,041.30  | 1,990.32  | 0.00      | 0.00      | 14,642.07  |
| Total: Highline          | 3,392.18  | 0.00     | 0.00      | 860.84    | 8,131.36  | 11,454.91 | 10,418.93 | 25,539.49 | 26,564.80 | 16,077.75 | 9,411.81  | 7,581.67  | 119,433.74 |
| Oxford Farmer's (River)  | 633.83    | 0.00     | 0.00      | 152.17    | 2,713.49  | 828.21    | 3,468.29  | 5,371.18  | 8,052.06  | 5,659.42  | 3,117.45  | 3,081.35  | 33,077.45  |
| Res. or Imported         | 0.00      | 0.00     | 0.00      | 0.00      | 52.92     | 1,905.35  | 87.33     | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 2,045.60   |
| Total: Oxford Farmers    | 633.83    | 0.00     | 0.00      | 152.17    | 2,766.41  | 2,733.56  | 3,555.62  | 5,371.18  | 8,052.06  | 5,659.42  | 3,117.45  | 3,081.35  | 35,123.05  |
| River District #14       | 14,678.38 | 2,606.72 | 13,172.15 | 13,410.62 | 17,473.40 | 16,221.47 | 24,385.26 | 72,207.73 | 63,639.07 | 37,293.83 | 30,314.81 | 22,805.30 | 329,208.74 |
| Res. or Import Dist. #14 | 0.00      | 0.00     | 0.00      | 0.00      | 2,709.01  | 19,514.61 | 16,695.15 | 9,769.85  | 15,775.83 | 18,130.52 | 1,530.47  | 996.75    | 85,122.19  |
| Total: District #14      | 14,678.38 | 2,606.72 | 13,172.15 | 13,410.62 | 20,182.41 | 35,736.08 | 41,080.41 | 82,977.58 | 79,414.90 | 55,424.35 | 31,845.28 | 23,802.05 | 414,330.93 |

**APPENDIX "B-14a"**  
**DIVERSION BY DITCHES**  
**IN COLORADO WATER DISTRICT 14**

# APPENDIX "B-14b"

## DIVERSION BY DITCHES IN

### COLORADO WATER DISTRICT 17

Diversion by Ditches in Colorado  
Water District 17  
Report-Year ending October 31, 1986  
Source: Water Commissioner's Monthly Reports  
(acre-feet)

| NAME OF CANAL                  | NOV.      | DEC.      | JAN.      | FEB.      | MAR.      | APR.      | MAY       | JUNE       | JULY       | AUG        | SEPT      | OCT       | YEAR         |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|-----------|-----------|--------------|
| Otero                          | 0.00      | 0.00      | 511.74    | 773.53    | 1,578.29  | 0.00      | 0.00      | 3,372.90   | 1,811.17   | 776.46     | 1,020.81  | 0.00      | 9,844.90     |
| Res. or Imported               | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00       | 0.00       | 0.00       | 0.00      | 0.00      | 0.00         |
| Total: Otero                   | 0.00      | 0.00      | 511.74    | 773.53    | 1,578.29  | 0.00      | 0.00      | 3,372.90   | 1,811.17   | 776.46     | 1,020.81  | 0.00      | 9,844.90     |
| Catlin Canal (River)           | 2,897.30  | 0.00      | 0.00      | 0.00      | 7,909.46  | 10,343.14 | 12,262.36 | 13,573.92  | 16,005.16  | 14,801.77  | 9,335.06  | 8,489.60  | 95,617.87    |
| Res. or Imported               | 472.85    | 0.00      | 0.00      | 129.46    | 3,891.59  | 4,295.09  | 4,123.86  | 88.50      | 27.43      | 4.64       | 0.00      | 0.00      | 13,033.42    |
| Total: Catlin                  | 3,370.15  | 0.00      | 0.00      | 129.46    | 11,801.15 | 14,638.23 | 16,386.22 | 13,662.42  | 16,032.59  | 14,806.41  | 9,335.06  | 8,489.60  | 108,651.29   |
| Holbrook (River)               | 423.16    | 0.00      | 4,084.38  | 0.00      | 0.00      | 0.00      | 2,924.83  | 25,060.95  | 13,700.25  | 4,337.30   | 1,202.18  | 4,787.32  | 56,520.37    |
| Res. or Imported               | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 1,902.77  | 0.00       | 0.00       | 0.00       | 0.00      | 2,186.75  | 4,089.52     |
| Total: Holbrook                | 423.16    | 0.00      | 4,084.38  | 0.00      | 0.00      | 0.00      | 4,827.60  | 25,060.95  | 13,700.25  | 4,337.30   | 1,202.18  | 6,974.07  | 60,609.89    |
| Rocky Ford                     | 1,330.81  | 0.00      | 0.00      | 1,490.12  | 5,515.50  | 6,703.89  | 6,402.74  | 4,837.93   | 5,879.47   | 5,535.61   | 4,020.26  | 4,033.86  | 45,750.19    |
| Ft. Lyon (storage)             | 19,535.49 | 28,373.97 | 28,639.76 | 15,417.75 | 0.00      | 0.00      | 0.00      | 46,963.17  | 6,549.52   | 0.00       | 0.00      | 0.00      | 145,499.66   |
| Ft. Lyon (Riv.)                | 25,906.29 | 0.00      | 0.00      | 5,149.60  | 11,670.46 | 13,152.08 | 16,707.14 | 61,217.37  | 54,514.72  | 31,754.87  | 21,813.50 | 21,212.78 | 263,098.81   |
| Res. or Imported               | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00       | 0.00       | 0.00       | 0.00      | 0.00      | 0.00         |
| Kicking Bird*                  | 14,955.23 | 0.00      | 0.00      | 15,413.72 | 4,597.06  | 0.00      | 0.00      | 23,751.72  | 3,885.20   | 0.00       | 0.00      | 0.00      | 62,602.93    |
| Total: Ft. Lyon-K.B.           | 30,486.55 | 28,373.97 | 28,639.76 | 5,153.63  | 7,073.40  | 13,152.08 | 16,707.14 | 84,448.82  | 57,179.04  | 31,754.87  | 21,813.50 | 21,212.78 | 345,995.54   |
| Las Animas Consol.             | 1,203.89  | 0.00      | 0.00      | 0.00      | 1,887.38  | 3,127.64  | 4,144.34  | 6,230.08   | 7,104.98   | 5,181.99   | 2,264.38  | 2,914.81  | 34,059.49    |
| Native—District #17            | 51,296.94 | 28,373.97 | 33,235.88 | 22,831.00 | 28,561.19 | 33,326.75 | 42,441.41 | 161,276.32 | 105,565.27 | 62,388.00  | 39,656.19 | 41,438.37 | 650,391.29   |
| Res. or Imported #17           | 472.85    | 0.00      | 0.00      | 129.46    | 3,891.59  | 4,295.09  | 6,026.63  | 88.50      | 27.43      | 4.64       | 0.00      | 2,186.75  | 17,122.94    |
| Total: District #17            | 51,769.79 | 28,373.97 | 33,235.88 | 22,960.46 | 32,452.78 | 37,621.84 | 48,468.04 | 161,364.82 | 105,592.70 | 62,392.64  | 39,656.19 | 43,625.12 | 667,514.23   |
| Native Dist. #14-#17           | 65,975.32 | 30,980.69 | 46,408.03 | 36,241.62 | 46,034.59 | 49,548.22 | 66,826.67 | 234,484.05 | 169,201.34 | 99,681.83  | 69,971.00 | 64,243.67 | 979,600.03   |
| Res. or Imported Dist. #14-#17 | 472.85    | 0.00      | 0.00      | 129.46    | 6,600.60  | 23,809.70 | 22,721.78 | 9,858.35   | 15,803.26  | 18,135.16  | 1,530.47  | 3,183.50  | 102,245.13   |
| Total Dist. #14-#17            | 66,448.17 | 30,980.69 | 46,408.03 | 36,371.08 | 52,635.19 | 73,357.92 | 89,548.45 | 244,342.40 | 185,007.60 | 117,816.99 | 71,501.47 | 67,427.17 | 1,081,845.16 |

APPENDIX "B-15"

**DIVERSION BY DITCHES IN  
IN COLORADO WATER DISTRICT 67**

Diversion by Ditches in Colorado Water District 67  
Report-Year ending October 31, 1986  
Source: Water Commissioners Monthly Reports  
(Acre-Feet)

| NAME OF CANAL          | NOV.     | DEC.   | JAN. | FEB.   | MAR.      | APRIL     | MAY       | JUNE      | JULY      | AUG.      | SEPT.     | OCT.      | YEAR       |
|------------------------|----------|--------|------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Fort Bent              | 446.29   | 5.95   | 0.00 | 0.00   | 1,477.71  | 3,625.84  | 3,901.54  | 1,930.74  | 5,481.01  | 2,870.72  | 973.14    | 1,711.36  | 22,424.30  |
| Kessee Ditch           | 0.00     | 0.00   | 0.00 | 0.00   | 231.87    | 1,198.83  | 1,295.03  | 680.74    | 1,431.75  | 948.91    | 389.96    | 418.72    | 6,595.81   |
| Amity                  | 4,157.42 | 0.00   | 0.00 | 0.00   | 3,822.20  | 22,078.34 | 18,416.80 | 5,783.89  | 16,647.52 | 9,421.63  | 3,199.39  | 6,710.18  | 90,237.37  |
| Lamar                  | 1,112.74 | 212.23 | 0.00 | 359.61 | 4,391.47  | 6,793.49  | 8,400.12  | 5,512.15  | 10,133.70 | 4,597.75  | 4,776.27  | 3,972.75  | 50,262.28  |
| Hyde                   | 0.00     | 0.00   | 0.00 | 0.00   | 41.65     | 178.52    | 200.33    | 204.30    | 245.95    | 313.39    | 47.60     | 226.12    | 1,457.86   |
| Manvel                 | 0.00     | 0.00   | 0.00 | 0.00   | 2,213.59  | 1,769.28  | 102.35    | 75.97     | 0.00      | 0.00      | 0.00      | 0.00      | 4,161.19   |
| X, Y, & Graham         | 0.00     | 0.00   | 0.00 | 0.00   | 1,245.64  | 3,661.15  | 3,397.54  | 1,819.46  | 3,414.60  | 1,253.57  | 794.59    | 1,090.73  | 16,677.28  |
| Buffalo                | 0.00     | 0.00   | 0.00 | 0.00   | 2,275.07  | 3,838.07  | 4,196.09  | 2,172.43  | 1,753.41  | 1,880.75  | 2,318.71  | 2,225.49  | 20,660.02  |
| TOTAL: District 67     | 5,716.45 | 218.18 | 0.00 | 359.61 | 15,699.20 | 43,143.52 | 39,909.80 | 18,179.68 | 39,107.94 | 21,286.72 | 12,499.66 | 16,355.35 | 212,476.11 |
| Trans. Mtn. Diversions | 0.00     | 0.00   | 0.00 | 0.00   | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00       |
| GRAND TOTAL            | 5,716.45 | 218.18 | 0.00 | 359.61 | 15,699.20 | 43,143.52 | 39,909.80 | 18,179.68 | 39,107.94 | 21,286.72 | 12,499.66 | 16,355.35 | 212,476.11 |

APPENDIX "B-16"

DIVERSION BY DITCHES IN KANSAS  
STATELINE TO GARDEN CITY

| Diversions by Ditches in Kansas<br>Stateline to Garden City<br>Report-Year ending October 31, 1986<br>Source: Frontier Ditch: U.S.G.S. Records<br>Other Ditches: Kansas Division of Water Resources Records |        |      |          |      |          |           |           |           |           |           |           |          |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|----------|------|----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|------------|
| NAME OF CANAL                                                                                                                                                                                               | NOV.   | DEC. | JAN.     | FEB. | MAR.     | APR.      | MAY       | JUNE      | JULY      | AUG.      | SEPT.     | OCT.     | YEAR       |
| Frontier                                                                                                                                                                                                    | 182.00 | 0.00 | 0.00     | 0.00 | 0.00     | 1,382.50  | 1,872.42  | 523.13    | 1,991.59  | 592.33    | 75.77     | 489.92   | 7,109.66*  |
| Ft. Aubrey Canal                                                                                                                                                                                            | 0.00   | 0.00 | 0.00     | 0.00 | 0.00     | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00      | 0.00     | 0.00       |
| Total Stateline<br>to Syracuse                                                                                                                                                                              | 182.00 | 0.00 | 0.00     | 0.00 | 0.00     | 1,382.50  | 1,872.42  | 523.13    | 1,991.59  | 592.33    | 75.77     | 489.92   | 7,109.66   |
| Amazon Canal                                                                                                                                                                                                | 0.00   | 0.00 | 0.00     | 0.00 | 1,384.00 | 11,550.00 | 5,470.00  | 3,689.00  | 8,045.00  | 7,648.00  | 2,035.00  | 0.00     | 39,821.00  |
| Great Eastern Canal                                                                                                                                                                                         | 0.00   | 0.00 | 4,217.00 | 0.00 | 1,555.00 | 9,035.00  | 5,655.00  | 3,102.00  | 6,504.00  | 7,630.00  | 2,214.00  | 1,876.00 | 41,788.00  |
| South Side Ditch                                                                                                                                                                                            | 0.00   | 0.00 | 0.00     | 0.00 | 0.00     | 7,511.00  | 2,227.00  | 2,610.00  | 6,547.00  | 3,219.00  | 3,310.00  | 0.00     | 25,424.00  |
| Farmers Ditch                                                                                                                                                                                               | 0.00   | 0.00 | 0.00     | 0.00 | 1,793.00 | 3,548.00  | 4,066.00  | 3,475.00  | 1,956.00  | 4,374.00  | 3,632.00  | 0.00     | 22,844.00  |
| Garden City Canal                                                                                                                                                                                           | 0.00   | 0.00 | 0.00     | 0.00 | 121.00   | 520.00    | 381.00    | 240.00    | 518.00    | 645.00    | 518.00    | 278.00   | 3,221.00   |
| Total Syracuse<br>To Garden City                                                                                                                                                                            | 0.00   | 0.00 | 4,217.00 | 0.00 | 4,853.00 | 32,164.00 | 17,799.00 | 13,116.00 | 23,570.00 | 23,516.00 | 11,709.00 | 2,154.00 | 133,098.00 |
| Total Stateline<br>To Garden City                                                                                                                                                                           | 182.00 | 0.00 | 4,217.00 | 0.00 | 4,853.00 | 33,546.50 | 19,671.42 | 13,639.13 | 25,561.59 | 24,108.33 | 11,784.77 | 2,643.92 | 140,207.66 |

\*3,422.00 acre-feet returned directly to the river.

Transmountain Diversions into the Arkansas Basin 3 /  
 Report-year ending October 31, 1966  
 Source: Division Engineer  
 Colorado Water Division No. 2  
 (acre-feet)

| STRUCTURE                              | NOV.   | DEC.   | JAN.  | FEB.  | MAR.  | APR.   | MAY     | JUNE     | JULY     | AUG.    | SEPT.  | OCT.   | TOTAL    |
|----------------------------------------|--------|--------|-------|-------|-------|--------|---------|----------|----------|---------|--------|--------|----------|
| Twin Lake Tunnel                       | 533.50 | 204.08 | 44.77 | 27.56 | 23.87 | 516.30 | 8714.15 | 29395.69 | 10128.34 | 0.00    | 0.00   | 191.44 | 49779.70 |
| Colo. Springs-54.65%                   |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Pueblo-23.14%                          |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Pueblo West-11.56%                     |        |        |       |       |       |        |         |          |          |         |        |        |          |
| <sup>1</sup> /Aurora-4.90%             |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Individuals-5.75%                      |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Homestake Tunnel                       | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00   | 7716.65 | 4368.25  | 3010.59  | 1763.79 | 94.75  | 0.00   | 16954.03 |
| <sup>1</sup> /Aurora-50%               |        |        |       |       |       |        |         | -1700.00 |          |         |        |        |          |
| Colo. Springs-50%                      |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Wurtz Ditch                            | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 19.78  | 1056.44 | 2132.35  | 564.35   | 88.89   | 0.00   | 0.00   | 3861.81  |
| Pueblo Bd.                             |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Water Works-100%                       |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Larkspur Ditch                         | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00   | 81.00   | 100.87   | 31.56    | 5.38    | 0.00   | 0.00   | 218.81   |
| Catlin Consolidated                    |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Co.-100%                               |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Ewing Ditch                            | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 2.06   | 321.79  | 629.05   | 120.34   | 0.00    | 0.00   | 0.00   | 1073.24  |
| Pueblo Bd.                             |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Water Works-100%                       |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Columbine Ditch                        | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00   | 273.82  | 1266.45  | 325.68   | 50.93   | 0.00   | 0.00   | 1916.88  |
| Pueblo Bd.                             |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Water Works-100%                       |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Bousted Tunnel                         | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00   | 4161.69 | 21458.28 | 4821.93  | 1306.30 | 0.00   | 0.00   | 31748.20 |
| Southeast Colo.                        |        |        |       |       |       |        |         |          |          |         |        |        |          |
| WCD-100%                               |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Busk-Ivanhoe System/<br>Carlton Tunnel | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 50.05  | 1063.93 | 2518.09  | 962.34   | 516.05  | 174.85 | 207.85 | 5493.16  |
| Pueblo Bd.                             |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Water Works-50%                        |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Busk-Ivanhoe Inc.-50%                  |        |        |       |       |       |        |         |          |          |         |        |        |          |
| <sup>1</sup> /Aurora-98%               |        |        |       |       |       |        |         |          |          |         |        |        |          |
| Highline Individuals-2%                |        |        |       |       |       |        |         |          |          |         |        |        |          |

# TRANSMOUNTAIN DIVERSIONS

## APPENDIX "B-17"



|                                              |         |         |         |        |         |         |          |          |          |         |        |        |           |
|----------------------------------------------|---------|---------|---------|--------|---------|---------|----------|----------|----------|---------|--------|--------|-----------|
| Blue River Project 2 /<br>Colo. Springs-100% | 1216.00 | 1315.00 | 1473.00 | 884.00 | 990.00  | 514.00  | 679.00   | 424.00   | 819.00   | 267.00  | 446.00 | 196.00 | 9223.00   |
| TOTAL                                        | 1749.50 | 1519.08 | 1517.77 | 911.56 | 1013.87 | 1102.19 | 24068.47 | 62293.03 | 20784.13 | 3998.34 | 715.60 | 595.29 | 120268.83 |

NOTES:

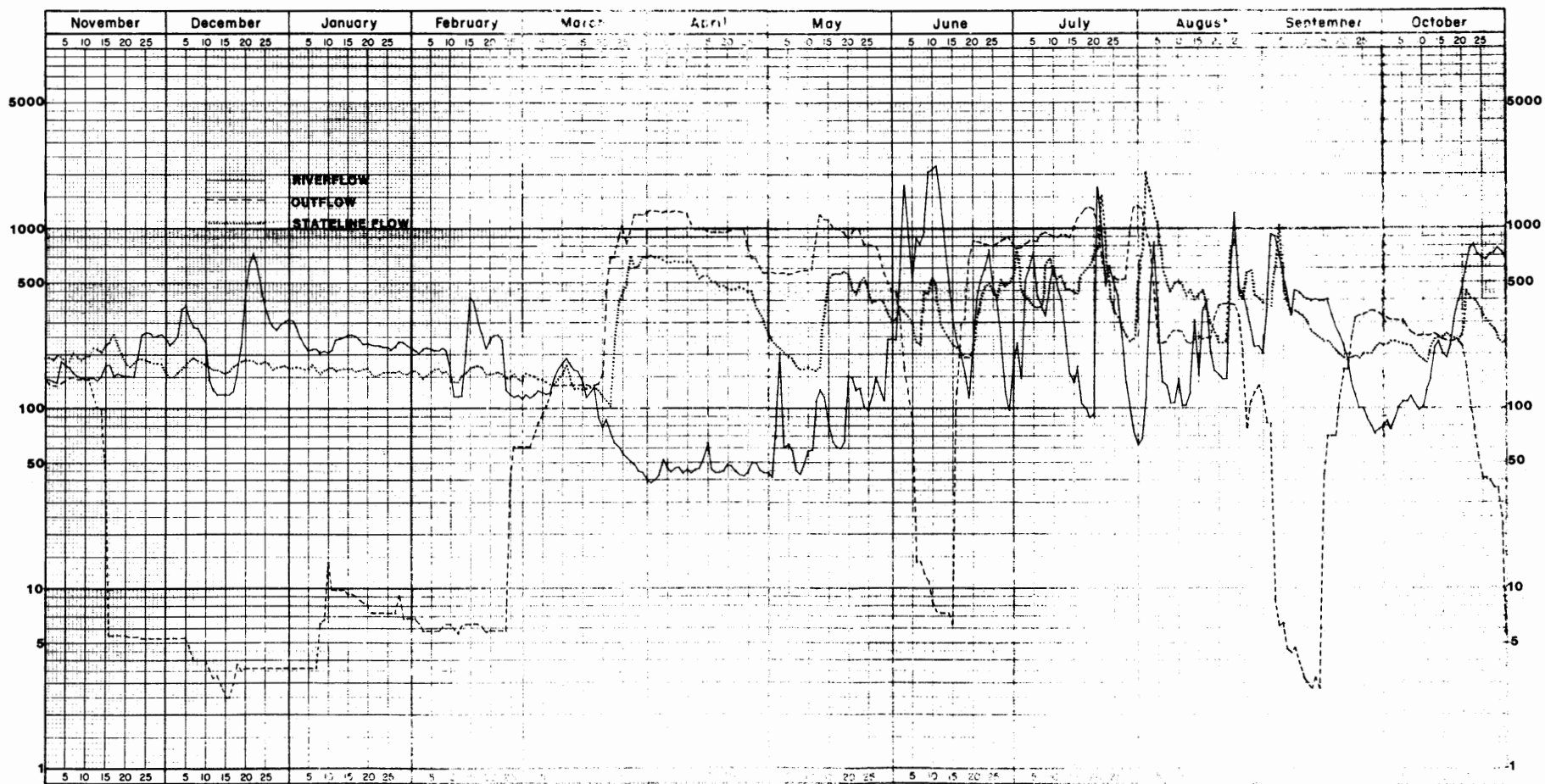
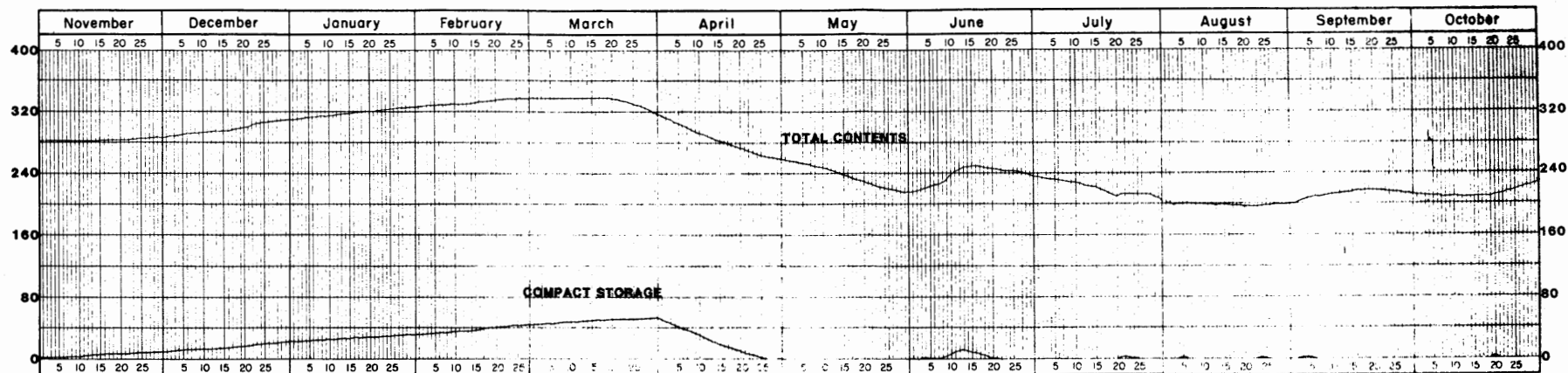
- 1) Aurora diverted 1700 af during June from a combination of Twin Lake, Busk-Ivanhoe, and Homestake Tunnels.  
Aurora made no other transmountain diversions in compact year 1986.  
Total diversions for June, 1986 should be reduced by 1700 af to reflect water that went to Aurora.
- 2) Blue River Project values from May 1, 1987 letter from U.S. Bureau of Reclamation to Colorado Springs.  
Values show amount of water "delivered into Colorado Springs potable water system" from the Blue and So. Platte Rivers by either direct flow or transmountain exchange.
- 3) Transmountain water diverted into the Arkansas Basin through a facility is generally delivered to some type of storage prior to use.  
The values reported reflect water as it is diverted into the basin, generally to storage.

Summary Tabulation  
Report-Year  
November 1, 1985 to October 31, 1986

| LOCATION                                                             | NOV.       | DEC.       | JAN.       | FEB.       | MAR.        | APR.        | MAY         | JUNE       | JULY        | AUG.       | SEPT.      | OCT.       | YEAR       |
|----------------------------------------------------------------------|------------|------------|------------|------------|-------------|-------------|-------------|------------|-------------|------------|------------|------------|------------|
| Arkansas River at Las Animas,<br>Colorado - cfs                      | 3,786.00   | 8,274.00   | 6,244.00   | 5,504.00   | 2,898.00    | 1,137.00    | 2,713.00    | 16,379.00  | 8,876.00    | 4,561.00   | 7,598.00   | 9,735.00   | 77,705.00  |
| - a.f.                                                               | 7,510.00   | 16,411.00  | 12,385.00  | 10,917.00  | 5,748.00    | 2,255.00    | 5,381.00    | 32,488.00  | 17,606.00   | 9,047.00   | 15,071.00  | 19,309.00  | 154,128.00 |
| Purgatoire River near<br>Las Animas, Colorado - cfs                  | 1,601.00   | 863.00     | 948.00     | 309.90     | 426.40      | 241.30      | 470.10      | 4,770.30   | 2,761.70    | 4,113.70   | 2,472.00   | 1,880.00   | 20,857.40  |
| - a.f.                                                               | 3,176.00   | 1,712.00   | 1,880.00   | 615.00     | 846.00      | 479.00      | 932.00      | 9,462.00   | 5,478.00    | 8,160.00   | 4,903.00   | 3,729.00   | 41,372.00  |
| River Flow Into John Martin<br>Reservoir - cfs                       | 5,387.00   | 9,137.00   | 7,192.00   | 5,813.90   | 3,324.40    | 1,378.30    | 3,183.10    | 21,149.30  | 11,637.70   | 8,674.70   | 10,070.00  | 11,615.00  | 98,562.40  |
| - a.f.                                                               | 10,685.00  | 18,123.00  | 14,265.00  | 11,532.00  | 6,594.00    | 2,734.00    | 6,314.00    | 41,950.00  | 23,083.00   | 17,206.00  | 19,974.00  | 23,038.00  | 195,498.00 |
| Contents of John Martin Reservoir<br>at end of Month - a.f.          | 287,056.00 | 309,656.00 | 325,200.00 | 336,449.00 | 316,830.00  | 258,806.00  | 215,822.00  | 236,386.00 | 205,313.00  | 199,782.00 | 212,043.00 | 225,954.00 |            |
| Net Change in Reservoir<br>contents - a.f.                           | 5,104.00   | 23,600.00  | 15,544.00  | 11,249.00  | (19,619.00) | (58,024.00) | (42,984.00) | 20,564.00  | (31,073.00) | (5,531.00) | 12,261.00  | 13,911.00  |            |
| Outflow from John Martin<br>Reservoir - cfs                          | 2,007.80   | 118.70     | 224.80     | 365.60     | 12,712.00   | 30,041.00   | 23,754.00   | 11,741.90  | 27,921.00   | 10,213.00  | 3,838.70   | 5,918.30   | 128,856.80 |
| - a.f.                                                               | 3,982.00   | 235.00     | 446.00     | 725.00     | 25,214.00   | 59,586.00   | 47,116.00   | 23,290.00  | 55,381.00   | 20,257.00  | 7,614.00   | 11,739.00  | 255,585.00 |
| Diversion in District 67,<br>Colorado - a.f.                         | 5,716.45   | 218.18     | 0.00       | 359.61     | 15,699.20   | 43,143.52   | 39,909.80   | 18,179.68  | 39,107.94   | 21,286.72  | 12,499.66  | 16,355.35  | 212,476.11 |
| Arkansas River at Colorado-<br>Kansas Stateline - cfs                | 5,859.82   | 5,355.00   | 5,055.00   | 4,365.00   | 7,840.00    | 15,947.00   | 10,613.00   | 10,534.70  | 15,914.08   | 18,428.63  | 8,993.20   | 8,111.00   | 117,016.43 |
| - a.f.                                                               | 11,623.00  | 10,622.00  | 10,027.00  | 8,658.00   | 15,551.00   | 31,631.00   | 21,051.00   | 20,896.00  | 31,566.00   | 36,553.00  | 17,838.00  | 16,088.00  | 232,104.00 |
| Diversion by Ditches in Kansas<br>Stateline to<br>Garden City - a.f. | 182.00     | 0.00       | 4,217.00   | 0.00       | 4,853.00    | 33,546.50   | 19,671.42   | 13,639.13  | 25,561.59   | 24,108.33  | 11,784.77  | 2,643.92   | 140,207.66 |

SUMMARY TABULATION

APPENDIX "B-18"



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

COMPACT YEAR 1986

NOVEMBER 1, 1985 TO OCTOBER 31, 1986