

MINUTES OF
ARKANSAS RIVER COMPACT ADMINISTRATION

POSTPONED
REGULAR MEETING
September 21, 1962

Broadmoor Hotel
Colorado Springs, Colorado

RECEIVED

SEP 18 1962

DIVISION OF WATER RESOURCES
GARDEN CITY

Attendance:

For Colorado:

L. R. Kuiper, Denver
Hacket Smartt, Lamar

For Kansas:

Logan N. Green, Garden City, Kansas, Vice-Chairman
Carl E. Bentrup, Deerfield, Kansas

For the United States:

F. M. Bell, Denver, Chairman

Others Attending:

Fred L. Boydston, Jr.	Colo. Water Cons. Board	Denver, Colo.
Ross W. Moor	U.S.G.S.	Lamar, Colo.
J. W. Odell	U.S.G.S.	Denver, Colo.
F. C. Snyder & Wife	State Eng'r.-Div. Eng'r.	Pueblo, Colo.
Guy M. Vincent	Kans. Div. Water Resources	Garden City, Kans.
Warden L. Noe	Atty.-Div. Water Res., Ks. Bd. of Agric.	Topeka, Kansas
Robert A. Buckhagen	Corps of Engineers	John Martin Dam
John T. Martin	Corps of Engineers	Albuquerque, N. M.
W. C. Fagerquist	Bureau of Reclamation	Pueblo, Colo.
Gene Cook	Colo. Game & Fish	Denver, Colo.
Harry K. Woodward	Colo. Game & Fish	Denver, Colo.
Carl R. Welsh	Colo. Game & Fish	Colo. Spgs, Colo.
Harry C. Nevius	Amity Mutual Irrig. Co.	Lamar, Colo.

Chairman Bell opened the meeting at 10:10 A. M. and noted that there was a quorum present, although Mr. Smrha and Mr. Jenkins had not put in an appearance. He also noted that this meeting was the postponed meeting regularly held in July and was being held at this time with the unanimous consent of the Administration. Mr. Vincent said that Mr. Smrha had had to cancel his appearance at this meeting at the last minute and wanted him to express Mr. Smrha's regrets to the Administration. Mr. Smartt said that Mr. Jenkins was planning to attend when he saw him a week before, and that perhaps he was just late.

The Chairman requested that the minutes of the March meeting be considered, and Mr. Kuiper's motion that the minutes of the March 27, 1962 meeting be approved, as written, was seconded by Mr. Smartt and passed by vote of the States.

Mr. Bell said that the Chairman had no written report to make, but that the minutes of the last meeting show that the Chairman was instructed to attend a meeting of the Arkansas Valley Ditch Association May 18, 1962 to represent the Compact Administration in a discussion of Trinidad Reservoir. However, the meeting was cancelled, and although he had received notice of the cancellation, he had not received notice of the rescheduled meeting and, therefore, had not attended. Mr. Smartt said that Mr. Nevius had gone to the meeting and that nothing had been concluded.

Mr. Smartt gave the Secretary's report as follows:

SECRETARY REPORT

March 28, 1962 to Sept. 21, 1962

The Secretary distributed the 1961 Annual Reports mailing out some and furnishing the Board of Directors of the ditch company with ample supply.

The demand for water from the Reservoir began on April 9. Both Colorado and Kansas calling. The discharge was ordered operated to supply their demands during the period of time water was being discharged from the Reservoir. The Secretary read the gage at the Lamar Station all season and forwarded the findings to Mr. Guy Vincent daily on the days when Kansas was calling.

August 6th the Secretary submitted a proposed budget for 1963-64 to the members for their approval which was approved by all.

The Secretary made three trips to the Reservoir during this period to investigate water available for storage.

July 21st the Secretary authorized Mr. H. C. Nevius as Operator in charge as the Secretary was leaving for a two weeks vacation. On August 1st Mr. Nevius was obliged to take his wife to California for surgery. He therefore arranged for Mr. Ross Moor to take charge until my return which was August 4th. Water had been declared available and storage was declared during this time. The Secretary took over his duties on August 5th and continued to operate the discharge at the Reservoir until the Reservoir was empty at 2 a.m. on August 12, 1962. Other than paying all bills and preparing the reports for this meeting this concludes my report.

Respectfully submitted,

Hackett Smartt,
Secretary

Mr. Bell said that unless there were objections the Secretary's report would be accepted as read.

Mr. Smartt then submitted minutes of five telephonic meetings and Mr. Bell asked for comments, and said that if there were no objections, the minutes of the five telephonic meetings would be approved as written. The minutes follow:

Minutes of Special Telephonic Meeting

April 25, 1962

A Special Telephonic Meeting of the Administration was held April 25, 1962 in accordance with Article IV, 3B of the by-laws for the purpose of declaring the reservoir empty. Notice was given to the State Engineer of Colorado that priority administration would commence on May 1, 1962 unless a change of conditions justified cancellation or modification of this notice. Priority administration should commence and decreed rights of water users in Colorado would be administered by the State Engineer. The reservoir was officially declared empty at 12:00 a.m. on May 1, 1962.

Members Participating Were:

For Kansas: Mr. Green and Mr. Bentrup
For Colorado: Mr. Smartt and Mr. Jenkins

Minutes of Special Telephonic Meeting

May 18, 1962

Heavy rains throughout the Arkansas Valley on the 16th and 17th of May reduced the demand for water by the Colorado users, so a Special Telephonic meeting was held as provided in Article IV, 3B of the by-laws of the Administration for the purpose of considering water available for Storage. The result of this meeting was that water was declared available for storage. The gates at the dam were closed at 7:45 a.m., May 18, and the State Engineer was notified, as was Mr. F. C. Snyder.

Members Participating Were:

For Kansas: Mr. Bentrup and Mr. Green
For Colorado: Mr. Smartt and Mr. Jenkins

Minutes of Special Telephonic Meeting

May 28, 1962

A special Telephonic meeting was held by the Administration on May 28, 1962 in accordance with Article IV 3B of the by-laws for the purpose of finding the reservoir empty, the reservoir was found to become empty on May 31, 1962. Notice was given the State Engineer of Colorado that priority Administration would commence on that date, unless a change of conditions justified cancellation or modification of this notice. Priority Administration should commence and decreed rights of water users in Colorado would be administered by the State Engineer. The reservoir was officially declared empty at 5:00 P. M., May 31, 1962 or 1700.

Members taking part in the meeting were:

For Colorado: Mr. Smartt, Mr. Jenkins, and Mr. Kuiper
For Kansas: Mr. Green and Mr. Bentrup

Minutes of Special Telephonic Meeting

July 24, 1962

Due to heavy run-off in the Arkansas River, at 8 a.m. on July 24, 11,000 cfs was reported at Oxford Dam and a gage height of 3.08 at the Highline Dam. A special telephonic meeting was held in accordance with Article IV, 3B of the by-laws for the purpose of declaring storage in John Martin Reservoir. The result of this meeting was to declare water available for storage. The gates were closed at 8:45 a.m. on July 25, and storage began. The State Engineer was notified as was Mr. F. C. Snyder. At 6:30 a.m. on July 25, the discharge at the telemark below the reservoir was 930 cfs prior to closing of the gates at 8:45 a.m.

Members Participating Were:

For Kansas: Mr. Green and Mr. Bentrup
For Colorado: Mr. Jenkins, Mr. Kuiper and Mr. Nevius representing Mr. Smartt

Minutes of Special Telephonic Meeting

July 26, 1962

A special Telephonic Meeting was held on July 26, 1962 as provided in Article IV, 3B of the By Laws of the Administration for the purpose of declaring the Reservoir empty. The Reservoir was declared at this meeting to become empty on July 26, 1962.

The State Engineer was notified that commencing on this date, unless a change of conditions justify cancellation or modification of this notice, he is required under terms of the Compact to administer the rights of water users in Colorado in the manner and for a period of time as set forth in Article V, F of the Compact. The time was later extended to Aug. 5 and again to Aug. 15. Then, on Aug. 9 the time was changed to Aug. 11. The State Engineer was notified of all changes as was Mr. F. C. Snyder.

Members Participating Were:

For Kansas: Mr. Green and Mr. Bentrup
 For Colorado: Mr. Kuiper, Mr. Jenkins and Mr. Smartt

Mr. Smartt then gave the Treasurer's report as follows:

TREASURER'S REPORT

from

Oct. 31, 1961 to Sept. 21, 1962

Balance on hand on Oct. 31, 1961 - - - - - \$5,703.07

Date	Voucher Number	Payee and Purpose	
1/ 8/62	330	Telephone Co. - Nov., Dec. Service	\$ 31.20
1/ 8/62	331	Alvin Larsen Co. Auditing 1961 Accounts	\$ 65.00
1/ 8/62	332	Hacket Smartt Nov. & Dec. Salary	\$ 194.00
1/ 8/62	333	Treasurer of the United States O.A.S.I. Fund	\$ 18.00
3/ 6/62	334	Telephone Co. Jan. and Feb. bill	\$ 22.70
3/ 6/62	335	U.S.G.S. 2nd Qtr., Cooperative Agreement	\$ 412.50
3/27/62	336	Peerless Printing for Annual Reports	\$ 630.00
4/ 6/62	337	Treasurer of U.S.A. O.A.S.I. Fund	\$ 18.75
4/ 6/62	338	Hacket Smartt, Jan., Feb., & Mar. Salary	\$ 290.60
5/ 4/62	339	Telephone Co. March, April Service	\$ 25.95
6/30/62	340	U.S.G.S. 3rd Qtr. Agreement	\$ 412.00
6/30/62	341	Telephone Co. May telephone service	\$ 31.95
6/30/62	342	Hacket Smartt, Apr., May & June Salary	\$ 290.65
6/30/62	343	Treasurer of the U.S.A. O.A.S.I.	\$ 18.75
6/30/62	344	Telephone Co. June Service	\$ 19.50
8/ 6/62	345	U.S.G.S. 4th Qtr. Cooperative Agreement	\$ 413.00
8/ 6/62	346	Telephone Co. July Telephone Service	\$ 17.35
9/ 5/62	347	Lamar Daily News - Envelopes	\$ 13.50
9/ 5/62	348	M. S. Telephone Co. August bill	\$ 20.45
Total Disbursements this Period - - - - -			\$2,945.85
Balance funds available 9/21/62 - - - - -			\$2,757.22

Mr. Bentrup then moved that the Treasurer be authorized to call on Colorado and Kansas for the operating funds for this year. Mr. Kuiper seconded the motion and it was approved by vote of the states. After some discussion, Mr. Kuiper's motion, seconded by Mr. Bentrup, that the Treasurer have continuing authority to call upon the states of Colorado and Kansas for budgeted funds as needed was approved by states vote. The Treasurer's report was discussed further and it was decided to delay purchase of new stationery until after January 1, 1963. Mr. Bell ruled that the Treasurer's Report would be accepted if there were no objections.

Mr. Green reported that the Administrative and Legal Committee had no assignment and, therefore, nothing to report.

Mr. Kuiper reported for the Engineering Committee and said that the field investigations on stock ponds have been completed and a final report on this assignment will be made at the December meeting.

Mr. Bentrup gave the following report of the Operations Committee:

OPERATIONS COMMITTEE REPORT
from
April 1, 1962 to Sept. 21, 1962

On April 1, 1962 there was 34,838 ac. ft. of water in storage in John Martin Reservoir. There were no demands for water until April 9th when the gates were opened to 800 CFS. Kansas calling for 350 and Colorado 450. On April 18 the discharge was increased to 850. Kansas calling for 400 CFS at this time.

The Reservoir was empty at 12 o'clock noon, May 1st. Water was administered by the State Engineer until May 18 at 7:45 a.m. when the gates were closed and storage declared. On the 19th Colorado called for 300 CFS and the gates were opened at 8:30 a.m. to supply this amount. The discharge remained fairly steady until the Reservoir was empty at 5 p.m. on May 31st, 1962. Kansas not demanding at this time.

Again on July 25th, 1962, water was declared available and the gates were closed at 9:15 a.m. on this date and storage began. The demand at this time was 550 CFS and was increased to 850 at 4:15 p.m. and remained thus until the 27th when the discharge was reduced to 400 CFS at 6:15 a.m. because of some heavy rains in the lower valley.

On August 1, Kansas ditches cancelled their request for water until August 6th when their demand was made for 400 CFS. Both Kansas and Colorado continued their requests for water until the Reservoir became empty at 2 a.m. on August 12, 1962, and has remained empty ever since.

Respectfully submitted,

Carl Bentrup,
Chairman

Mr. Bell, hearing no objections, said the report of the Operations Committee would be accepted as presented.

Mr. Bentrup said he would like to submit the report of the Operations Committee on its assignment for inspection of measuring devices on ditches between John Martin Dam and Pueblo. The report is attached as Appendix A.

Following discussion of the conditions of the measuring devices, the Chairman said that the report will be accepted, as written, and directed the Secretary to send copies of the reports to the Colorado State Engineer, Mr. Snyder, Mr. Smrha and Mr. Vincent. At Mr. Kuiper's suggestion the Chairman directed the Secretary to also send copies of the report to each ditch company in the area covered in the report. Mr. Bell complimented the Operations Committee on the report.

Mr. Smartt submitted a proposed budget for the 1963-1964 fiscal year and after some discussion, Mr. Green's motion, seconded by Mr. Kuiper, was passed to approve the 1963-1964 budget as submitted. The budget follows:

Personal Services - - - - -		\$4,825.00
Secretary Salary - - - - -	\$1,200.00	
Social Security - - - - -	50.00	
Gage Reports - - - - -	1,800.00	
Professional Services (Audit of Accounts) - -	75.00	
Cooperative gage replacement and rehabilitation - - - - -	1,700.00	
Capital Outlay- - - - -		\$ 300.00
Maintenance and Operation - - - - -		1,675.00
Bond, Treasurer - - - - -	25.00	
Printing - - - - -	600.00	
Official Publications - - - - -	100.00	
Travel Expense-Secretary and Employees- - - -	150.00	
Typing and Mailing - - - - -	200.00	
Investigation and Inspection- - - - -	150.00	
Telephone and Telegraph - - - - -	300.00	
Office Supplies - - - - -	150.00	
 Total Approved Budget, 1963-1964		<u>\$6,800.00</u>
Estimated Carry-Over as of June 30, 1963		1,850.00
Total to be appropriated by Colorado and Kansas		4,950.00

In accordance with Article VIII E (I), the amount of such budget payable by the State of Colorado is sixty percent thereof, or \$2,970.00, and the amount payable by the State of Kansas is forty percent thereof, or \$1,980.00.

Respectfully submitted

/s/ Hacket Smartt
 Hacket Smartt, Secretary
 Arkansas River Compact Administration

Mr. Smartt read a letter from Mr. Odell containing the agreements to be signed for cooperation with the U. S. Geological Survey. Mr. Bell said that if there were no objections, the Secretary will be instructed to sign the agreements. Mr. Kuiper said he wanted it understood he was not offering any objection to signing the contract, but wanted to inquire if this contract included the 1-1/2 percent increase of contribution funds funneled into investigation funds of proposed programs. He said that some investigations do not altogether meet the approval of the States. It seemed illogical to some of the States to have the U.S.G.S. in Washington, D. C. establish hydrologic procedures, when the States are perfectly competent to determine their own procedures. In the discussion which followed, Mr. Odell stated that he was unaware of some of the happenings in Washington and especially regarding the matter of "procedure". However, he said he knew of no time when the G. S. has been dictatorial, and hoped that others more familiar with the subject would have an opportunity to express their opinions. Mr. Kuiper said the States showed some concern on use of those funds primarily because of a G. S. publication a couple of years ago which stated that Glen Canyon was not necessary. This statement brought strenuous objections from the Upper Colorado River Basin States. Mr. Kuiper continued his remarks by saying that in his opinion the U.S.G.S. is tops as a basic data collection agency, but sees no reason to branch out.

Chairman Bell said that under "New Business", a resolution to amend Article IV of the by-laws has been included in the call for this meeting. He summarized the resolution as requiring the Administration to hold an annual meeting, and any others would be special meetings. Mr. Bentrup moved that the resolution be approved and that the amendment to Article IV of the By-Laws be adopted as written. Mr. Smartt seconded the motion and it was approved by vote of the States. Article IV, as approved, follows:

R E S O L U T I O N

BE IT RESOLVED that Article IV of the By-Laws of the Arkansas River Compact Administration be amended to read as follows:

ARTICLE IV

MEETINGS

1. The annual meeting of the Administration shall be held on the second Tuesday in December of each year.

2. (a) Special meetings of the Administration may be called by the Chairman or, in the case of a vacancy in the office of Chairman or inability of the Chairman to act, by the Vice-Chairman. Upon the written request of two or more representatives, it shall be the duty of the Chairman, or Vice-Chairman, as the case may be, to call such a meeting.

(b) Special telephonic meetings of the Administration may be held by telephonic communications between the several members of the Administration in respect to all matters arising under Article VI of the Compact; Provided that such special telephonic meetings may be called by the Chairman, Vice-Chairman or any member of the Operations Committee, and in any case at least two

representatives of each State shall participate personally in such special telephonic meetings and concur in the action taken as a result of any such meeting. And provided further, that the Secretary of the Administration shall prepare minutes of any special telephonic meeting and such minutes shall be acted upon by the Administration at the next Annual meeting or special meeting held under sub-section (a) hereof.

3. Notices of all annual meeting of the Administration shall be sent by the Secretary, or in the case of a vacancy in the office of Secretary, or the inability of the Secretary to act, by the Chairman or Vice-Chairman, as the case may be, to the members of the Administration by ordinary mail at least ten days in advance of such annual meetings. Notice of special meetings shall be given by the Secretary to the members of the Administration by the most expeditious method so as to allow as much time prior to such special meetings as conditions permit.

4. All annual meetings of the Administration shall be held at the principal office of the Administration. Unless otherwise agreed to in advance by all members of the Administration, special meetings shall be held at the office of the Administration.

5. The Administration shall keep a record of the proceedings of all its meetings. The minutes of such proceedings shall be preserved in a suitable manner as directed by the Administration. Minutes of proceedings until approved by the Administration shall not be official and shall be furnished only to members of the Administration, its employees, and committees. Distribution of official minutes shall be made by the Secretary in accordance with directives of the Administration.

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

7. At each meeting of the Administration, the order of business, unless otherwise agreed, shall be as follows:

- Call to order;
- Reading of minutes of last meeting;
- Approval of minutes of last meeting;
- Report of Chairman;
- Report of Secretary;
- Report of Treasurer;
- Report of Committees;
- Unfinished business;
- New business;
- Adjournment.

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

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

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

Mr. Bell said that all of the assignments for preparation of the annual report are known and he expected that the material would be available for approval at the annual meeting.

Mr. Smartt asked if he could have approval to have the books audited, and Mr. Bell assured him that approval had been given previously.

A discussion ensued on closing the gates of the reservoir at the end of the irrigation season, and Secretary Smartt said he would call for the gates to be closed a midnight on October 31st or as soon as possible thereafter, but in any event before 8:00 A. M. on November 1st.

Mr. John Martin, reporting for the Corps of Engineers, said that a complete resurvey of the reservoir had been made last spring and that a new area-capacity table would be available this fall--probably about November. Upon being questioned, he assured Mr. Odell that the revised area-capacity table would not be effective until after the end of the annual report period.

Mr. William Fagerquist, reporting for the U. S. Bureau of Reclamation, said that everyone in the valley is happy that the Fryingpan-Arkansas project has successfully gone through Congress and since the bill that was passed authorizes construction and operation and maintenance, it is hoped that a supplemental appropriation for preconstruction planning will also be passed in this session. He also said that no agreement has been reached yet on operating principles of the Trinidad project.

Mr. Kuiper said he would like to add some information on the Trinidad project. He stated that the principles were established in the authorizing legislation and that the Colorado Water Conservation Board will require that those principles are observed. He said that the Water Conservation Board, in cooperation with the Conservancy District, is installing additional gaging stations on the river and he figures that about ten years of record will be necessary to determine what the effect will be on the river. The Board also maintains the position that any changes made in the project plans will be made available to the Compact Administration. Mr. Kuiper said he wanted to say to the Kansas members of the Administration at this time that Colorado appreciated the support given the Fryingpan-Arkansas legislation by Congressman Breeding of their State.

Mr. Harry Woodward of the Colorado Game and Fish Department was asked if he had any comments to make and he said that his department is still working on obtaining a permanent pool in John Martin Reservoir and will try to find the water for it. He thinks that legislation will probably be necessary and he hopes for the support of the Administration. No specification on size of the pool has been finally determined, and this needs further study.

Chairman Bell said that it was planned to have an opportunity at this meeting to hear from former Administrators, Commissioners, and others having been associated with the Compact. He had letters from Congressman Breeding of Kansas and W. E. Leavitt of Garden City, Kansas expressing regrets at not being able to attend. He then introduced Mr. Warden L. Noe, former Secretary to the Compact Commission.

Mr. Noe related that he had not come into the Compact negotiations picture until the fifth or sixth meeting of the Commission when he attended as an advisor to Mr. Knapp, the Kansas State Engineer. He was then asked to serve as Secretary, and did so until the Compact was signed. He recalled some of the meetings of the Compact Commission and said that he regretted that he had been able to attend only one other Administration meeting. He said that he has been busy on lower Arkansas River negotiations, and other matters. It was interesting, he said, that in 1945 Kansas had changed their basic water laws to the appropriation doctrine. There has since been a great amount of litigation and only last week the courts had upheld the appropriation law.

Mr. Kuiper asked Mr. Noe if he would care to give his reaction to the proposed Water Resources Planning Act, but Mr. Noe said he did not feel that he was qualified to comment on this legislation. In a discussion that followed, Mr. Kuiper pointed out that under such legislation a River Basin Commission could be created which might swallow up a compact administration body. He suggested that the Legal Committee might desire to keep abreast of the proposals contained in the proposed bill.

Chairman Bell then introduced Mr. Nevius as one of the original Administration members, and asked him for some remarks.

Mr. Nevius said that he has kept in close touch with the Administration, and has frequently attended the meetings. It is his opinion that a more thorough reporting system is necessary to tell when to close the gates when floods are on the river. In order to make the telephonic meetings successful, all available information must be obtained and means of obtaining more information should be studied. He noted that recreation and Game and Fish proponents are always in evidence, but the sediment deposition in John Martin reservoir has increased at an alarming rate. It may be that pumping from the reservoir might prove useful in getting sediment into the downstream ditches. He said that the Administration should remember that the ditches below the dam in Colorado have all passed resolutions opposing a permanent pool in the reservoir. Evaporation from 10,000 acre feet of water would be significant, in his opinion, and people want to know where the water would come from. He believed that eight feet of depth was necessary for fish support and questioned what effect the sediment encroachment would have on this. Mr. Nevius said the administration of the compact has been good; however, he thought that with regard to winter storage, the call by the ditches should be in before the gates are closed.

Mr. Kuiper said that referring back to sediment capacity in Trinidad reservoir studies, 39,000 acre feet of capacity had been designated for sediment, and that the authorizing legislation had been accomplished from studies which did not use this capacity for conservation. Therefore, the State does not go along, at this time, with any operating criteria which would use the sediment capacity for conservation storage.

Mr. Ross Moor said he thought that the Administration should know that the Louviers Drain and a stock pond may be causing some error in the gage below John Martin reservoir. The return flow is now about 1,000 feet above the gage, and if a flood occurs there could be quite an error. The error only amounts to about 1 cfs now. Mr. Nevius said that the stock pond referred to is probably rather recent.

Mr. Smartt said he would like to express his appreciation of Mr. Nevius' assistance in operating the reservoir--both recently and when he first came on the Administration. He agreed with Mr. Nevius' comments on telephonic meetings, and also thinks more information is needed for closing the gates.

Mr. Bell said that, in his opinion, better methods of rainfall forecasting and communication will help in the reservoir operation. He thanked Mr. Green for making the arrangements for the meeting at the Broadmoor Hotel and reminded everyone that the next meeting will be December 11, 1962 at Lamar. He thanked all those in attendance for their interest.

The meeting adjourned at 12:30 P. M.

ARKANSAS RIVER COMPACT ADMINISTRATION

Lamar, Colorado

May 8, 1962

Arkansas River Compact Administration
Lamar, Colorado

Gentlemen:

At the December, 1959, meeting the Operations Committee, under instructions received at the July meeting, submitted reports of an inspection of the measuring devices on the Kansas Ditches and of the Colorado Ditches below John Martin Dam.

At the March, 1960, meeting the Operations Committee was further instructed to report on a similar inspection of the measuring devices on ditches above John Martin Dam and April 24th and 25th, 1962, an inspection was made of the devices on the ditches between John Martin Dam and Pueblo.

The Operations Committee of Carl Bentrup for Kansas and Hackett Smartt for Colorado were accompanied at various times on this inspection trip by the following:

For Kansas
Harris Mackey - Guy M. Vincent

For Colorado
David Jenkins - Roy Burgess -
Harry Nevius - David Hiser -
Frank Leatherwood - Don Patterson

For U. S. Geological Survey
Ross Moor.

As a continuation of the previous report on the inspection below John Martin Dam the following was found on these canals in confirmation of previously reported conditions:

Amity Canal - a 20 foot Concrete Parshall Flume with timber floor equipped with necessary recording gages.

Fort Bent Canal - 12 foot Concrete Parshall Flume had been completed, and a recording gage had been installed and the whole installation was in good operating condition.

Keesee Ditch - 4 foot Timber Parshall Flume in poor condition. Equipped with a Stevens Type "F" Recorder.

Lamar Canal - 15 foot Timber Parshall Flume equipped with a Parshall Double-Head Recorder. The installation was in good operating condition.

The following report concerns the ditches on the Arkansas River between Pueblo and John Martin Dam:

Bessemer - 16 foot Concrete Flume (not Parshall) and a Bristol Recorder in good condition.

Booth-Orchard - 4 foot Steel Parshall Flume equipped with Bristol Recording Gage. In good condition.

Colorado Canal - 30 foot Concrete Parshall Flume equipped with Stevens Double-Head Type "L" Recorder. In good condition.

Rocky Ford Highline - 15 foot Timber Parshall Flume equipped with Parshall Double-Head Recording Gage. Timber in fair condition.

Oxford Farmers - 12 foot Timber Parshall Flume equipped with U. S. G. S. Bubbler System operating a Stevens Type A-35 Gage. Station also has a Telemark Reporter. Flume is in satisfactory condition.

Otero - 12 foot Timber Parshall Flume equipped with a Bristol Recording Gage. Installation is in fair condition. The canal is used infrequently.

Catlin - 12 foot Timber Parshall Flume equipped with a Parshall double-head recorder. Also has electrically operated controls for the purpose of maintaining a constant flow in the canal. The committee was favorably impressed with the excellent diversion and control system of this canal.

Holbrook - 20 foot Concrete Parshall Flume equipped with Parshall Double-Head Recording Gage. In good condition.

Rocky Ford - 12 foot Timber Parshall Flume equipped with Parshall Double-Head Recording Gage. In satisfactory condition.

Fort Lyon - 40 foot Concrete Parshall Flume equipped with Parshall Double-Head Recording Gage. Is in good condition and is reported to have carried up to 2,700 cubic feet of water per second.

Las Animas Consolidated - 10 foot Timber Parshall Flume equipped with Bristol Recording Gage. Is in fair condition.

Las Animas Town - 4 foot Steel Parshall Flume equipped with Bristol Recording Gage. Is in good condition.

In addition to these Arkansas River Canals inspection was made at the Highland Canal on the Purgatoire River which was found to have a 6 foot Concrete Parshall Flume with Bristol Recording Gage. In good condition.

Also an inspection was made at the diversion and measuring points of the Pueblo Water Works which has diversion on both the North and South Sides of the River. The North side diversion is through a three foot Concrete lined Flume equipped with two 3 foot Parshall Flumes with necessary Recording Gages. The South side diversion is through a 5' x 5' Concrete lined Flume. Measurement is by means of a vane type meter in the Flume which is read frequently throughout the day and night.

Brief inspections were made at two points at which water was being returned to the river. One was Salt Creek.

The discharge from the Pueblo Sewage Disposal Plant is measured by means of a 10 foot Concrete Parshall Flume equipped with a Chronoflo Telemetering Device that makes continuous reports to the plant.

It is the opinion of the Operations Committee that the measuring devices on the canals as outlined above are in the main good and in a satisfactorily operating condition.

The Committee wishes to express thanks to the Colorado Officials for their courtesy and help in conducting this inspection.

THE OPERATIONS COMMITTEE

By /s/ Carl E. Bentrup
Chairman

By /s/ Hacket Smartt
Member

RECEIVED

JUL 30 1963

DIVISION OF WATER RESOURCES
GARDEN CITY