



STATE OF COLORADO)

SS:

COUNTY OF LAS ANIMAS)

REPORTER'S TRANSCRIPT

MEETING OF THE ARKANSAS RIVER COMPACT ADMINISTRATION
HELD AT RAMADA INN, APRIL 23, 1977, 9:00 A.M.

Frank Cooley, Chairman
Guy E. Gibson, Kansas Representative
Carl E. Bentrup, Kansas Representative
Robert Tempel, Kansas Representative
Duane D. Helton, Colorado Representative
Harry K. Bates, Jr., Colorado Representative

P R O C E E D I N G S

MR. COOLEY: At this time, I am going to call this meeting to order. I think Mr. Dawn is coming but he isn't here yet and we are going to, for that reason, postpone the introduction of persons here for just a few moments. The agenda that has been prepared for this meeting for the benefit of many of you who don't have it, is as follows: At 9:00 o'clock we are to open and review the purpose of the meeting. At 9:10 we are going to commence a discussion of the Trinidad Reservoir and we have a problem concerning the discussion of the Trinidad Reservoir that I want to just briefly touch on, and that is this. We anticipated that the Court would have decided by this date the pending case concerning the water rights in the Trinidad Reservoir and we had arranged with all three of the attorneys involved, all three of the principal attorneys, that the successful attorney would give a report to the Administration about the decision of the Court, its implications, and what it had to do with the operation of the Reservoir. As I understand it, the

i

court this week pointed a finger at each one of the three contending parties and said to draw up findings of fact, conclusions of law, presumably the Judge will throw them at the ceiling and the one that sticks to the ceiling will be his judgment. And, therefore, it will be improper of us to touch upon that pending case other than for just a few seconds to state what the issues are. After the discussion of Trinidad which it is hoped to be the first item of business on the agenda this morning we would then turn to the question of the river studies and call on Dick Fiddler and Bob Jesse and Tommy Thomson to discuss river studies. Then go to the report of the engineering committee which has had a meeting since the last regularly scheduled meeting of the Compact Association. Following a short coffee break we will turn to the discussion of the John Martin Reservoir, and, finally, discuss water problems of the Arkansas River in general until the conclusion of the meeting, and that promises to be rather interesting.

Because Mr. Dawn is not here, again, I do not wish to go into introductions at this second, and I would now like to jump to the river studies. Let me now call on Dick Fiddler of the USGS and Bob Jesse and Tommy Thomson collectively to kick things loose on the studies of the Arkansas River. And it was my intention, you three gentlemen, that among other things you educate us not only as to the flood routing studies so denominated, but other studies that are taking place on the River so that on the record we will have a better understanding of what is being done. Mr. Fiddler, will you lead off, please, sir?

DICK FIDDLER: Let me offer a few comments. I think I will direct it to the study we are talking about, flood route study, and I would like to summarize a little bit of the events leading up to this time. We had a special engineering committee of the Arkansas River Compact Administration in Pueblo on September 14th, I believe. At that time, there was a request by the Arkansas River Compact Administration of the USGS, and the U.S. Bureau of Reclamation to prepare a proposal to study the flood events along the Arkansas River; particularly those related to the Pueblo Reservoir. The geological survey prepared in consultation with Leo Abbott of the Bureau of Reclamation a proposal that was presented at the annual meeting of this organization in Lamar. As a result of that meeting there was a committee appointed to review the proposal further and to assist in providing funding for the study. The committee, and I guess it was the committee- I hope it was- but anyhow, the committee and others who are interested in this particular study were asked to meet again in Pueblo in February. At that time, the U.S. Bureau of Reclamation, the Southeastern Colorado Water Conservancy District, the Division Engineer's Office, and the Colorado Water Conservancy Board, and the USGS were to meet and review the proposal and discuss any changes in the proposal itself and the funding for the study. As a result of that meeting we agreed unanimously to revise the wording of the proposal. That is accomplished. I have copies of that revised document which I will tender. Anyhow, generally we revised some of the wording of the proposal. And one other change that was made in the proposal was

distributing the funding over a two-fiscal period instead of the one-year for 1977. And one reason for that being that we did not have approval to start the study and we are now five months remaining in our fiscal year, and I do not believe that we can complete the study within the five remaining months. I think it will work out better if we were to carry it over two years. The Geological Survey has agreed to provide 50 percent of the funding for the study no matter whether it is in one fiscal year, or two. If this study is carried out we will make every effort to coordinate it. The results through the agencies that are particularly interested in this, particularly the Division Engineer's Office, the Southeastern Conservancy District, the Colorado Water Conservancy Board, the Bureau of Reclamation, and, of course, the Arkansas River Compact, and we will- as we always have- make presentations frequently. Now, that is all I am going to say right now unless you have questions on the study. As far as studies, in addition to that, the Geological Survey involved on the Arkansas, we do have a cooperative program with the Southeastern Colorado Water Conservancy District and there are several segments of that program, one being a water level monitoring network. We have about, it seems to me it is in the order of 600 observation wells in the Arkansas River, measured at least once a year. There are about 50 wells we measure every two months, particularly in the area of the low Pueblo Reservoir all the way to Kansas. Six counties on that. Another study we have is water availability study in the area to the west of Pueblo and what is referred to as the Wet Mountain Valley

to evaluate the amount of ground water and surface water generally a hydrological budget. That study is near completion, the report is complete and, generally, will end shortly. One study that has been of major interest to many of you here is the study of the Arkansas River from the Pueblo Reservoir to John Martin Reservoir, or determinations of the lawsuits resulting from releases from the Reservoir from Pueblo. We worked one full year on this already and we are attempting to gather additional information when releases are made from Pueblo Reservoir this spring and summer. These are releases made from the winter water storage program that has been active for two years, and it is a study I think of great interest to many of the ditch companies. It's controversial. It is not a very easy study to make, and I think we have made a lot of progress, to. I'm very pleased with the result. We know there are some pitfalls in the study of this thing. We also know that there are some weak points in studying flood routing. These are not straightforward type investigations. My feeling is, and I think many others, if we do attempt to look at the studies of this nature of a river as complex as the Arkansas, at least we will come up with a better understanding. We may not learn all the facts, but anyhow we can work with an organization such as the Compact which I think is certainly a step forward. One additional effort that we have started this year with the Conservancy District is the study of water quality of return flows along the Arkansas River. This is a brand new attempt. We are particularly looking not at the mainstem of the Arkansas,

but inflows to it, and our data collection program will be in full force this spring and summer when the irrigation season gets underway. I think I covered all the breakdowns. I would like to say one more thing. There are opportunities when we have programs with the Conservancy Districts, the State Engineers Office- we do have programs with all state agencies- and with the Arkansas River Compact. We were actively involved in the release of John Martin which happened at the evening of Easter, 12:01 A.M. that took four people. Two of them are here today. I think these show that we cooperate. Two of those fellows were with Bob Jesse's office and two were with mine. There is a lot of extra work put into our programs. And I just did not like to let some of them go without being answered. I am going to stop unless you have questions. I know Tommy and Bob are supposed to make some comments and I will let them see what they can come up with.

MR. COOLEY: Thank you very much. Are there any questions? I would like now, out of sequence, to ask Mr. Thomson to describe first where we are on the funding and the routing study and, secondly, Tommy, if you would, to discuss as has Dick, the studies that are underway or have been accomplished on the River.

CHARLES L. (TOMMY) THOMSON: Following Dick's comments, the Board of Directors of our District met in official session on Thursday the day before yesterday. Frank Cooley, Duane Helton, and Bob McCabe came down and, of course, Bob Jesse and Dick Fiddler attend meetings regularly. We received a letter from Mr. Cooley, along with a copy of the revised

draft proposed study which I mailed out to the Board of Directors two weeks in advance of the meeting in order that they might be able to review it preparatory to the meeting. I will say this. The two-phase study was not at all popular with the members of the Board of Directors because they felt it was an after-the-fact type study. It was too concentrated on a single event. And I am sure I speak for the Board that had that study not been recommended by Frank, the Board- I am sure- would not have felt inclined to co-fund the project. However, with Frank's presentation the members of the Board could see some value in this kind of study. Several of them had serious concern as to whether or not it might be a duplication of other studies we have funded. Our District has been cooperative with the Geological Survey in these studies for thirteen years. It started out roughly with the ^{analogy} analogy program and has had continuous study as Dave Fidler mentioned, in the Lower Valley. Not only Wet Mountain Valley, but also in the Uppermountain study, Salida, Poncha Springs and Buena Vista. We have tried to incorporate the entire river drainage. Some of the other studies was a water supply study particularly the ground water in the area of Salida, Poncha Springs and Buena Vista. In other words, our District western boundary is at the Lake County line, and our Board is very anxious to know the water ratio in the entire Valley. They studied that, and that study was complete a year ago. As Dick mentioned, the Wet Mountain Valley is primarily a hydrological study to determine the characteristic of that rather vast Mountain Valley, and with the study from that we will be able to incorporate it in water management

programs. We have had three different studies up in the Colorado Springs area, or El Paso County. Ground water supply studies, soil characteristics, and so on. Those studies have been completed. But in the Lower Valley it is a continuing thing. Our Board has been averaging Thirty Thousand Dollars that we have invested in these studies of ground water. And, as Dick mentioned, another study by the USGS was transit loss study between Twin Lakes and the Colorado Canal to see how closely that study, the results of the study, relate to a court decision known as the Sunnyside case decision which was filed in 1932. Now, back to this study. The Board Members did vote unanimously to cooperate in the study and authorize the expenditure of the necessary Five Thousand Dollars as our part of the study. They were concerned, as you are Frank, over the possibility that it might be a duplication of the ongoing studies but did feel so long as the study went beyond the 1976 incident and did incorporate statistics from other years and similar events which could relate to the overall river characteristics of the Pueblo and John Martin that it would be a meaningful study, and so they did authorize that program.

MR. COOLEY: Thank you very much. We are going to hear from you again this morning. Before I call on Bob Jesse I wish to put on the record, and before each of you, to state the general statements that came out in the colloquy before the Southeastern Board. I represented to that Board in very strong terms and in a biplay, two positions. One position is that the study in no way is an effort to recapture water from the 1976 flood. That the Compact Administration, from

i

the best of my knowledge no member of the Compact Administration felt that it was either possible or fruitful to determine ways of recapturing water that was gone. That was not the purpose of the study. And the second representation I made to that Board is that the purpose of the study was not to establish that Bob Jesse by name had made any errors in the release of water from Pueblo Reservoir. On examination or questions from Frank Melinski, I certainly agreed with the proposition that genesis of the study was the question and the controversy, if you will, involving the 1976 event of what happened to the water and what was done. But that we had long since progressed past the point of wanting the study to say "hey, this is what should have been done", but rather, the purpose of the study was to use all the available data so that the water users on the River would have more information and better criteria for each and all to administer the water. Now, because this has been going on now for more than a year Bob Jesse is- I think it is proper to say- sensitized about this subject. And I don't blame him. I think I would be if the tables were turned. I think I would be paranoid where he is sensitized. But I did not want Bob to speak to this group until I had made these comments. I certainly felt in addressing the Southeastern Board that I was speaking for the Compact Administration in describing these two things that I believe, and I think you believe, the study is not. Now, Bob, with that introduction I would like you to address the group.

BOB JESSE: I don't have a lot to say. I apologize for appearing sensitive, but I'm just a little nervous about the whole

thing. And the Division Engineer has always made all our records and all our findings and measurements open to anyone. We compiled a fairly extensive compilation of the events of the infamous event of August 1st, and this Administration has a copy of it, Kansas has a copy of it, the Bureau, and the Geological Survey. We have the originals and we will allow anyone within reason to come in and look at them and do what they want with them. We consider that event closed. And we will cooperate in any way we can to the extent that we have manpower available, and this sort of thing, in any study the Geological Survey makes. Of course, we are always delighted to have the results of any new information and will use it insofar as we are able in the administration of the River. Unless there is a question that's all I have.

MR. COOLEY: You certainly throughout this entire past year on the subject have conducted yourself as a gentleman in every way at every one of the meetings I have attended and I think you deserve a great deal of credit for your behavior whilst seated on the skilnet. I have one question directed to the three persons who have just spoken. Is there an annotated bibliography? Is there to be found anywhere a current summary of the factual data on the Arkansas River?

CHARLES L. (TOMMY) THOMSON: We have an indexed library. We have copies of the USGS report, Mr. Chairman, and they are indexed.

MR. COOLEY: How many are there in number? Would you suppose more than fifty?

CHARLES L. (TOMMY) THOMSON: No. I would say what we have gathered in the Black Squirrel Creek studies and so on probably in the vicinity of twenty-five.

MR. COOLEY: How much effort would it be either for you or for Mr. Fidler, or for Mr. Jesse to prepare a summary with some comments on what they, not only anything they had but what in fact was contained in the respective studies that would be of general use and benefit beyond the scientific community.

CHARLES L. (TOMMY) THOMSON: We could certainly do it. Dick, do you have any comments about that?

RICHARD GROZIER: I think I could get our report section in Denver to put together a listing of all of the reports that are available, both the CWCB and the USGS, and the State Engineer and others, that could be used as a reference material for the Arkansas Valley. Reports, circulars, things of that nature.

MR. COOLEY: Let me ask a question of Mr. Howland. Bill, would such an annotated bibliography be of any practical value to water users on the River?

WILLIAM HOWLAND: Certainly would. We would be aware of the data available and where to get it. That would be valuable, really. I think if it wasn't too time consuming and expensive it would be an asset to all water users.

MR. COOLEY: Mr. Grozier has seen fit without any comment by the Chair to volunteer to do such.

RICHARD GROZIER: We can volunteer everything we have got. We will correspond with Tommy and get his references to some reports we do not have in our library and that we don't know about. I do not think the drafting of such would be such a big program.

MR. COOLEY: On behalf of the Compact Administration, Mr. Grozier, we would be very pleased if you could put together such a report.

RICHARD GROZIER: All right.

MR. COOLEY: Are there any questions of any of the people on the flood routing study, or on reports in general? Mr. Gibson

GUY E. GIBSON: I'm a little bit in the dark. I was under the impression we had been handed a revised flood routing study. Does the Compact officially concur in this study, or do we need to take any action on it? Particularly with reference to, I would like to ask our secretary or someone, on this proposed funding. Have we got that all taken care of?

MR. COOLEY: Your point is very well taken. There have been changes made in both the study proposal and the method for funding. And, Lane, why don't you comment on these changes?

LANE HACKETT: I think the flood study proposal was set up for the 1978-1979 budget of Five Thousand Dollars on the flood routing study which will be presented to the State. This is an approved budget that has already been approved by the Compact.

MR. COOLEY: Let's go into that in a little more detail. The amount of money and the revised funding is neither one cent greater, nor less than has already been approved by the Compact Administration?

LANE HACKETT: That is the way I understand it.

MR. COOLEY: There is no change in amount. The change as I understand it, and correct me if I'm wrong, is that instead of us reimbursing the Southeastern Water Conservancy District Five Thousand Dollars that at the time we planned this

reimbursement, the District would make that Five Thousand Dollar payment to the United States Geological Survey directly. Is that not correct?

LANE HACKETT: I think that is the way the minutes which were approved at Aspen show that it was to be, a cooperative agreement with the USGS. Mr. Grozier might comment.

RICHARD GROZIER: That is the way I understand it.

MR. COOLEY: The change in money is one of style and routing rather than in amount of money.

WILLIAM HOWLAND: As far as I am aware of.

MR. COOLEY: Now, what about the amendment to the text? I will lead you on this one, again, if I may. It is my understanding that the amended text makes clear what was not clear in the study proposal, and that is that the study is to be broader than that of the August 1976 event. Mr. Fidler, is that a fair representation of what the change is in the proposal?

DICK FIDLER: It is not to be broader.

MR. COOLEY: The study proposal, the changes that were made since the study proposal was approved by the Compact Administration.

DICK FIDLER: Not necessarily broader, no. The funding has been distributed over two years instead of just one.

RICHARD GROZIER: There is no mention whatsoever of the August 1976 material, and it is to be a broad study taken into account on flood peaks we have on the Arkansas. It is to be a complete study.

MR. COOLEY: Mr. Gibson, do these comments and colloquy answer some of your questions?

GUY E. GIBSON: I think it does. I notice here it says a problem point and I don't know what the problem is but

the guidelines developed in this study will be used to better determine where flood waters would be utilized downstream had the Pueblo Reservoir not been constructed. Is this a problem? Or is this the objective of the study? To develop guidelines that could be used and better determine where flood waters would be utilized. I thought we got away from the "would have been" and it ought to be "will be". Also, I have heard considerable discussion this morning that the purpose of this is to go back not to what would have been, but to develop guidelines for the future. That is my question. Another thing, when I look at something budgetary that Kansas has to supply money for, I prepare the budgeting and have to clearly understand. We did budget for the 1978 fiscal year and I am sure that I have Kansas's share in there, but Tommy Thomson told us Five Thousand Dollars will be put up for the 1977, and when we get ours in 1978 we put it into the Compact and refund it to you?

CHARLES L. (TOMMY) THOMSON: Can I speak to that?

MR. COOLEY: Please do. Of course, Mr. Gibson is correct; it is not clear.

CHARLES L. (TOMMY) THOMSON: As we understood the first proposal, the one discussed at the December meeting, we were to put up Ten Thousand Dollars, and if the Compact could get the money from these two states next year we would be reimbursed to the extent of Five Thousand Dollars. Our Board objected to that. We have gone that route with state agencies before and it hasn't worked out. So that was when it was changed to cover two fiscal years. And so we put up Five Thousand Dollars for this year, and by the time they get to take the

second year you will be in this fiscal year and you will put up the Five Thousand, so there is no refunding.

MR. COOLEY: Mr. Gibson, the Chair at this time will entertain a motion that we adopt the changes in the revised study proposal and the changes in the funding mechanism as the action of the Compact Administration notwithstanding the use of the subjunctive voice.

GUY E. GIBSON: I move that the Compact accept the revised flood routing.

MR. COOLEY: Motion has been made that the flood routing study be accepted as revised. Is there a second to the motion? The motion has been seconded. Is there further discussion? I would like to call for the vote of Kansas.

(KANSAS VOTES YES)

Call for the vote of Colorado.

(COLORADO VOTES YES)

Thank you each of the three persons who has contributed to this, and especially Mr. Grozier for wonderful things to come.

We are now going to move out of sequence to the report of the engineering committee and I am going to call on Bob McCabe to give the report on that committee.

BOB McCABE: My report is on the Amity Storage Program in John Martin this year and I don't know how far you want me to go in on some of this engineering. The storage program ran for fifty days during which time the Amity was storing water in John Martin Reservoir. And during the fifty days we had a total increase in storage in John Martin of 14,504 acre feet. So we had to apportion this water between the Compact water and the Amity water, and when we did this, the gauge

was used at Las Animas so we had to actually go back to La Junta or just below the State line headgate to measure out Amity's water and then took our loss of Point Eleven Percent (.11%) all the way to John Martin. To find our total Compact water we used base flow time at the Las Animas gauge of 26 cfs. This was based on averages through gauges by Bob Jesse's office. We went through our engineering calculations and came up with 16,147 acre feet during a fifty day period which left us our theoretical calculation of 1,643 acre feet more than what actually accrued. So that we had to apportion the loss to each, to the Compact and to the Amity. According to how much water they actually did have in storage. So this loss, 1,643 was apportioned to Compact water of 15.74 percent, and winter water 84.26 percent, and then subtracted the theoretical calculation so we came up with what actually had been stored. On February 14th we began to subtract the evaporation loss. The Reservoir was completely frozen over until that date. The way we apportion the evaporation was exactly the plan we used for the permanent pool which is already approved by the Compact. We took the surface area of the Compact water and computed the evaporation and took additional surface area of the winter water and computed evaporation of that, and we arrived at a total.

MR. COOLEY: What evaporation loss did you calculate for the period when the Reservoir was frozen over?

BOB McCABE: We didn't calculate any. We figured it would be so small it wouldn't be worthwhile. It was only about 14 acre feet per day, after it was empty. So we didn't think we should even consider it. That's about all I have on this.

Our computation sheets are available. If anybody wants to see them we can run off copies. I think Amity water is supposed to be emptied next Monday so we can run off copies and send to everybody if you like so you can go through this and see what we did.

GUY E. GIBSON: In this report here it says "given" item 4 transit losses are .11%. Where did this figure come from?

BOB McCABE: Those are figures the State Engineer used and are based on some prior studies that were done by the USGS. Next year if someone finishes their complete study we will probably be able to use more accurate figures, but these are the only accurate figures we have right now.

GUY E. GIBSON: Both your computations and I say yours and Jerry's computations show as a result of your study to be actual per mile transit losses.

BOB McCABE: If we had our actual flow at Las Animas we could compute that, but the gauge was frozen at Las Animas so we couldn't use that. We had to use the standard figure the State Engineer uses to compute all losses.

GUY E. GIBSON: When you used that you came up with Compact water at 59 acre feet, but after adjusting it the adjustment must have been based on losses? And you came up with Compact water at 22,8200 acre feet. The additional loss charged to Compact water was 259 acre feet.

DUANE D. HELTON: Maybe the term "loss" is really not appropriate. Maybe the term should be adjustment.

HARRY K. BATES, JR.: You are actually measuring the inflow at that particular time.

GUY E. GIBSON: They didn't use the inflow. Mr. Bates, as I understand it, the inflow was not measured. But they took

the change in this capacity to arrive at the amount of water that was delivered to John Martin Reservoir.

DUANE D. HELTON: That is a pretty accurate figure and about the only firm figure the engineering committee had to work with on the whole thing. Actually, what was done they calculated the theoretical amount and the Compact water and the Amity water and applied it to the actual inflow.

CARL E. BENTRUP: Bob, what is the actual loss figure from La Junta to the start?

WILLIAM HOWLAND: Point Eleven Percent.

CARL E. BENTRUP: It exceeded that for quite a lot?

WILLIAM HOWLAND: Missed it by 43 acre feet and we don't know if that was because our base of 23 cfs actually dropped, or whether it was due to evaporation, or what. What we did was best approximate it. I think what you are actually asking if you accept the measured flow at La Junta how much loss was accrued by the La Junta gauge and John Martin Reservoir. Is that not true?

CARL E. BENTRUP: Yes.

WILLIAM HOWLAND: The percentage as we calculated based on the .11% loss was slightly over 5 percent. The actual loss assuming the measurement at La Junta was correct was almost 14 percent.

GUY E. GIBSON: Basically, what I'm trying to bring out, Mr. Chairman, and I am not finding fault with the report per se. What we really have here is a report to be accepted. Are we going to accept it, and what future reference might be made to the report?

MR. COOLEY: We are leading to that on the agenda. Mr. Bates is chairman of the committee but necessarily he relied on the

professional engineers from the two states, and it is my understanding that the professional engineers from the two states took the position that given the lack of information with the frozen gauges we will have to do the best we can from the data that is available, and based on certain assumptions. I would hope that we will have a better means of measuring in another year. Maybe we better refer that question back to Mr. McCabe or Mr. Helton. Unfortunately, because of the discipline imposed by the Governor of Kansas Jerry can't be here today which would have been a great benefit to all of us.

GUY E. GIBSON: I think the last sentence of the report is really getting down to what the writer feels is a fair and accurate adjustment procedure concerning the matter at hand. I think if they had said "Mr. Chairman, this is based on the best information available, etc." this was the best conclusion that could be drawn at this time. I imagine that the phrase fair and accurate adjustment procedure concerning the matter at hand means different things to different people. Maybe I'm being over-argumentative. But, gentlemen of the Compact, you can get things like this circulating around and we all know it is based on the best information available, but how many times will somebody come up waving something around saying that this is the procedure or something accepted by the Compact. As I understand the report it is not merely an illustration; it sets forth the problems.

MR. COOLEY: I think the way to handle this problem since you are going to be called upon for a report of the committee, is to work your way up through the staff on a question which

is as follows: Can you recommend that the report you adopted at the meeting of the engineering committee be amended so that the last sentence of the report contains language of the nature based on the fact that the gauge was frozen, based on the fact that the Las Animas gauge was frozen, and given the information available at the time? We will start off with Mr. McCabe on that single proposition. Could you recommend that as one of the technicians to the engineering committee?

BOB McCABE: I think that would be probably one of our main priorities to perhaps go in and make some improvements on the gauge.

MR. COOLEY: Mr. Bates, as Chairman of the Operational Committee what do you think would be an appropriate way to handle the situation to now modify the report of the engineering committee to the Compact? Would you be ready to entertain that? The question simply stated is this. I understand Mr. Gibson's concern is that these things get set in concrete and that the conclusion of the report says that we think it was an accurate determination.

HARRY L. BATES, JR.: I don't have any comments, but I think it points out the fact that it was a good thing. We had the water still available to know exactly how much and then we allocated the losses. The thing that concerns me indicates more proof that there are inaccuracies in our measurements of water in some cases, and I don't know how we can correct this. We do have to use some guesswork. The allocations I think everyone is satisfied with the determination of what was actually measured and the calculations, and that the losses

were allocated equally to arrive at the actual amounts of water owned by Compact and Amity. We agreed on the decision and accepted the report on that basis.

DUANE D. HELTON: We have no quarrel, but I do agree with Guy that the sentence should be amended, or added, that with the best information available considering the frozen gauge, would that be agreeable with you?

BOB McCABE: That's fine.

HARRY L. BATES, JR.: Under those conditions there was no fast rule set on.

MR. COOLEY: Mr. Gibson, are you ready to give the Compact Administration a report of the Engineering Committee on this stretch of the water?

GUY E. GIBSON: Well, I might be doing this a little bit backward. I could have talked with Jerry who signed this about amending that paragraph, but since it was already distributed I thought it was better to discuss it here and I feel if we could have maybe a paragraph or two from you, Bob or from the record here that you pointed out the conditions under which you had to proceed as you did in your report here, and a statement to the fact that under the circumstances this was the basis that the Committee was able to arrive at and that percentages, etc. indicated in the report may vary depending upon additional information as it becomes available. If you would agree to that I think Jerry would, and if the Compact would accept it on that basis, I would so move.

MR. COOLEY: Fine. I think we have all understood Mr. Gibson's clear statement. To simply paraphrase, it is the action of the Engineering Committee that the report be accepted subject

to certain qualifying sentences to be added explaining the data which was available at the time. Is there a second to the motion of the Engineering Committee?

(A SECOND) It has been moved and seconded. Is Kansas ready to vote on the adoption of the report of the Engineering Committee?

(KANSAS VOTES YES)

(COLORADO VOTES YES)

The report is accepted. And on behalf of the Compact, Mr. McCabe, I want to thank you and Mr. Gibson. And I understand that Jerry Hilmes did some very fine work in compiling this data and I am sure you will convey to him the appreciation of the Compact for his work. At this time, I would like to introduce the Arkansas River Compact Administration to those people here. I am Frank Cooley; I'm the Chairman of the Administration. The gentleman with the blue shirt is Mr. Guy Gibson who is the Chief Representative from Kansas. Next to me on my left is Mr. Carl Bentrup from Kansas. On my extreme right is Lane Hackett who is the Secretary presumptive of the Arkansas River Compact Administration. Next to him is Duane Helton who is acting as proxy for Felix L. Sparks, Colorado Representative. Next is Mr. Harry Bates. And to my right is Robert Tempel. This constitutes the Arkansas River Compact Administration. Yesterday afternoon and particularly last night we had the hospitality of the Purgatoire Water Conservancy District Board and particularly Mr. Dawn, and I would like to call upon him to introduce in the audience the members of his Board who are here, after which we will introduce a few other persons and then proceed to the discussion of the Trinidad Reservoir.

GUY E. GIBSON: Mr. Chairman, I hate to raise these details, but in case the Compact would take some action today that might at some future date be questioned, I am concerned that some very sharp attorney might say that Duane had not been properly recognized and seated by the Compact members, and I wonder if it would be in line to have the record show that the members of the Compact do recognize Mr. Helton as being the designated authorized representative for Mr. Sparks, and that he will have the right to vote on any matters that come before the Compact. It is not that I object; I want to make myself clear. I want the record clear that the Compact has agreed that he can

MR. COOLEY: The Chair has reviewed the Arkansas River Compact with respect to membership quorum. As is clear, a quorum is present under the Compact. A quorum for any meeting shall consist of four members of the Administration, provided that two members are present from each State. Therefore, even with the presence of Mr. Helton we have a quorum for the conduct of business according to the Compact. The Bylaws provide that the membership shall consist of three members, representatives of each of the States, and, of course, the one member of each State is the State Engineer, or the Engineer having authority over water matters in that State. Mr. Helton, of course, is in the office of Mr. Sparks. For these reasons, and having noted the presence of a quorum I have not addressed the presence of Duane Helton. The Chair would entertain a motion that for the purposes of this meeting that Mr. Helton be recognized as a valid and legitimate representative of the State of Colorado for the purposes of the votes of Colorado at this meeting.

GUY E. GIBSON: Mr. Chairman, I so move.

MR. COOLEY: Is there a second?

ROBERT TEMPEL: Second.

MR. COOLEY: I would like the vote of the State of Kansas.

(KANSAS VOTES YES)

(COLORADO VOTES YES)

MR. COOLEY: Before I turn to Mr. Dawn of Trinidad, I want at this time to ask Mr. John Cunico of the Corps of Engineers from Albuquerque to stand. Thank you John. We are very, very happy to have you here and are looking forward to having you at our other meetings. And as I told you, the Compact Administration will look at every way it can to schedule its meetings so that we will continue to enjoy your attendance here. It is a great value to us. Mr. Clyde Dawn of Trinidad will now introduce the members of his Board and then give a brief, factual statement about the Trinidad Reservoir and we will then get into a discussion of the operation of the Trinidad Reservoir. We want to thank you for your hospitality, and recognize at this time, Mr. Clyde Dawn.

CLYDE DAWN: Mr. Chairman, Board members of the Compact. We are very happy to have all of you gentlemen in Trinidad. First, I will introduce myself as the business person who has been in Trinidad in business since the year 1929. I will apologize for being a little late to the meeting this morning, because you people were so delightful to be with and get acquainted with yesterday. I would like to introduce next, Mr. Max Torres of Trinidad who is a member of the Board of the Purgatoire River Water Conservancy District, who is our Secretary-Treasurer. Next to Mr. Torres is Mr. Latuda who is a board member on our Board and a very capable man. We are proud

to have him on our Board. He is a college professor. He was born and reared in Trinidad and gives us a great deal of input and value. I believe that is all of our board members, but I would like to impose and take the opportunity to introduce Mr. Roberts of the Corps of Engineers who is locally here in charge of the field at the present moment. Mr. Danny Marques who is our local Water Commissioner and who I feel very capably and very ably handles his position. Now, Gentlemen, I would like to take about one minutes time and say that I do have a farm in the Arkansas Valley. I will admit it takes a mighty good business to support it so I have to stay here. But I enjoy it. I was born and reared on a farm, and my father sold it to move his family to fields that were educational, and I worked all my life to get another, and I'm very proud of my farm in the Arkansas Valley between La Junta and Las Animas. I have been a member of, In fact I think I was instrumental in forming the Well Users Protective Association in the Valley. I have wells down there. I also have surface rights. And so I'm just taking this opportunity after being involved in litigation many years down there and a little here lately, unfortunately, to express my views. And I apologize to the legal and the engineering firms that are present or absent, but they don't make a drop of additional water. I always like to feel that we would be better off if we could have more cooperation and more understanding of the other people's problems. Yesterday I think was a fine example of that. I am sure that we are all going away from Trinidad and the people in Trinidad to have a better understanding a more kindly feeling, a more kindly attitude toward

everybody. So I would like for the Compact, as you people administer your fine work to recognize that Trinidad feels that harmony is the best way to get along. There are so many things about our water and the segments of the Arkansas Valley that I believe its tributaries are over thirteen counties. And there is a great deal unknown yet about the total water supply, whether it be on top of the ground or under the ground that people in Kansas are entitled to have granted their parts of the water. But I think as we go along we should look at continual conservation rather than lawsuit after lawsuit after lawsuit. They are rather expensive. Believe me, I know. Because this one that Trinidad has had lately has been very expensive to both sides. I am very sympathetic with anybody that has to dish out for engineering, legal expenses because it is just, generally speaking, it seems to be never ending.

MR. COOLEY: You are on dangerous ground here, but keep on going.

CLYDE DAWN: I realize that, but we do have just so much water in the Arkansas drainage. That's all there is. Regardless of where it is, where it comes from. We do have ways, such as more concrete ditches and more pipelines and more conservation, and I think we all recognize and have studied a little bit that has gratified the growth of the Arkansas River Basin, especially the tremendous amount of water. Now, I'm probably on dangerous grounds with the conservationists and archeologists, but you know, a beautiful field of alfalfa or a beautiful field of corn I just have to admire them more than I do acres and acres of tamarack. So I think we should all work together toward using our water to the best

advantage, and the best advantage is, in my humble opinion in the near future is going to be for food purposes. Because if the world population continues to grow as it is today we are going to be in an envious position with our food production. Because if you have got water you will trade anything you have for food. Certainly, I have never been hungry as that, but I think I could get that hungry pretty easy. On the Trinidad Project I would like to say that I have been a member of the Conservancy District Board from almost its inception. I worked at this as an outsider diligently to help get our beautiful dam that we have up here, and I presently am Chairman of our group. I might say this, and I say it openly. We have Mr. Robinson here who can verify because he was one of the attorneys at a trial that we had in the Water Court lately between Nine Mile, Highland, and Trinidad, that our whole criteria- and Mr. Robinson, correct me if I'm wrong- our whole criteria in the Trinidad Project since the inception, the Bureau's planning, the attorneys planning, everything, all of the concept of the Trinidad Dam is to protect and deliver the water that has been customarily going to the Arkansas lower reaches of the Arkansas. Is that about a true statement, Mr. Robinson, would you say?

MR. ROBINSON: I think very much that is the position that the District has taken, yes.

CLYDE DAWN: We have tried to do this, Gentlemen. If we haven't done it adequately it is because we haven't been led adequately, but we have certainly tried to protect the flows of the Arkansas. And I really believe we have. I do wish to express my gratitude in you people coming and holding this meeting here and to know your cooperation and

the spirit in which it was held. I do thank you very kindly.

MR. COOLEY: Thank you very much, Mr. Dawn. At this time, I would like a one minute statement of the physical characteristics of the Dam.

JOHN CUNICO: The Trinidad Reservoir Project has three basic purposes. The primary purpose is flood control. It has 58,000 feet of flood control storage. It has for purposes of irrigation, 20,000 feet; recreation, fish and wildlife 2500 acre feet; a sediment reservoir 39,000 acre feet. And I think I will give you some figures of the relative value of the structure for the purposes it serves even if in some unfortunate circumstance the irrigation never became a reality. The total benefits to be accrued by the Project wouldn't be that significantly affected. The irrigation benefits portions of the project are 11 percent; flood control purpose is 58 percent; and in addition to that, we have unemployed resources because this is an area of under-employment, and the fact that the structure is there and the benefits it would provide will also help employment in the area, and that is 20 percent. There is a 1 percent benefit for land enhancement, and the other 10 percent is for recreation, fish and wildlife. The total cost of the Project is now estimated to be somewhere in the vicinity of Forty-Seven Million Dollars. Forty-Eight Million, Ninety.

MR. COOLEY: Mr. Gibson was curious about the cost benefit ratio to your Corps. Did you make such calculation?

JOHN CUNICO: Yes, sir. It presently stands on value indexed at the last calculation to about 1.2 to 1, using normalized agricultural prices five or six years ago.

MR. COOLEY: Mr. David Robinson of the Office of the Attorney General of the State of Colorado has kindly consented to give a factual discussion of the issues which are before the court which would be in propriety and would be limited very severely to a statement of facts and issues that are now before the court. And we are very grateful that you would undertake such a statement.

DAVID ROBINSON: Thank you, Mr. Chairman. Board Members, Members of the audience. David Robinson, Assistant Attorney General State of Colorado. As the Chairman stated I don't intend to give any opinions on anything. The Chairman asked me if I would express my views on the issues in the lawsuit. I will try to do it in an unbiased manner because I certainly don't want to describe in any way how I think the outcome should occur. Before I talk about the lawsuit between the lower ditches and the Purgatoire Trinidad Conservancy District I will mention that there are a number of other lawsuits that are interrelated, and I will mention their existence at the end. Basically the lawsuits that are presently before the Water Court arose out of two orders issued by the Division Engineer, Mr. Bob Jesse, and his efforts to administer the water in the Purgatoire River. His first order was issued in December of 1976. The other order was issued requiring the Purgatoire and the Corps of Engineers to discontinue storage in the Trinidad Dam. The reason he did this was that the Highline and Nine Mile Ditches which are two ditches in the Purgatoire and Las Animas area, had filed formal call letters against any such storage, and Mr. Jesse thereupon endeavored to deliver water to those ditches. On the 25th

of January, 1977, Mr. Jesse issued a subsequent order pursuant to Colorado Statutes rescinding his former order and instructing the Water Commissioner that storage could commence because he determined that under the decree of the Las Animas District Court transfer of the Model Reservoir storage rights to the Dam could commence if certain provisions in his order were followed, and that he had been unable to get significant quantities of water from above the City of Trinidad Dam down to the two calling ditches. The two ditches as a result of this order, went into court and attempted to restrain Mr. Jesse, and were successful in restraining him. The Judge preserved the status quo until a trial could occur on the merits, and this trial was held the first week in April. The basic issues of the trial were then joined by challenges from intervenors. And the basic cast of characters was everybody against the State on various issues. Joining were the Highline and Nine Mile, as co-defendants in the original action with the State, and the Amity Canal and Fort Lyon Canal joined as intervening defendants, Taking the position that storage should not occur in the Reservoir as was contemplated by the City of Trinidad, the Model Land and Irrigation Company, and a whole batch of ditches in the Trinidad area on the side of the District. The basic issue was that the decree of the Las Animas District Court transferring the Model Land and Irrigation Decree to the Trinidad Reservoir is not a valid decree. Do the operating principles contained within that decree conform to Colorado Water Law. Were the orders of the Division Engineer as described, proper. And under what conditions could storage occur in the Reservoir

That brings it down to the operating principles Mr. Dawn referred to based upon the delivery of historic flows to the ditches below the Trinidad area down by Las Animas. The issue, I guess, is can you store so long as you don't hold historic water availability. Or if you are junior, do you deliver until all decrees are filled to their decree limits before you can go into storage. Those are now before the Court. The briefs, findings of facts, conclusions of law are due before the Judge and he will then make his decision. There are a couple of side lawsuits going on. One of them is in the State Supreme Court where the Highline and Nine Mile Ditches through their attorneys are challenging the 1965 decree of the Las Animas District Court. That is the decree providing for the storage, and also includes operating criteria under which the Reservoir will be operated. In that matter, the opening briefs have been filed, the answer brief has been filed, but the reply brief is not yet in. The outcome of that case will, of course, be very important. There is another lawsuit filed by the Purgatoire River Water Conservancy District that is in the form of a challenge to the tabulation of the Purgatoire River which tabulated all of the ditches on the River from Las Animas to the source of the River in one tabulation. Their basic contention is that there are two basins, and the source of water for Highline and Nine Mile is different from the Trinidad Ditch. There is an additional application for water rights on behalf of the State pending in the Water Court requesting 4500 acre feet for conservation storage in the Trinidad Dam. That decree is somewhat separate

from the other decrees in that it does not contemplate the storage of river flow, but contemplates the storage of either purchased or acquired water rights for the purpose of maintaining a conservation pool, and theoretically will not affect certain gauges working inflow and outflow. It should not affect in any way the amount of water going down the river. The parties in that suit are the Water Conservancy Board and Division of Parks, and Recreation, and there is a whole list of objectors most of whom came in simply to insure that the State did not receive a decree that would alter the regimen of the river in any way.

MR. COOLEY: Thank you very sincerely for that presentation this morning. I think it would be, as stated before, improper for the Compact Administration to consider those items bearing directly on the suit. At the same time, one of the purposes of our being here is to understand the Trinidad Lake Project and the Trinidad Dam as to factual matters concerning the basic operating criteria and the construction. I think we might have factual questions on those, if any are needed. Mr. Gibson, is there anything in this area you wish to inquire, subject to the fact that when we get on thin ice we will retreat.

GUY E. GIBSON: Well, I have some questions but I am not sure this is the proper time for me to present any questions. In fact, Mr. Chairman, is the Compact ever going into executive session where just the Compact members alone are present?

MR. COOLEY: This is the first time the question has been posed

to me, and I know of no reason why the Compact could not go into an executive session. It might be of benefit.

GUY E. GIBSON: What I'm thinking of, Mr. Chairman, maybe the last thing today before the Compact adjourns that we might have a five or ten minute executive session when only members of the Compact can be present.

DAVID ROBINSON: I think it would not be proper for the Colorado representatives to go into executive session under the Colorado Sunshine Law, and open meetings law, unless you have a specified purpose for doing so and will inform the people who are here at this meeting what it is going to be and that it is a recognized exception to the open meeting. Otherwise I would wonder whether you should contemplate an executive session.

MR. COOLEY: It poses, does it not, an interesting legal question of whether the Compact, which is a creature sort of, of the Constitution of the United States approved by Congress and with representatives of both States would take precedence procedurally over State Law to open meetings.

DAVID ROBINSON: My comment was not purely of a legal nature. I agree there is clearly an issue to be raised. It seems to me there is no reason unless there is specific need to go into executive session to do it simply because the argument is there, and the Compact being the law of the State of Colorado is also bound by Colorado Law. Unless you have a definite purpose to do so, I would encourage not to.

MR. COOLEY: Implicit in your comments, Mr. Gibson, were the words would be a lot better able to discuss this entire matter after the Court decision were entered.

GUY E. GIBSON: Where has the Compact been throughout this matter? Nowhere does it say anything about Compact rights. Should the Compact have been supporting any of these cases?

DAVID ROBINSON: The Compact concerns, I think I can state this fairly, were represented by Mr. Carl Shinn, at least peripherally, who is the attorney for the Amity Mutual, and he stated on the record that one of the concerns was the inflow to John Martin. Even though the Compact did not have counsel present at these deliberations as such, some of the water users on the Arkansas River did present the Compact's concern.

GUY E. GIBSON: That was the question I was going to bring up. What has the Compact been doing? Have we been sitting here doing nothing?

ROBERT TEMPEL: The Compact took some position on the Trinidad Dam at some point way back.

CARL BENTRUP: There is a rather complete set of operating principles developed by both Colorado and Kansas irrigators and they are in the June 1967 Minutes of the meeting. And that is one of the operating principles being challenged now.

MR. COOLEY: As I understand it, the principles that have been agreed to previously for the operation of the Reservoir are not themselves under attack or challenge by any party in the litigation.

DAVID ROBINSON: I will venture to say the principles are a bottom line. If the parties challenging Mr. Jesse's second order are successful, then the principles will not go into effect because the Reservoir won't be used for irrigation storage and they won't be necessary. That will be their contention.

If the Reservoir is used for storage, then there is no contention on the part of any party that the principles should be weakened or changed. The principles if I can describe it as a bottom line on how it is going to be operated, if there is water in the Reservoir for conservation purposes the principles apply. If there is storage in the Reservoir will it damage the Amity, Highline by call, the Fort Lyon, the Nine Mile during an extended period of time, and as a result of those damages will it also damage the Compact because John Martin water affects the lower Colorado ditches.

MR. COOLEY: I am ready to make two offhand conclusions based on discussions. One is that this matter should come before our August meeting in Leadville because there will be restraints that are not imposed on us in Leadville that are imposed on us now.

DAVID ROBINSON: I would ask you reserve it until Leadville. There isn't anything this Commission is going to do now to cause additional evidence to be presented or cause the Judge to affect his ruling in any way. If it is going to be discussed I would ask that the Amity, Fort Lyon, Highline and Nine Mile and Purgatoire people be given an opportunity to have counsel present here to discuss their views on what it means.

MR. COOLEY: Perfectly proper comment, and very sound. The Compact is entitled to assistance from the Attorney General of the United States on this question. Because my instructions are very clear that I wouldn't begin to issue any opinions or even think about it on such matters, and if there is going to be advice on such a question given to the Compact

Administration it can't really be given by the Attorney General of both States because there is a third entity involved, and that is the Compact Administration itself. We know that the opinions of the Attorney General of the United States are available to the Compact Administration if requested and this might well be an occasion for such a request.

DAVID ROBINSON: If that is your desire, I would certainly appreciate that sort of position because we, the State of Colorado, the Attorney General of the State of Colorado obviously in the final analysis we have to represent the interests of the People of this State, not the interests of the Compact Commission, or the interests of the people of the State of Kansas. I am more than happy to express my opinion, or answer any question Mr. Gibson or any other Commissioner might have, but I think it might be far better to have legal advice because I certainly have an interest in the lawsuit, and the State of Colorado may have in the outcome.

MR. COOLEY: That question of Mr. Gibson's triggered a delightful set of discussions here. Mr. Bentrup has a question he would like to ask.

CARL BENTRUP: While these problems are being resolved and we have a flood, how would the flood water out there be handled? Would it be allowed to flow through the gates at the maximum rate?

DAVID ROBINSON: The Corps of Engineers I would assume, and I am speaking a little bit out of school, but they have operating criteria and responsibility. If you have a flood they are going to have to close the gates to save lives and property

in the Trinidad area. The Court did not enjoin the gates from being closed for purposes of flood storage, but only for purposes of conservation.

JOHN CUNICO: The gates will operate for flood control as authorized by Congress. Irrigation is a separate entity and under the control of the State. Flood control purposes will be operated as authorized by Congress.

MR. COOLEY: For the record let us again go into the flood control criteria. Is it 5,000 cubic feet per second?

JOHN CUNICO: We will control the flows of the River to 5,000 second feet as long as possible. Naturally, if you don't have a head to get 5,000 you can't control that. With the structure we designed a 4500 acre pool in there, and there is a certain elevation within the Reservoir you can't operate, you can't push as much water out as anticipated. I think it is a minor amount. The control is 5,000 as long as possible and as long as possible is when the water gets to the crest, the notched spillway we saw yesterday. At that time the gates will start closing. Once you have got 5,000 going through the notched spillway you have no more control other than that built into the notch.

GUY E. GIBSON: Basically under the present conditions if there was a flood up above you could store flood water, but would the Corps of Engineers open the gates to irrigation maximum possible without causing flooding downstream?

JOHN CUNICO: Yes. We would release water as rapidly as possible.

GUY E. GIBSON: The State Engineers Office of Colorado would not have any particular say in that operation?

JOHN CUNICO: Not unless they call it irrigation water.

GUY E. GIBSON: Under the present operation you can't store irrigation water.

JOHN CUNICO: Right.

GUY E. GIBSON: And if we had a flood you would release it as rapidly as the channel flows allowed until it was empty?

JOHN CUNICO: Yes.

MR. COOLEY: We are not going to continue this discussion much further. I want the criteria circulated to each member of the Compact Administration prior to the August meeting. Mr. Hackett, I would suggest that you correspond with the attorney who is successful in the case in the next two or three weeks, to the extent necessary to get this operating material and data, and then to circulate it to the members of the Compact Administration not later than the end of June.

DAVID ROBINSON: Mr. Chairman if you are wanting the operating principles they are a public document and I don't think they have any effect to the lawsuit. If there is some way to copy these documents, I can give them to Mr. Hackett.

HARRY L. BATES, JR.: I have one question to ask Mr. Cunico. What are the sizes of the conduit of the dam? How much free flow will come through there?

JOHN CUNICO: I don't know right offhand. There are two 5 by 7 boxes. I don't have a reading with me so I don't know.

HARRY L. BATES, JR.: Would you say 1500?

JOHN CUNICO: I doubt if they would carry 1500 without a head.

CLYDE DAWN: Mr. Chairman, may I have a word at this point?

I will have to tell the Compact, and one of our proceedings on the restraining order I advised the Court that we had

hired a very capable engineer, Dr. Zorich, to interpret the operating criteria for us because we didn't have any engineering people on our Board. And Dr. Zorich has been with us throughout these proceedings. I believe he has a full understanding of the thing, and Mr. Morley of course you people know is our representative, and if you people would desire to converse with these two gentlemen at your August meeting I am going to stick my neck out and say that our group will make these two men available to you to answer any and all questions on this criteria. Because it is highly technical and it is quite lengthy. And I think in your position you gentlemen certainly have the right to discuss this freely and objectively with our representation

MR. COOLEY: Thank you very much. We would be very happy to hear from either of the gentlemen. On the Agenda at this time we have planned that Mr. Bates and others would kick loose on the entire operation of the Arkansas River.

HARRY L. BATES, JR.: Thank you, Mr. Chairman. That is a pretty good load to go over the whole thing. We have been quite concerned before we started in on this thing, and I would like to mention that I feel that this Compact Commission needs to have a study period to review with legal counsel our Compact and get some advice. I have the feeling there has been a lot of things that have been done in the past that may have set a precedence that may not have been exact as the intent of the Compact or those who drew up the Compact intended, and some of these things have been brought out in this material that will be presented at this time.

We in District 67 in Colorado below John Martin have been

quite concerned about the changes in the use and in the regulations due to many different things, especially the Pueblo Dam and the Trinidad Dam coming into this picture. And all of these changes in use are affecting the lower River more than the upper stretches of the River, and with this in mind I asked Bill Howland if he would put together some historical data and some recommendations of some improvements that might be made in the administration of the River in regard to our Arkansas River Compact. And that water which belongs to the Compact, we as Compact members are obligated to look after the interests of the waters which belong to the Compact. The Compact shall not interfere with any improvements as far as waters of the Arkansas above John Martin are concerned unless they materially injure the rights, prior rights of those involved, and we contend that this is happening gradually, and if there are not some changes made somewhere down the line we are going to be without irrigation ditches. We are quite concerned about this. I know all of the members of the Compact received a copy of this Historical Data document, and Frank, I don't know how much time I should take on this.

MR. COOLEY: I think you should start out with a thorough review of the document and not simply refer to it. If it means reading it paragraph by paragraph, I would recommend that you do so. At this time, I would only state that besides this matter on the agenda we will conclude with the presentation of the operation of John Martin Reservoir to date. That is just a side remark.

HARRY L. BATES, JR.: With that, I will then proceed to read

through this and if you have any questions as I do so, feel free to stop me. This paper as stated was drawn by Bill Howland and put together and distributed to the members of the Compact. The Subject is problems concerning storage in John Martin Reservoir. The first item is the Historical Data, and this is data he gathered from the materials from the negotiations that took place in the formation of our Compact. (Mr. Bates reads the document in its entirety and it is attached herewith).

^{STRAMLER}
MR. ~~STRANLEY~~: May I speak for the Fort Lyon Canal. Fort Lyon has not been in receipt of this document previously and we naturally haven't had a chance to review it at all, and I can see there could be some discrepancies in some of these figures and I would respectfully request you give us the opportunity to review this thing in depth and get back to you at another time, and request the Compact does not make any decisions on this today because I personally can see there are a lot of things fraught with danger.

MR. COOLEY: Mr. Stranley, there is no way the Compact Administration can act this morning on any of the matters that are being brought before it by Mr. Bates. My interpretation of this would be that this paper, this presentation, would kick loose a variety of investigations and studies on the overall regimen of the River to the end that the Compact Administration be advised better as to what the characteristics of the River are; and, secondly, however long down the road there be an improvement in the administration of the River.

^{STRAMLER}
MR. ~~STRANLEY~~: Okay. I just wanted to present this as my thinking on it.

HARRY L. BATES, JR.: As far as I am concerned I thought it was understood this is strictly a kick-off thing. We hope to arouse interest and delve into this, and I will be quite blunt about this matter as long as I have anything to do with it and will study this and see if we can't make recommendations to some of the members on some of the wrongs that I feel- and everybody else feels- that have taken place. Not pointing a finger at anyone, just an overall need for this whole picture and trying to find some remedies into some of these problems. It is not my intent nor the intent of anyone present to even think we would make any decisions on this matter today. Those are some of the problems that are facing us with some possible solutions. I guess we will just open this up to discussions or questions.

LEO POLLARD: Mr. Chairman, I have here affidavits signed by the other ditches in 1967, so that this is not conceived as a leverage or pressure being put on by one company that initiated this action. I represent the Amity Mutual Irrigation Company. I have here affidavits signed both from the Amity Mutual, the Buffalo Canal, Lamar Canal, Manville Irrigation Company, Sisson-Stubbs Ditch, the Hyde Ditch Company, and the Fort Bent Company, affidavits agreeing with and going along with these ideas so presented. And I have these for your inspection if you care to look at them.

MR. COOLEY: Any questions or comments from the members of the Compact Administration? Mr. Gibson, we would like to hear from you if you have anything to say at this time.

GUY E. GIBSON: Mr. Chairman, I don't have any comments to make. As I understand it this is simply being presented for

consideration by the Commission and no particular action be taken.

MR. COOLEY: That is my understanding. It is a position paper and contains a lot of things, some of which are highly controversial, some perhaps less so and might be a starting point for consideration. If, for example, a refinement or modification of the Compact is necessary or, in fact, if there are other remedies to some of the problems of the members of the Compact. I would make a comment that during consideration of this that one thing is beginning to come to light, becoming a credit in any event, and that is that there are in some respects a difference between Water District 67 and its positions, and the State of Colorado. And I don't quite know how to put it, but the Compact is geared in fact to Water District 67 which is an interested party in these matters, and the delivery of water in this district is of great concern to the irrigators and water users in the District. At the same time, the party to the Compact is the State of Colorado and it is not always the case that the interests of the State of Colorado is, with respect to the Compact, identical to the needs of Water District 67. I think we run into this at almost every meeting and I think as your efforts to ameliorate your problems you are faced with continuing matters and more frequently we will see the problem in various forms. The interests of 67 are not necessarily identical with the interests of the State of Colorado.

DAVID ROBINSON: May I make a comment. On behalf of the State of Colorado, I don't believe that the State of Colorado

has taken a position on the record here, and I want the record to reflect that I speak for the Attorney General's Office, the legal representative of the State of Colorado. The State of Colorado at this time does not consider our interests to be adverse or different than the individuals or irrigators in Water District 67. I can't state what will happen in the future, I think we understand the problems, and the feelings which exist, but the State has not taken a position on record, and I would like, Mr. Chairman, clearly to have the record reflect there is no divergence at the present time.

GUY E. GIBSON: Mr. Chairman, we have had a very courteous offer here to introduce affidavits, and if the Commission would so desire, it is my feeling it might be worthwhile to accept that offer and let those affidavits be made a part of the record.

MR. COOLEY: Without exception they will be made part of the record if Mr. Pollard will tender them. (So tendered).

LEO POLLARD: There has been a little controversy on this, Mr. Chairman, possibly an omission of an eight-year period tending to bend the records. However, I think the concept of averages was just that, a concept. If it is including a period that had a record of floods involved it would tend to even more sway the results of an average, it would include the 1965 flood if you include the middle years. However, that was not the intent to start with. The intent was to show in the immediate first ten years of the operation of the Compact there seemed to be growth in storage than there was in the ten years just prior to this date. These two

ten years are comparable as I see it.

HARRY L. BATES, JR.: I would like to make this statement.

I checked back upstream to the rainfall and as far as the amounts of rainfall over those ten year periods they were very much like in that vicinity down there. For what it's worth. Mr. Chairman, I would request that somewhere along the line that this Compact Commission review with legal counsel our Compact, and each and every one of us go through this thing together so that we might understand each other's problems. It hasn't been done since I have been on here. I have the feeling probably other members feel about the same as I do on this thing. We need a work session to actually review this. I am in my third year on the Commission my last year on this Compact I hope not, because there are some things that I would like to see through. If not, I would hope whoever takes my place on this Compact will continue in this regard. I am very concerned about it, and was long before I became a member of this Compact Commission. So if it is not possible on our agenda, somewhere along the line before too long I feel we would be wise, and I would like to hear from the other members of the Commission as to how they feel.

CARL E. BENTRUP: Some of these shouldn't be put off too long. Number 4, for example, I talked to a few of the irrigators in Kansas and we would prefer that water be served John Martin rather than on the Great Plains. I think at our August meeting there should be some plan developed somewhere to increase the rights of District 67 to put more winter storage in John Martin. Number 5 perhaps

is something that the Kansas water users are very concerned about, the drastic reduction in winter storage in John Martin. And, frankly, most of the irrigators blame the operation of the Pueblo Reservoir. This is what they have said. Largely because they aren't suspicious of the Trinidad Project because they were consulted and were partners in drawing up plans of operation, and as I understand it, there are no plans of operation for the Pueblo Reservoir except that it be administered as if it did not exist. Well it does exist. It's changed the whole picture. Kansas is interested in floods that occur that would get to John Martin. I might suggest that a committee of interested people, Kansas, District 67, the State Engineers Office, get together and draw up a set of operating principles. They are blamed for the decrease and they are particularly disappointed in the 5,000 foot release.

MR. COOLEY: Talk about agenda items for August. Bob, do you want to make a quick comment to the last comment of Mr. Bentrup's? Would you like to respond to that?

BOB JESSE: I don't think I can add anything to it. If there is any information you would like that I have, tell me what it

DUANE D. HELTON: Mr. Chairman, I know that the Southeastern District has written to the Corps of Engineers and asked the Corps to review the channel capacity between Pueblo Reservoir and John Martin Reservoir and it may not be appropriate for this Administration to do the same thing.

MR. COOLEY: That is the essence of simplicity, but would you state it one more time?

DUANE D. HELTON: Part of the administrative problem developed in the Pueblo Reservoir is the fact that 5,000 cfs has been

determined to be the safe channel capacity. So when water is impounded in the Pueblo Reservoir and released at 5,000 cfs when there may be more coming in, there is a possibility to change the ownership of that water, and that is causing a lot of problems, a lot of confusion. And that problem could be eliminated possibly, at least momentarily, if the channel capacity were in fact higher, if the safety capacity were in fact higher than that. And my personal discussion with irrigators in December 1967, it appeared there is evidence that the safe channel capacity does exceed 5,000 and I think it would be highly desirable for the Chairman of this Administration to write a letter to the District Engineer asking for whatever assistance the Corps could do to re-evaluate that channel capacity, and if in fact the safe capacity is larger that figure could be revised and the Pueblo Reservoir operating criteria could be so amended. A similar subject study has been requested by the Southeastern Colorado Water Conservancy District.

MR. COOLEY: Mr. Thomson, would you take the ball on this one for a moment, please?

CHARLES L. (TOMMY) THOMSON: The reference Mr. Helton made there are four of us who are appointed by the Governor of the State of Colorado to serve on the Arkansas River Basin Interstate Committee representing the states of Arkansas, Oklahoma, Missouri, Kansas, and Colorado. During a meeting in Tulsa, Oklahoma on March 11th, this delegation met with Colonel Leonard, the District Engineer from Albuquerque, and among the other discussions we had with the Colonel was the fact

that there was serious concern registered in the Arkansas River relative to the 5,000 cfs and safe channel capacity. That among the studies the Corps is conducting above John Martin is a study of a test reach, and also other flood control programs. So we asked if the Corps would review the criteria on the 5,000 cfs. There still seems to be some confusion as to whether that 5,000 cfs is at Avondale or whether it is at Pueblo. One bit of correspondence we have shows that at Pueblo, and then it gets up to about 6700 near Avondale, and so on. The irrigators have said that they know very well the capacity at Avondale is far in excess of either 5 or 6700, or whatever the case may be. The Colonel did say that he would review it and get back in touch with us. We have not heard from him up to this time.

MR. COOLEY: Thank you, sir. I would not undertake such a request without the action of the Compact Administration.

HARRY L. BATES, JR.: You see another thing that bothers me along this line, if we have a 5,000 second foot capacity at the present time, we feel with the Pueblo Dam in there, with any structure of this type it is natural that capacity will not stay there without some assistance, and I am wondering what provisions have been made to maintain capacity. If we could reach a capacity of 10,000 cfs even this might not be satisfactory if it should happen to be this. Unless there is some maintenance work done to maintain the capacity, the river naturally, the structures wherever they are put will close shut if it isn't maintained. Are there any provisions you know about in here to take care

of this?

MR. COOLEY: If I understand your question, it is what physically can be done to the river to maintain or even increase the capacity. But it would appear to the Chair what is before us is primarily requesting the Army to determine if their own criteria are also for 5,000 feet and it would appear we ought to tackle that one first.

HARRY L. BATES, JR.: I would move we make this request.

MR. COOLEY: There is a motion that such a request be made on behalf of the Administration of the Corps of Engineers. Is there a second? (SECOND) It has been moved and seconded. Any further discussion?

GUY E. GIBSON: I am not sure I understand the motion in detail. Is this going to mean we are asking the Corps to submit to us a copy of their study for our consideration? We are not adopting that study?

MR. COOLEY: No. If I understand the lengthy motion as made, it is that I write to Col. Leonard and request that they re-evaluate their own criteria and re-make their own determination of the safe channel capacity of the Arkansas Valley.

GUY E. GIBSON: I second it.

DUANE D. HELTON: If I'm out of order, just tell me. Could we amend that motion to include in your request, additional request that would ask the Corps to tell us what we can do to the channel to improve it in its limitations?

MR. COOLEY: It really is a point of order. And in further discussion I would like Mr. Sparks' office to make a first draft of the letter and to send it to Mr. Gibson for him

to look it over . Is Kansas ready to vote?

(KANSAS VOTES YES)

(COLORADO VOTES YES)

I do not think at this time it would be fruitful to pursue any further these many matters that have been kicked loose. It is my intent in the last few minutes to do the following: First I am going to call for a report on the John Martin Reservoir. Neither of the gentlemen from the Corps could be here. Next, I am going to briefly discuss the appointments of the State of Colorado. And next, I wish to bring up the question of a court reporter at the Leadville meeting. It is my present intention to suggest to the Commission we not have a court reporter in Leadville. And finally, I intend to discuss a date for meeting in Leadville sometime during the month of August. I call at this time for a report on the operation of the John Martin Reservoir. Mr. Hackett?

LANE HACKETT: I will make it short and not too sweet for Kansas. With your permission. The Resident Engineer at John Martin Reservoir expressed his regret in not being able to attend the meeting today and on the observation in their part of the releas John Martin Reservoir on this spring run of water due to a facility construction and operation going on there it was necessary that they stay on the job. But they did express their regrets not being able to attend. But as of March the 1st, the Reservoir had 20,073 acre feet in storage. Compact water was 7,866, and Great Plains winter water was 12,207. At that same date a river flow release call was made by Colorado District 67 for a release of 25 cfs which was released on March the 1st for Fort Bent and Cassai Canals.

On March 31st, the inflow with new ratings on the Las Animas gauge, the inflow to the Reservoir had dropped down to 15 cfs, so, therefore, the release of John Martin was cut accordingly to equal inflow. On the 1st of April storage content was 20,678 acre feet in John Martin, Compact water was 8,722, Great Plains winter water was 11,965. On the 10th of April just prior to opening date there was 20,756 acre feet storage in the Reservoir. 8,888 acre feet of that was Compact water, 11,868 Great Plains winter water. One minute after Midnight on the 11th, a request for release was made for Compact water to both States. Colorado, 6,000 plus 15 river flow; Kansas, 14 under the Articles of the Compact Release. And that extra 15 feet of river flow was already being released. Compact was helping to deliver water to Kansas as it was already being released through John Martin. We conducted that release and charged it to Colorado, but it should be applied to Kansas. The initial release was dated a minute after Midnight on the morning of the 11th. Colorado ditches remained in use of the diversion for twenty-four hours by their headgates in order to keep their head of water of 1,015 second feet moving down the river at one head by each individual Colorado diversion which moved the water pretty well down the river in feet, should the Dam complete the overall delivery to Kansas. On April 15th at 6:00 A.M. Mountain Standard Time, the Compact water in my opinion and from the records that I have to work with as close as possible, the Compact water was exhausted. Kansas called for ten percent of Great Plains winter water storage which was released in

a twenty-four hour period, and at that time it amounted to 595 cfs on top of the Colorado 615 for a total release of 12,010 second feet. That was for a twenty-four hour period. But it turned out we saw we were in error and on our Compact exhaust, Compact water we cut Kansas off a little too quick, so we extended that twenty-four hour period, Great Plains water, an extra hour to help compensate for that early cut-off of Compact water. On April 16th there was 9,431 acre feet of water in storage and Kansas' flow was cut at the reservoir which brought the release down to 615 second feet for Colorado. That was river inflow plus Great Plains water. On the 21st our final records are not worked up to that date, but we had an increase in river flow at Las Animas, and Colorado District 67 ditches placed a call for that river flow which was released, and we will deduct that from the release and adjust it. So it was river flow release instead of winter water storage and that release was 790 cfs which is still incurred today. On midnight of the 20th the storage in John Martin was 4,237 acre feet of water and barring a steady river, or as near as I can calculate or we can calculate as of yesterday, the reservoir will probably become empty either Sunday or early Monday.

MR. COOLEY: Thank you very much. Are there any questions or comments, on the operation of the reservoir.

CARL E. BENTRUP: According to my calculations Kansas is entitled to 3200 acre feet of storage water. 1200 of Great Plains water, is that correct? 10 percent, 12,000.

LANE HACKETT: On the 10th, Carl, when we went to your Great Plains water it was calculated that the winter water storage

was 9,980 feet.

CARL BENTRUP: The total winter water storage was 900 feet then?

LANE HACKETT: Yes. That was on the 15th. I am going to have to back up to midnight the 10th on that. That was 11,803 acre feet, so you would have been entitled to 11080 Great Plains Water.

CARL E. BENTRUP: I don't have the figures yet on what crossed the State line. Allowing a little more time lag, allowing Compact water, do you know approximately how much water?

LANE HACKETT: I don't have the total. I have daily spot readings. The transmitter was in bad condition, not sending the figures as it should, so I imposed on Mr. Howland at Holly to run down at 5:30, 6:00 o'clock to verify my readings that I was getting. Even though we had a gauge and I had read it close we were working on a low measurement shift, five to the curve. So until the USGS computes the actual data, I will not swear to how much water passed the State line.

CARL E. BENTRUP: Could we make a lot better effort to get it?

LANE HACKETT: I think this initial twenty-four lag time Colorado frowned on, but it was necessary to meet our obligation to Kansas. The 1,000 foot release had held together for twenty-four hours in Colorado. Down the river it was a big step in the right direction for delivery. It was real obvious.

MR. COOLEY: Any more questions on the report of John Martin Reservoir? I want to suggest that at the meeting in August that we not undertake the expenses of a court reporter. The tape recorder has been sufficient for certain of the matter particularly on motions which come clearly off the tape, and I feel that at some meetings, particularly at the Aspen

meeting that the great expense which was, I believe more expensive than other court reporters was justified, but I want to throw it out for the consideration of our members, without taking a formal motion. What is the consensus of the Committee? (Off-the-record discussion) It is a consensus of the Committee that we will not employ a court reporter at the Leadville meeting and from now on, we will determine it in advance depending on how heavy the meeting will appear to be. Next, it seems that the two Colorado appointments are up. I have not yet taken any action with the Governor's Office with respect to these myself, requesting propriety involved. Does anyone have any further information on what is in the wind?

HARRY L. BATES, JR.: I think the appointments are to June the 30th

MR. COOLEY: In any event it will be before the August meeting.

I have determined that I am going to do what I can in good taste, to second the re-appointment or at least voice my attitude of the re-appointment of the two Colorado appointed members. I don't think as a group we can discuss much on that.

(Following a discussion, the next meeting of the Compact is scheduled for AUGUST 10 and 11, 1977, Wednesday and Thursday, at the Silver King Motel in Leadville, Colorado).

MR. COOLEY: I would entertain a motion at this time to designate Mr. Bentrup as a delegate and Mr. Bates as an alternate, or vice-versa, to be representatives of the Compact Administration at the meetings of the board of trustees of the Southeastern Colorado Water Compact, and that Mr. Hackett be encouraged to attend as many of those meetings as possible

ROBERT TEMPEL: I make a motion that Mr. Bentrup be representative and Mr. Bates be alternate.

MR. COOLEY: Motion has been made and seconded for a one-year term, that these gentlemen be the representative and the alternate and that Mr. Hackett be encouraged to attend those meetings as well.

(KANSAS VOTES YES)

(COLORADO VOTES YES)

Motion carried.

There are a number of persons here who should be recognized and I do not at this noon hour intend to recognize each of these persons, but without slight to those who do not get recognized we certainly want to thank Mr. Grozier for coming here, and we want to thank him sincerely for the work he has done in his flood routing and his support. I want to thank Mr. Abbott, and recognize Mr. Eryman from the Corps of Engineers. And recognize Jack Vayhinger of the Colorado Division of Wildlife who has been faithful and diligent. And we thank all of the rest of you for attending.

MEETING ADJOURNED (12:45 P.M.)

#

BERTHA L. SANDOVAL
District Court Reporter
Trinidad, Colorado 81082

To: Members, Colorado - Kansas Arkansas River Compact
Administration

Subject: Problems Concerning Storage in John Martin Reservoir

Historical Data

The waters of the Arkansas River have been the subject of long-standing controversy between the States of Colorado and Kansas. From 1901 until the adoption of the Arkansas River Compact in 1948, negotiations and litigation had been almost continuous. Interests in both states who sponsored the authorization of the project then known as the "Caddoa Project" entered into an agreement, designated the Stipulation of 1933, the purposes of which included removal of obstacles resulting from litigation from the path of legislative progress in the authorization and construction of the project.

The existence of the interstate controversy was clearly recognized in the Flood Control Act of 1936, which legislated into law the so-called 308 report on the Arkansas River, one paragraph of which reads as follows: "The problem confronting irrigation interests in the Arkansas River Basin west of the 99th meridian is three-fold; first, the settlement of interstate controversies arising over water supplies; second, capture of all unused waters for ultimate irrigation use; and third, stream flow regulation of present vested water rights."

By Public Law 34, 79th Congress, 1st Session, enacted in April 1945, Congress consented to the negotiation of a Compact between the two States which finally resulted in the Colorado - Kansas Arkansas River Compact.

The United States Supreme Court, upon entering its decree in the case of Colorado vs. Kansas in the spring of 1944, specified that such controversies between quasi-sovereign States necessitate expert administration, rather than the judicial imposition of a hard and fast rule. It further stated that this may be accomplished by negotiation and agreement, and that such mutual accommodation and agreement should, if possible, be the medium of settlement instead of the invocation of the Court's adjudicatory powers.

Thus, from a series of negotiations spanning nearly three years, from January, 1946, until December, 1948, the Colorado - Kansas Arkansas River Compact was formed and this Administration came into being. As specified in Article VIII of this Compact, the Administration has the power to adopt, amend and revoke by-laws, rules and regulations consistent with the provisions of the Compact, and to perform all functions required to implement the Compact and to do all things necessary, proper, or convenient in the performance of its duties. Thus, it would seem that the Administration is properly authorized to deal with the problems which shall be presented.

The Problems

In the first 10 year period of operation after the Compact was adopted, 1949 thru 1958, the average storage in John Martin Reservoir on April 1 was 80,334 a.ft. In the immediate preceding 10 year period, 1968 thru 1977, the April 1 average has been 26,200 a.ft. By comparison, the most recent 10 year average shows a decline of over 54,000 a.ft. from that of the first 10 years of Compact operation. The weather conditions within both periods were similar (1953 and 1954 were very dry years). Therefore, we must look elsewhere to explain the decline. It is felt that the most probable causes are as follows:

1. Heavy increase in winter irrigation during the months of November thru March by water users in Colorado Water Districts 14 and 17 upstream from John Martin Dam.
2. A proliferation of wells pumping from the aquifer hydraulically connected to the live river stream above John Martin.
3. Transfer of some water rights from agricultural use to municipal and industrial use.
4. Recently, a re-regulation of river flow by Pueblo Reservoir. This re-regulation will be amplified by operation of the Trinidad Dam.
5. Increase in phreatophytic growth along the river.

6. Less run-off because of increase in contour terracing, stock water ponds, range land pitting, and other conservation practices.

Number 6 is probably not subject to change. However, the first 5 are properly the concern of water users below John Martin Reservoir in Colorado and Kansas and this Compact Administration. To paraphrase Article IV, Paragraph D of the Compact, it is not the intent to impede or prevent beneficial development of the Arkansas River Basin, provided, however, that the waters of the Arkansas River shall not be materially depleted in usable quantity or quality for use to water users in Colorado and Kansas. We submit that the first four causes listed heretofore are no doubt beneficial developments; But they have, in bitter fact, depleted the usable quantity of the waters of the Arkansas River. It is a proper function of the Compact Administration to seek a remedy for this situation.

Up until the Seventeenth and final meeting of the Compact Commission, held December 13th and 14th, 1948, Paragraph V F of the Compact drafts held the provision that when the Conservation pool is reduced to less than 20,000 a.ft., Colorado ditches in District 67 would go back on decreed rights. Water to honor these rights would be passed through the pool in the reservoir. This would continue so long as Colorado ditches were not drawing stored water, until such time that the Conservation pool again reached 20,000 a.ft. This so-called "cushion pool" was favored by all four Kansas Commissioners and two of three Colorado Commissioners (the fourth had resigned and had not been replaced). During the final meeting, however, it was agreed to drop the "cushion pool", but with the inclusion of very specific language which now provides that when water in the conservation pool is exhausted "Colorado shall administer the decreed rights of water users in Colorado Water District 67 as against each other and as against all rights now or hereafter decreed to water users diverting upstream from John Martin Dam on the basis of relative priorities in the same manner in which their respective priority rights were administered by Colorado before John Martin Reservoir began to operate and as though John Martin Dam had not been constructed. Such priority administration by Colorado shall continue

until the Administration find that water is again available in the conservation pool for release...."

Possible Solutions

- I. Curtail winter irrigation by water users upstream from John Martin Reservoir.
- II. Establish a 20,000 a.ft. "cushion pool" in John Martin Reservoir.
- III. Adhere strictly to Paragraph V - F allowing the gates to remain open and water passed through on a priority basis even after November 1, until river flow is sufficient to create storage.
- IV. Insist that water users in Colorado water District 67 be allowed to store $\frac{1}{2}$ their direct flow rights in John Martin Reservoir, the same as water users upstream are being allowed to do in Pueblo Reservoir and as water users in the upper Purgatoire River basin intend to do in Trinidad Reservoir. The water so stored in John Martin Reservoir would then be divided between Colorado and Kansas by agreement.
- V. Insist that the safe channel capacity below both Pueblo and Trinidad Reservoirs be at least 10,000 CFS.
- VI. Expand the usage of available space in John Martin Reservoir for use as an alternate storage site for upstream, off-channel reservoirs such as the Great Plains System.

The Administration is urged to give these problems serious consideration. It is time to recognize that developments upstream from John Martin Reservoir have drastically depleted the usable waters of the Arkansas River. The Administration will, no doubt, be able to suggest remedies other than those outlined here. The one certainty is that the situation can no longer be ignored.

4/22/77

TRIP AT TRINIDAD Reservoir

Chairman

FRANK G Cooley

Ark. River Comp

May Turner

Purgatory Dist

SECRETARY

LANE HACKETT

A.R.C.A. + V.D. #67

JIM KASIC

DIV ENGR OFF. DIV 2

✓ Guy E Gibson

Ark River Comp, KS

✓ Duane D Helton

Colo Water Conserv Bd.

Charles J. ...

SE Colo Water Conserv Bd.

Robert W. ...

D. W. 2 Engr. ...

Robert Kempe

Ark. River Comp

Dave Albee

Lamar Daily News

H. A. Winter

Purg. Con. Dist

Chuck Gattula

Purgatory Con. Dist

John M. ...

Purgatory Dist

Wm Howland

Amity & Buffalo Canal

Leo Pollart

Amity Mutual Irr. Co.

✓ C. P. ...

ARCA

✓ W. A. ...

ARCA

Cl Dawn

P.R.C.D. - Trinidad

Henry H. FURV.

P.R.C.D. " "

Richard Grozier

U.S.G.S - Denver

JACK VAYHINGER

Colo. Div of Wildlife

Walter Briggeman

Lamar Canal

John CUNICO

Corp of Engr. & Archt.

ROU Steger

U.S.G.S Pueblo

DICK FIDLER

"

BOB McCABE

COLD WATER CONSV. Bd.

Bill ...

Corps of Engineer

...

" "

Henry D. Magnus

Division of Water Resources