

MINUTES OF
ARKANSAS RIVER COMPACT ADMINISTRATION
REGULAR MEETING
March 29, 1957

COURT HOUSE
LAMAR, COLORADO

Attendance:-

For Colorado:

Ivan C. Crawford, Denver; Director Colorado Water Conservation Board
Harry B. Mendenhall, Rocky Ford; Chairman of Colorado Representatives
Harry C. Nevius, Lamar; Administration Secretary and Treasurer

For Kansas:

Wm. E. Leavitt, Garden City
Roland H. Tate, Garden City; Vice Chairman and Chairman of
Kansas Representatives

Absent:

R. V. Smrha, Topeka, Kansas
U. S. Representative (vacancy)

Others Attending:

Ralph Adkins	C. F. & I. Corp.	Pueblo, Colorado
James E. Bone	U. S. Engineers	Caddoa, Colorado
Jack M. Terry	U. S. G. S.	Denver, Colorado
Ross W. Moor	U. S. G. S.	Lamar, Colorado
John T. Martin	U. S. Engineers	Albuquerque, N. M.
Carl H. Brauer	Farmer	Lamar, Colorado
Geo. W. Colburn	C. W. C. B.	Denver, Colorado

The postponed regular meeting of the Arkansas River Compact Administration was held at the Court House, Lamar, Colorado on March 29, 1957.

Vice-Chairman Tate called the meeting to order at 9:45 A. M.

As first order of business the Minutes of the Annual Meeting of December 11, 1956 were approved as written.

The death of Hans Kramer (Brig. Gen. U.S.A. Ret.), Administration Chairman and U. S. Representative on February 16, 1957 was noted. Secretary Nevius reported he had notified the Administration members and had wired condolences to Mrs. Kramer. He presented Mrs. Kramer's acknowledgement of the message.

On motion made and duly seconded, the following resolution was unanimously passed:

IN MEMORIAM TO HANS KRAMER

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

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

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

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

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

Secretary Nevius reported that he had transmitted copies of the 8th Annual Report of the Administration to the Governors of Colorado and Kansas. He had also made local distribution in addition to that made by the Colorado Water Conservation Board and by the Kansas Representatives.

Secretary Nevius further reported that he had received remittances from the States of Colorado and Kansas in response to the call authorized at the October meeting.

Secretary Nevius presented a communication from the U. S. Geological Survey which follows:

Mr. Harry Nevius, Secretary
Arkansas River Compact Commission
Prowers County Court House
Lamar, Colorado

Dear Mr. Nevius:

You may have learned that changes are being made in organization of the Water Resources Division of the Geological Survey, and we wish to acquaint you with the principal ones. We believe that these changes will improve our public service and make our cooperation with your agency and others more effective. The increasing complexity and scope of our operations makes it increasingly urgent to foster mutual interests in water resources, and to coordinate plans and operations. The need for reliable water facts by public and private agencies at the national, State and local levels requires that we maintain the closest possible working relationships among all who are concerned.

An organizational change which is of special consequence to regional and State agencies is the establishment of Area Offices of the Water Resources Division in the field centers of the Geological Survey at Menlo Park, California; Denver, Colorado; Rolla, Missouri; and Arlington, Va. No changes have been made at the State level and you may continue to deal in appropriate instances with District and other offices in the State. The District Offices, however, report to the chiefs in their area offices instead of to the headquarters at Washington, D. C. Each area office will be manned by a Division Hydrologist, representing the Chief of the Water Resources Division, and by Branch Area Chiefs representing the Chiefs of respective branches. These offices will coordinate our operations in the respective four areas, and will assist in developing and executing our nationwide program.

Another significant change is the establishment of a new operating branch of the Division, that of General Hydrology. The former staff branch of Technical Coordination has been abolished. Thus, there are now four branches--those of Ground Water, Quality of Water, Surface Water, and General Hydrology. The latter does research and general studies, including the interrelationships among climate, topography, vegetation, soils, geology, and use of water.

The area office of principal concern to you, its area of jurisdiction, and the personnel assigned to it are as follows:

Rocky Mountain area (Building 25, Denver Federal Center, Denver 2, Colorado). Includes Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah and Wyoming.

Sherman K. Jackson, Division Hydrologist
Francis M. Bell, Area Chief, Surface Water Branch
Stanley W. Lohman, Area Chief, Ground Water Branch
H. V. Peterson, Area Chief, General Hydrology Branch
Frank C. Ames, Area Chief, Quality of Water Branch

Representatives of the Rocky Mountain Area Office, in company with our State representatives, may call on you as opportunity arises-- to become acquainted, to familiarize themselves with local water problems and operations, and to discuss other matters of mutual interest. Our determined purpose is to continue and to cultivate the longstanding cordial relations between the Washington headquarters of the Geological Survey, the States and their agencies, and other Federal agencies. Our new Area Offices should be helpful in promoting mutual understanding and in coordinating the State and Federal programs, with adequate attention to the diverse interests of all the agencies so deeply concerned with water resources.

(Signed) C. G. Paulsen

C. G. Paulsen
Chief, Water Resources Division

As Treasurer, Mr. Nevius presented his report which, on motion by Mr. Crawford, second by Mr. Leavitt and vote by States, was accepted and placed in the record:

ARKANSAS RIVER COMPACT ADMINISTRATION
Report of the Treasurer, March 29, 1957

Balance on hand October 31, 1956, 1956 Auditor's Report		\$ 971.73
Receipts		
Call authorized October 26, 1956	\$3000.00	
Colorado 60% 12-19-56	1800.00	
Kansas 40% 1-4-57	<u>1200.00</u>	
		<u>3000.00</u>
		\$3971.73

Disbursements by the Administration:

Voucher	Date			
195	12-31-56	Robert W. Rollins, Audit & Service	65.00	
196		Secy. Salary, Nov. & Dec. (less \$4.00 F. I. C. A.)	196.00	
197		Outwest Printing Co., Printing Vouchers	30.39	
198		Mtn. States T. & T. Co., Nov. & Dec. Service & Tolls	24.40	
199		Treasurer of U. S., Deposits by States	8.00	
201	2-28-57	H. R. Menninger Co., Ozalid Paper	4.50	
202		Peerless Ptg. Co., Annual Reports	516.00	
203		Secy. Salary Jan. & Feb. (less \$4.50 F. I. C. A.)	195.50	
204		Treasurer of U. S., Deposit by States	9.00	
205		Mtn. States T. & T. Co., Jan. & Feb. Service	16.90	
				<u>1065.69</u>
		Balance on hand March 29, 1957		<u>\$2906.04</u>

The Administrative Committee reported that the formal forms for the Finding and Notification had been printed. These would prove of considerable value by saving time when occasion arose to use them. No further report was made.

The Engineering Committee had nothing to report.

The Operation Committee reported verbally that the gates to the dam had been closed on December 7, 1956 and that there was now 3,755 A. F. of stored water.

Mr. Nevius, as Chairman of a Special Committee, presented a written report. He requested Mr. Martin, Corps of Engineers, to comment on the report. Mr. Martin said that this report and the data presented seemed to fill the requirement very closely.

Vice-Chairman Tate, hearing no objection, accepted the report and expressed the thanks of the Administration while discharging the Committee.

REPORT OF SPECIAL TECHNICAL COMMITTEE
ARKANSAS RIVER COMPACT ADMINISTRATION

The special committee appointed at the October 1956 meeting of the Arkansas River Compact Administration held a meeting in the County Courthouse, Lamar, Colorado on November 14, 1956 with the following in attendance:

Harry Nevius, Committee Chairman	Compact Commissioner, Colorado
Guy Vincent	Kansas Div. Water Resources
F. C. Snyder	Div. Eng. State of Colorado
Ross Moor	Hydrographer, U. S. Geological Survey
R. J. McGrath	Water Commissioner District 67
James E. Bone	Resident Engineer, John Martin Dam
John T. Martin	Corps of Engineers, Albuquerque

The purpose of this meeting was to determine agreeable criteria and procedure to use in analyzing the reservoir emptying periods for the purpose of obtaining low-level area-capacity tables which would have an accuracy required by the Compact Administration. The Corps of Engineers presented an analysis of the April 1956 drawdown of John Martin Reservoir with a description of the various items of criteria used. Attachment 1 is this brief description and attachment 2 is a graphic comparison of the capacity curve obtained from this drawdown study to the capacity curves adopted February 1, 1954 and March 1, 1956.

The committee checked the results of this study against the drawdown periods during July and again in August 1956 and found that, had the April 1956 drawdown capacity table been in use, a three-day notice as to when the reservoir would be empty could have been given the State Engineer of Colorado with an accuracy of two to three hours. The desired accuracy is within six hours. The committee concluded, therefore, that the criteria used by the Corps was as good as could be determined at this time and it was decided that the Corps would issue a revised low-level area-capacity table based on the April drawdown study prior to the December 1956 meeting of the Arkansas River Compact Administration. Further, it was concluded that studies of future drawdown periods could serve as an accurate basis to determine when additional adjustment of the low-level capacity table is warranted. This procedure can be used in lieu of the more expensive partial reservoir resurvey method to maintain a sufficiently accurate low-level capacity table.

Attachments:

1. Description of Criteria
2. Graph of Capacity Curves

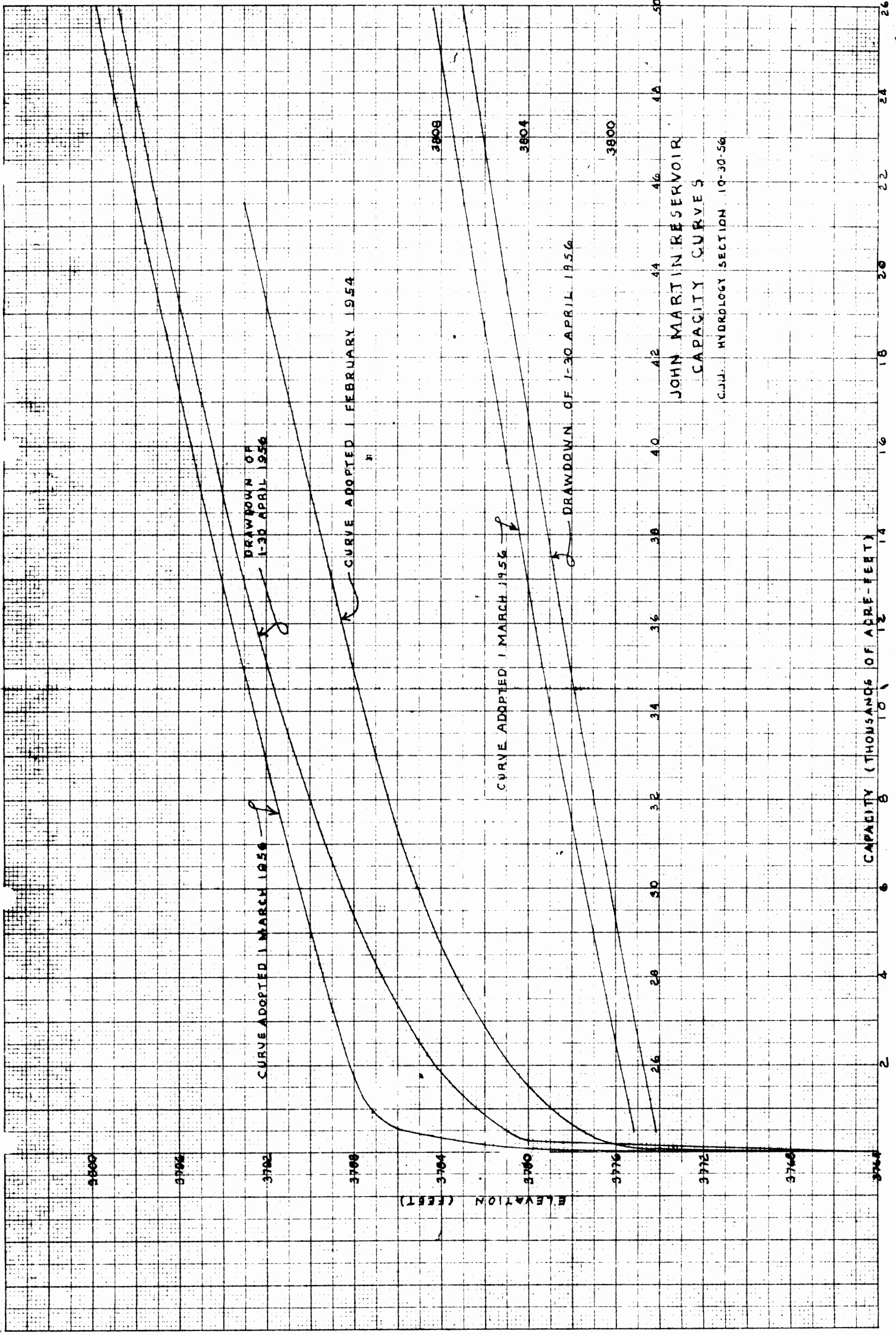
JOHN MARTIN RESERVOIR
Drawdown of 1-30 April 1956

On 1 April 1956, the reservoir elevation was 3806.50 and the indicated storage was 44,144, based on capacity curve adopted 1 March 1956.

The reservoir was drawn down during the month and became empty at 0445 on 30 April 1956.

Spot readings on the Arkansas and Purgatoire Rivers at Las Animas were the basis for combined inflow at that point and an arbitrary allowance for 70 acre-feet per day was added for unmeasured inflow, in accordance with a letter from U.S.G.S. at Denver, dated 6 January 1956.

From these daily inflow figures, the measured outflow below the dam, and daily amounts of evaporation, the daily change in storage was computed and applied to daily reservoir elevations from 30 April back to 1 April, resulting in a new capacity curve based on this drawdown period. From the incremental differences in volume on this curve, an area curve was computed.



JOHN MARTIN RESERVOIR
CAPACITY CURVES
C.J.H. HYDROLOGY SECTION 10-30-56

With reference to the passing of General Kramer, Judge Tate noted that the Compact had no provision absolutely requiring a U. S. Representative. He quoted Article VIII-C and requested discussion on the action to be taken by the Administration on the vacancy. Because of General Kramer's outstanding service to the Federal Government, to the Compact Commission and to the Compact Administration, Judge Tate felt that perhaps the Administration could go on for some time on the impetus the General had given. However, there might be need of an arbitrator at some future date.

Mr. Crawford stated that he felt that an impartial man on the Administration helped balance the Administration's actions.

Judge Tate said he concurred in this thought and felt that the Federal Representative was needed to establish relations with the various agencies of the Government and to represent the Administration in these contacts.

Mr. Leavitt suggested the Senior Senators of each State be notified of the vacancy.

After considerable discussion, it was the consensus of the Administration that the Secretary write the President of the United States notifying him officially of the vacancy created by General Kramer's death. Further, that copies of this letter be sent to the Senators of Colorado and Kansas, to the Representatives of the two States in whose districts the Arkansas River flows, and to the Governors of both Colorado and Kansas.

Mr. Crawford advised the Administration that his attention had been called to an article in the Los Angeles Times which contained an extravagant statement on the quantity of underground water in the Arkansas River valley. There followed a brief discussion on the status of proposed underground water laws in Colorado and Kansas.

Judge Tate asked for remarks from any other of those in attendance.

Mr. Carl Brauer, a farmer from the Lamar area, asked a question concerning the possibility of shutting the gates to the reservoir at an earlier time in case of a flood. Mr. Nevius and Judge Tate explained the processes and administrative actions by telephone needed to do this. The actual time of closing the gates depends upon receipt of authentic information that storage water will be available, usually from officials at upstream gaging stations. After such information is received, closing of the gates can be accomplished in a very short time.

Judge Tate announced that the next regular meeting is scheduled for Tuesday, July 23, 1957 unless changed by further action.

The meeting adjourned at 11:00 A. M.