

**SPECIAL REPORT  
OF THE  
OPERATIONS SECRETARY**

**CONCERNING  
PROCESSES TO RESOLVE ADMINISTRATIVE ISSUES,  
THE STATUS OF ISSUES,  
AND A PROPOSAL TO ALTERNATE THE OFFICES OF  
OPERATIONS SECRETARY  
AND  
ASSISTANT OPERATIONS SECRETARY**

**12/8/2003**

**SUBMITTED TO THE  
OPERATIONS COMMITTEE  
ARKANSAS RIVER COMPACT ADMINISTRATION**

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## **Forward**

Article VIII of the Arkansas River Compact created the Arkansas River Compact Administration as an interstate agency to administer the provisions of the Compact. The Administration is empowered to adopt, amend and revoke by-laws, rules and regulations consistent with the provisions of the Compact, prescribe procedures for the administration of the Compact, and perform all functions required to implement the Compact and to do all things necessary, proper or convenient toward that end.

The Administration's By-laws, as readopted December 9, 1997, established an Operations Committee. See Appendix 1. Article V 3. (c) of the By-laws states:

The Operations Committee shall advise the Administration concerning, and shall have direct supervision over, rules and regulations governing the storage and releases of water from John Martin Reservoir and over such other Arkansas River interstate administration and operation between the States of Colorado and Kansas as come within the purview of the Arkansas River Compact, subject at all times to the provisions of such compact and the directives of the Administration thereunder. . . . The Operations Committee shall also be responsible, under directives and orders of the Administration, for supervision over the employees of the Administration engaged in the interstate administration of the waters of the Arkansas River pursuant to the Arkansas River Compact. [emphasis added]

Article II of the By-laws establishes the positions of Operations Secretary and Assistant Operations Secretary as elected officers of the Administration, in addition to describing the duties of each office. Paragraph 6 (b) of Article II provides that the Operations Secretary's duties shall include regulating the gates of John Martin Reservoir "in accordance with [the] Compact and any operating plans or procedures adopted thereunder." Additionally, it specifies that reports of the Operations Secretary shall be presented to the Operations Committee. Paragraph 7 of Article II provides that the Assistant Operations Secretary's duties shall include assisting the Operations Secretary.

The responsibility of the Operations Committee for the supervision of the Operations Secretary and the Assistant Operations Secretary is not addressed in the By-laws, although it may have been the intent of the Administration that they operate under the supervision of the Operations Committee. Rule 2 of the Rules and Regulations of Arkansas River Compact Administration, effective April 15, 1950 (see Appendix 2) provides that "[the Administration hereby delegates to the Secretary of the Administration [an officer of the Administration who was delegated essentially the same duties as those described in the current By-laws for

the Operations Secretary)], acting under the direct supervision of the Operations Committee, the following duties and functions: . . . ”

Since at least 1998, the Assistant Operations Secretary has submitted reports to the Operations Committee raising concerns regarding the interpretation and implementation of the Resolution Concerning an Operation Plan for John Martin Reservoir as approved April 24, 1980 and as subsequently amended (1980 Operating Plan) by the Operations Secretary. Despite attempts to resolve these concerns through staff level meetings, recommendations to the Operations Committee, and meetings of the Operations Committee that were attended by all members of the Administration, very few of these concerns have been resolved. As a result, the Operations Committee has not been able to recommend, nor has the Administration been able to approve, any report of the Operations Secretary since Compact Year 1994.

At the most recent meeting of the Operations Committee and the Administration held on May 22<sup>nd</sup> and 23<sup>rd</sup> 2003, it was my understanding that the Committee requested me to prepare a report describing each remaining issue together with a description of each State's position of each issue, an estimate of the amount of water at stake, a recommendation concerning the most appropriate level of authority for resolution of each issue, and, where possible, a specific proposal to resolve each issue. It was recognized that legal assistance might be required to fulfill some of these objectives. Finally, it was my understanding that the report should also include an analysis of the feasibility of periodically alternating the office and associated duties of Operations Secretary between the Division Engineer for Division 2, Colorado Division of Water Resources and the Water Commissioner of the Garden City Field Office, Division of Water Resources, Kansas Department of Agriculture. A status report was requested by September 1, 2003, with the final report to be submitted at the next regular meeting of the Administration scheduled in December 2003.

A status report was distributed to the members of the Operating Committee and the Assistant Operations Secretary dated September 2, 2003. See Appendix 3.

Subsequently, I learned that there were differences of opinion as to what the Committee had directed to be accomplished and what its members' expectations were. Clarification provided by the Committee members encouraged me to recommend a process to more effectively address issues related to interstate administration and operation of the Arkansas River. As a result, this issue became a primary focus of discussion at meetings between staff members of the Colorado Division 2 office and the Kansas Garden City field office held on October 23 and 24, 2003, in Pueblo, Colorado. A memorandum summarizing this meeting was prepared and circulated among the Committee members and participants.

This report is intended to respond to the directions of the Operations Committee. It is organized in three sections and includes Appendices. The first deals with recommendations to improve the current process of addressing and resolving interstate administration issues, the second provides a report on the status of selected issues before the Operations Committee and the final section provides analysis and my recommendation concerning the idea that the offices of Operations Secretary and Assistant Operations Secretary might be alternated between the States.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steven J. Witte", written over a horizontal line.

Steven J. Witte, P.E.  
Operations Secretary  
Arkansas River Compact Administration  
December 8, 2003

### **Processes to address and resolve interstate administration issues**

The staff of the Division 2 Engineer and the Water Commissioner of the Garden City field office agreed at the meeting in Pueblo, Colorado on October 23 and 24, 2003, that working relations between the States could be improved by encouraging timely and effective communications between the Operations Secretary and the Assistant Operations Secretary, their staff members, and the members of the Operations Committee. See Appendix

They also agreed that certain events during the year may warrant an exchange of data or a more extensive exchange of information concerning interstate administration, usually at the staff level. Similarly, certain events associated with dates during the Compact year were agreed upon as being potential opportunities for communication of additional information between the Operations Secretary and the Assistant Operations Secretary and between them and the Operations Committee. Two such events, one in the fall and one in the spring, were thought to be worthy to justify scheduled meetings between the officers and their staff members. These events are listed on both sides of Attachment A found in Appendix 4.

The reason for these exchanges of data or information and meetings is that both officers are responsible for monitoring the operations of John Martin Reservoir based on the information available to them, including the daily accounting records provided by the Operations Secretary. In recognition that the Operations Secretary has a duty to provide information, maintain open communications, and consult with the Assistant Operations Secretary in the performance of his duties, it was also agreed that the Assistant Operations Secretary and his staff members should raise any issue of concern in a timely manner and to make a good faith effort to resolve such concerns through open communications. With respect to the written report required of the Operations Secretary by the 1980 Operating Plan Resolution and the reports of the Assistant Operations Secretary that have served as primary means of communication between the officers and the Operations Committee, as well as with each other, it was agreed that fairness requires allowing time for review and comment so that in the future both reports should be submitted at the same time.

Based on the foregoing, I recommend that the Operations Committee adopt the following guidelines regarding communications between the Operations Secretary and the Assistant Operation Secretary, their staffs, and the Operations Committee:

- Concerns or complaints relating to the storage and release of water from John Martin Reservoir, the accounting of John Martin Reservoir operations, or other matters that relate to the interstate administration of the Arkansas River should be communicated promptly to the Operations Secretary or his staff. Such concerns or complaints may communicated orally or in writing. A response addressing the matter should be provided by the the Operations Secretary or his staff within a reasonable time. Normally, such concerns or complaints should be raised within

one week of the occurrence of the event in question and a response should be provided within a week of receipt of the concern or complaint.

- Good faith efforts to resolve concerns and complaints are expected on the part of the Operations Secretary and the Assistant Operations Secretary and their staffs and those good faith efforts are expected to continue as long as the participants perceive satisfactory progress toward resolution.
- In any instance where the explanation provided through this informal procedure does not satisfactorily resolve the concern or complaint and the Operations Secretary or the Assistant Operations Secretary no longer perceives that progress toward resolution is satisfactory, then the matter may be submitted to the Operations Committee.
- Any written report submitted to the Operations Committee by the Assistant Operations Secretary for consideration at the time of the annual meeting of the Arkansas River Compact Administration shall be made available to Committee members, the Operations Secretary, and to other interested parties, no later than December 1 of each year.

It is believed that at least one additional meeting of the Operations Committee each year would be beneficial to improved relations between the States. An additional meeting or meetings would provide additional time for the members to become familiar with issues, including any concerns or complaints referred to the Operations Committee, and to reach decisions. The date for an additional meeting that is thought to be the most beneficial would be mid to late summer. It is thought that a meeting at this time would also conflict least with other demands. In the alternative, a meeting scheduled to coincide with the mid-April meeting of the officers and their staff members may be useful and offer an opportunity to review the anticipated conditions of the upcoming irrigation season.

To improve communications between the Operations Secretary and the Assistant Operations Secretary and their staffs, I offer the following recommendations concerning future meetings of the Operations Committee:

- Formal notes or minutes should be prepared and approved by the Committee for each meeting to create a reliable record of decisions reached and directives issued to the Operations Secretary and/or the Assistant Operations Secretary. (Note, it may be necessary to amend the bylaws to enlarge the responsibilities of the Recording Secretary, if that officer is expected to provide this service.)
- Absent exceptional circumstances, the Operations Committee should not consider concerns or complaints that are referred to them for consideration unless;
  - A good faith effort has been made to resolve an issue through informal consultation, as previously described.

- The concern or complaint is presented in writing, together with any necessary supporting evidence, and is presented to each member of the Operating Committee and the officer's counterpart from the other State, at least one week prior to the meeting in which the Committee is to consider the matter
- Without limiting the actions that may be appropriate, the Operations Committee may take any of the following actions in response to the receipt of a written concern or complaint:
  - Recommend to the Administration that the matter be referred to another Committee;
  - Direct that further research or resolution efforts be conducted by either or both of the officers;
  - Call a special meeting of the Operations Committee to consider the matter or defer consideration to the next scheduled meeting;
  - Make a decision on the matter based on the Committee's interpretation of the Arkansas River Compact and the Administration's directives;
  - Issue directives to the Operations Secretary and the Assistant Operations Secretary in accord with the Committee's decisions or recommend that the Administration do so or that it conduct an investigation under Article VIII H. of the Compact;
  - Develop such amendments to previous resolutions of the Administration, as the Committee deems necessary or appropriate to clarify or revise such resolutions and recommend the approval of same by the Administration, subject to the approval of the District Engineer in charge of the Project;
  - Draft any new resolutions needed to address new issues or improve interstate administration procedures consistent with the Compact and recommend approval of the same by the Administration, subject to the approval of the District Engineer in charge of the Project; or
  - Refer any disputed matter to the Administration with a recommendation to submit the matter to arbitration pursuant to Article VIII D of the Compact.

Finally, there are two matters of policy that the Operations Committee should be aware of that pose impediments to the resolution of a number of issues.



The first is a procedural matter. As has been noted by Special Master, Arthur L. Littleworth in his Vol. 2 of his report dated July 1994 at page 176, "It is undisputed that the 1980 plan was (and remains) beneficial to the water users in both states." However, certain ambiguities, inconsistencies, and omissions related to the Administration's resolution as it has been thus far amended, have lead to many issues now before the Operations Committee. There seems to be a disagreement as to whether to continue to amend the resolution or to attempt to resolve issues through separate resolutions. The former method has the advantage of minimizing the number of controlling reference documents, but also carries with it a perceived risk to the benefits afforded to both states by the 1980 Operating Plan by potentially opening Pandora's box. In response to the latter concern, Colorado has tendered at least one resolution proposing recognition of the longstanding practice of using a "Winter Water" account to facilitate the accounting of Section III operations. Kansas, however, has not agreed with this approach. Direction from the Committee and the Administration as to the preferred approach would be appreciated.

Second, the potential for retroactive application of any agreement or concession makes it more difficult to resolve some issues. The principle of restitution in the event of injury was established in the 1980 Operating Plan, i.e., Section V; however, the difficulty of actually carrying this out, especially after the passage of significant amounts of time, makes it more difficult to resolve some issues. It is therefore suggested that the Operations Committee consider whether some issues might be resolved if the decision was prospective only. Additionally, the Committee should consider whether it continues to support the assignment of the quantification of injury responsibility to the Engineering Committee as provided in Section V of the 1980 Operating Plan.

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## **Issues**

For some time now there has been an effort to maintain a list of issues that have been presented to the Operations Committee. It has become customary to refer to this list as “the issues matrix”, because it contains additional information regarding each issue, such as a brief statement of each State’s position on the issue, the status of efforts to resolve the issue, etc. This matrix has undergone several revisions, and it is expected that it will continue to be revised. The most recent version of the matrix, which was developed following a meeting between members of the Operations Secretary’s staff and the Assistant Operations Secretary’s staff, was referenced in developing the following synopsis of issues and is included in this report as Attachment A of Appendix 4. I wish to extend my thanks to Kevin Salter for his diligent efforts to revise, renumber, and reorganize the matrix to maintain it as a useful reference. The issues appear below in the order they appear in this version of the matrix, and the same numerical reference system is used. The categorization of issues requested by the Committee may be found on the matrix. Only selected issues currently before the Operations Committee are addressed below. Other issues listed on the matrix are dealt with elsewhere in this report or are considered housekeeping matters of lesser immediate importance.

### **Winter Water account of convenience #20**

Kansas has questioned the use of a special account entitled “Winter Water” that has been used as a holding account in reports of the Operations Secretary during the period November 15<sup>th</sup> through March 15<sup>th</sup> of each Compact year to facilitate administration of “other water” that is authorized for storage in John Martin Reservoir by Section III of the 1980 Operating Plan. Initially, Kansas’ position was that this account is not authorized by the 1980 Operating Plan; however, through discussions, it was learned that Kansas’ concern is primarily a matter of timely control of waters to which it may be entitled as more fully described in the next issue, #21. In recognition of the validity of this concern, Colorado presented a draft resolution at the May 2002 Operations Committee meeting that was intended to address the needs of both States. A letter dated October 21, 2003, from Kevin Salter provided Kansas’ initial response. The draft resolution and the Kansas response may be found in Appendix 5.

It is believed that this account and the attempted resolution involve matters of policy that the Operations Committee should consider. Further direction from the Operations Committee to the Administration’s officers may facilitate future resolution efforts.

### **Timely distribution of Section III storage charge during Winter Water Storage Program #21**

Colorado recognizes that Kansas has legitimate concerns about the use of the “Winter Water” holding account during the period November 15 through March 15 because of an inability to access or utilize transit loss account water to which it may be entitled at times when it may desire to do so or to protect water from spilling in certain unusual and infrequent circumstances. But Colorado does not necessarily agree that the language of

Section III D of the 1980 Operating Plan requires that the transfer of water must occur at the instant of physical arrival in the reservoir. Colorado believes that there is a legitimate reason for delaying the distribution and that this delay has no adverse impact on Kansas in most years and has proposed a compromise in the form of the draft resolution discussed above under Issue #20.

It is recommended that further efforts to address this issue separately from #20, above, be tabled pending further consideration of the draft resolution.

**Criteria for determining Section III storage during the Winter Storage Program #22**

Kansas's position is that the criteria used by Colorado to determine a division of the inflows into John Martin Reservoir during the period of the Winter Water Storage Program (November 15 to March 15 of each Compact year) fails to adhere to the criteria established in the 1980 Operating Plan. Colorado's position is that the 1980 Operating Plans does not provide criteria for the division. The 1980 Operating Plan clearly authorizes the concurrent storage of inflows during the period of winter storage as inflows to conservation storage and "other water". See Section I D (definition of "Inflows"). Therefore, a division of inflows to the reservoir during such periods must be made. The procedure to make this division has been consistently used throughout the period that Section III of the 1980 Operating Plan has been in existence. Since the Special Master concluded that Kansas did not prove that the Winter Water Storage Program causes material Stateline depletions, and Kansas's exception to that finding was overruled by the United States Supreme Court, Colorado is very reluctant to make any changes to the procedures used in the administration of that program. For this reason, this issue has been characterized as a legal issue.

This should not be understood as an absolute refusal by Colorado to consider any alternative procedure. Colorado is willing to investigate and consider alternatives that may be more appropriate. In this respect, this issue has been categorized as a technical issue. It should be noted that the Colorado Water Court decree (84CW179) approving the Winter Water Storage Program contains the following term and condition:

If in the opinion of the Division Engineer, acting as the operation secretary of the Arkansas River Compact Administration, the winter inflow quantity to the John Martin Reservoir conservation pool in the winter period significantly departs from the 1950-1975 winter inflow quantity, he will advise the winter storage chairman, who shall convene the Board of Trustees to make findings as to the cause of such departure from historic patterns. Winter water that is delivered to John Martin Reservoir for storage in accounts in John Martin Reservoir shall not be included in the inflow quantity to the John Martin Reservoir conservation pool.

This term and condition is intended to protect the interests of downstream water users, and the comparison called for has been performed on an annual basis. Additionally, in my capacity as Division Engineer, I have committed to begin making this type of comparison on a monthly basis and distributing the information to the Assistant Operations Secretary and the other recipients of the Winter Water Storage Program status reports throughout the winter storage season. I have also invited input concerning the most appropriate definition of the phrase "significantly departs" as used in the term and condition quoted above.

The Assistant Operations Secretary proposed an alternative methodology to determine a division of the inflows into John Martin Reservoir during the period November 15 through March 15 in a submittal dated March 29, 2002, that was reviewed and criticized by the Operations Secretary. No revision of that proposal has been made and no further discussions regarding it have taken place, perhaps due to a misunderstanding of Colorado's position.

I recommend continued discussions on this issue at the staff level.

#### **Determination of Transit Loss #30**

Section II E 4 of the 1980 Operating Plan directs the Colorado Division Engineer and a representative of the Kansas Division of Water Resources to determine transit losses on releases of water from the Kansas account. The only guidance provided in relation to how such determinations are to be made is found in the first sentence of that Section: "Releases of Kansas account water shall be measured at the Stateline as provided in Compact Article V E (3) allowing appropriate arrival times."

Beginning in Compact year 1982 and extending through Compact year 1997, the Colorado Division Engineer and the Water Commissioner of the Garden City Field Office or another representative of the Kansas Division of Water Resources attempted to fulfill this responsibility by annual agreements that modified certain provisions of the 1980 Operating Plan and established methods to determine crediting of releases of Kansas account water delivered to the Stateline. Using these methods, there were no instances in which a deficit was determined to have occurred; therefore, there was no need to quantify transit losses on releases of Kansas account water. No such agreements have been made since 1997. Kansas has claimed transit losses on releases of its account water in Compact years 2001 (not quantified) and 2002 (4375 a.f.). Colorado did not agree that any transit losses occurred in Compact year 2001 and determined a transit loss of 676 a.f. in Compact year 2002. The current positions of the State officials are documented in an exchange of letters (Rude to Witte dated March 4, 2003, Witte to Rude March 19, 2003, Rude to Witte May 16, 2003), which are included in Appendix 6.

At the request of the Colorado Division Engineer, Thomas W. Ley, PE, PhD, the Lead Hydrographer, Division 2, Colorado Division of Water Resources, evaluated each of the 67 releases of water from the Kansas account during the period 1980-2002. The purpose for this evaluation was to characterize the physical response of the Arkansas River at the

Stateline due to reservoir releases so that representative and appropriate parameters could be identified that might lead to a “fact based” agreement between the water administration officials as to how to determine transit losses. A description of Ley’s preliminary work was provided to Kansas’s officials on May 23, 2003, and the underlying data was provided later.

Subsequent discussions held on October 23<sup>rd</sup> and November 20<sup>th</sup>, 2003, have led to an agreement in principle to reach a temporary agreement for Compact year 2004 by no later than April 1, 2004, that will define a procedure for measuring releases of Kansas’ Section II account water at the Stateline based on both flow rate and volume criterion. There is a commitment on the part of both States to rely heavily on the recommendations of their hydrography staff members who have been assigned the task to develop proposals collaboratively regarding how releases from the Kansas account should be evaluated and credited. There has been no agreement concerning application of any agreed upon methodology for Compact year 2004 to any previous year.

It is recommended that the efforts described above should continue to try to resolve this technical issue.

#### **Disposition of transfers to make up deficits #31**

A difference of interpretation of various portions of the 1980 Operating Plan by the States has existed for some time. The respective positions of the States are adequately described in the issues matrix. As previously discussed, both States determined that transit losses on the release of Kansas’ Section II account water occurred in Compact year 2002. Since the transit losses were greater than the amount of water in the Kansas transit loss account, Section III D of the 1980 Operating Plan directs that the deficit be made up from the thirty-five percent charge on the next deliveries of “other water”, which did not occur until March 15, 2003. At that time, acting as the Operations Secretary, I caused the accounting to conform to Colorado’s understanding of Section III D of the 1980 Operating Plan. Subsequently, through a letter dated August 26, 2003, Kevin Salter offered an explanation that appears to reconcile the different interpretations. This letter is included as Appendix 7.

It is recommended that the Operations Committee approve the explanation offered by Mr. Salter, direct that an accounting entry be made to complete the transaction initiated with the entry made March 15, 2003, and direct that any future accounting entries of this type be made to conform to that suggested in Mr. Salter’s letter. Further, it is recommended that the Committee direct the Assistant Operations Secretary to draft a clarifying resolution that the Committee may recommend to the Administration to memorialize the Administration’s intent in this matter for the future.

#### **Use of the transit loss account #32**

Historically, water in the Kansas transit loss account, as referenced in Sections II E (4) and III D of the 1980 Operating Plan, has been used by the Operations Secretary to

minimize transit losses on releases of Kansas account water, as measured at the Stateline, by releasing water from the account concurrently with releases of Section II account water requested by Kansas. There does not seem to be any controversy between the States regarding use of the water in the Kansas transit loss account in this manner; however, it has been noted that there is no specific authorization in the 1980 Operating Plan that authorizes the use of water in this manner.

I therefore recommend, as an interim measure, that the Operations Committee as a matter of policy, direct that water in the Kansas transit loss account continue to be used in this manner as the most practical means of ensuring delivery of releases of Kansas account water. Further, I recommend that the Committee consider incorporating into the clarifying resolution previously recommended in Issue #31, specific authorization for the use of water in the Kansas transit loss account in this manner to avoid the possibility that it might become an issue at some point in the future.

#### **Non-reporting of Section II C (1) determinations #41**

It is Kansas's position that a daily accounting of certain information that has not historically been included as part of the annual Operations Secretary's Report should be included in the report. Specifically, Kansas wants the report to include information describing operational determinations made by the Operations Secretary related to the provisions of Section II C (1), and in particular the last sentence of that section, which pertains to the by pass of inflows, without temporary storage, during times when conservation storage has been completely released into accounts. Colorado's position has been that this type of information should be routinely provided to Kansas, but that neither the 1980 Operating Plan nor the Administration's By-laws require this type of information to be reported. The Operations Committee has not provided any direction to resolve the issue; however, the basic data is being provided to Kansas throughout the year, thus providing both an opportunity and an obligation to raise concerns in a timely manner. Therefore, because the Assistant Operations Secretary has compiled and submitted the data in time for publication and has made a commitment to share responsibility for answering questions that may be raised related to the information, I decided to include this type of information as part of the 2003 Report. This represents a tentative resolution of the issue; however, the Operations Committee may want to determine for itself whether or not such information should continue to be made a part of the Operations Secretary's Report in the future.

#### **Interruption of transfers from conservation storage to accounts #42 & 43**

Article V F of the Arkansas River Compact states, in relevant part: "[W]hen there is water in the conservation pool the water users upstream from John Martin reservoir shall not be affected by the decrees to the ditches in Colorado water district 67." In this way, the operation of the conservation pool in John Martin Reservoir benefits water users in Colorado upstream from the reservoir, as provided in Article IV C (3) of the Compact. Article V F thus recognizes that at times when there is water in the conservation pool,

water users upstream from the reservoir may divert without regard to the decreed priorities in Colorado below the reservoir

The storage of water in the conservation pool is controlled by various terms of the Compact. For example, Article V A provides that during the period of winter storage, beginning on November 1<sup>st</sup> of each year, all water entering the reservoir up to the limit of the available conservation capacity is to be stored, with the limited exception that Colorado may demand releases not to exceed 100 c.f.s. Otherwise, no releases of water from the conservation pool be made are authorized until at least April 1<sup>st</sup> of the succeeding year, according to Article V B.

When the Arkansas River Compact Administration adopted the 1980 Operating Plan, authorizing accounts for the ditches in Colorado Water District 67 and Kansas, it attempted to mirror the provisions of the Compact in many respects. For example, Section II C (1) of the 1980 Operating Plan states: "For the purposes of Compact Article V.F. the conservation pool shall be deemed exhausted whenever conservation storage has been completely released into the accounts." Releases from the conservation pool under the Compact and releases (or transfers, if you will) of conservation storage into accounts under the 1980 Operating Plan have the same affect on storage in the conservation pool and, thus, when the conservation pool will be deemed exhausted.

Thus, to prevent the water users upstream from John Martin Reservoir from being affected by the decrees of the ditches in Colorado Water District 67 more frequently than would be the case under the Compact, the release of conservation storage into accounts must be suspended or interrupted under circumstances when releases of water from the conservation pool would have been suspended or interrupted prior to the adoption of the 1980 Operating Plan. This administration is necessary to insure that water users upstream from John Martin Reservoir receive the benefits they are entitled to under the Compact.

#### **Summer transfers #42**

Section II B (3) of the 1980 Operating Plan recognizes the principle of conserving conservation storage by providing for a potential 48-hour delay between the commencement of conservation storage and the transfer into accounts. This provision is recognition of the fact that at times during the summer storage season regional thunderstorms that are of sufficient magnitude to warrant conservation storage are also sufficient to satisfy irrigation demands for a period of time and thus would have resulted in the deferral of releases from the conservation pool under the terms of the Compact.

Based on this rationale, it has been the practice of the Operations Secretary to suspend transfers of conservation storage into accounts for a period of up to 48 hours during a period of conservation storage following a rain event sufficient to eliminate preexisting demands for the release of account water.

To provide express authorization for continued operation of John Martin in this manner, it is suggested that the Operations Committee recommend adoption of an amendment to the 1980 Operating Plan to add the following to Section II B (3): "Similarly, releases of conservation storage into accounts specified in Section II D shall be suspended following a rainfall / runoff event during a period of conservation storage sufficient to cause all Colorado Water District 67 ditches and Kansas to request that releases from their accounts be discontinued, until the first request for release of account water by a Colorado Water District 67 ditch or by Kansas or beginning 48 hours after the discontinuance of all account releases, whichever occurs first."

### **Winter transfers #43**

In October of 1997, it was determined that the requirements for commencement of conservation storage (Section II B (1) of the 1980 Operating Plan) were satisfied, resulting in the accumulation of 4,433 a.f. in conservation storage by the end of the 1997 Compact Year, despite transfers into accounts initiated on October 27, 1997 in accordance with Section II B (3). A decision was made to suspend further releases into accounts at that time because if there had been the same quantity of water in the conservation pool prior to adoption of the 1980 Operating Plan, the provisions of Compact Article V A would have precluded such a release of water from the reservoir. Following the same reasoning, the further transfer of 34,458 a.f. of conservation storage remaining on October 31, 1999 was suspended.

There appears to be no express provision to cover this situation in the 1980 Operating Plan; therefore, as suggested in the 1999 Report of the Operations Secretary, it is recommended that the Operations Committee recommend an amendment to the "Resolution Concerning an Operating Plan for John Martin Reservoir" to include a new subsection II D (4) as follows: "In the event that any conservation storage has not been released into accounts as of November 1 of any year, further release shall be suspended until such time as is provided for according to Section II A herein."

### **Commencement of a spill event #50**

Based on its interpretation of language in Section II G of the 1980 Operating Plan, it is Kansas's position that the accounting of water spilled from John Martin Reservoir should be triggered by the occurrence of water "physically [flowing] over the project's spillway."

It is Colorado's position that Kansas ignores the provisions of Article IV C. (2) and (3) of the Compact, which provide as follows:

- (2) The bottom of the flood control storage is presently fixed by the Chief of Engineers, U. S. Army, at elevation 3,851 above mean sea level. The flood control storage will be operated for flood control purposes and to those ends will impound or regulate the stream flow volumes that are in excess of the then available storage capacity of the conservation pool. Releases from the



flood control storage may be made at times and rates determined by the Corps of Engineers to be necessary or advisable without regard to ditch diversion capacities or requirements in either or both States. [emphasis added]

- (3) The conservation pool will be operated for the benefit of water users in Colorado and Kansas...as provided by this Compact. [emphasis added]

Since the Administration is empowered only to adopt rules and procedures that are consistent with the Compact and since the language of the Section II G does not recognize that the Corps of Engineers may conduct flood control operations by releasing water by means of the outlet gates without causing water to spill physically over the project's spillway, it is my position that the criterion to be used to determine the occurrence of a spill is when the maximum allowable invasion of the flood pool by the permanent pool occurs and, thereafter, any additional water impounded above that elevation is flood control storage and is not available for the benefit of water users in Colorado and Kansas.

My recommendation is that, as an interim measure, the Operations Committee should direct that in the event that runoff conditions occur in the Arkansas River basin upstream of John Martin Reservoir that cause the conservation pool to be filled and that cause the quantity of water then extant in the permanent recreation pool to invade the flood control storage, the Operations Secretary should account for the quantities in each account taking into consideration that the accounts spill in the order prescribed in Section II G of the 1980 Operating Plan (except as modified by Section 13 of the Resolution Concerning an Offset Account in John Martin Reservoir for Colorado Well Pumping, approved March 17, 1997) from the point when the maximum allowable invasion of the flood control storage by the permanent pool occurs as prescribed by the Administration's Resolution Concerning John Martin Reservoir Permanent Pool, dated August 14, 1976. I also recommend that the Operations Committee amend Section II G of the 1980 Operating Plan to make this intention clear.

#### **Accounting spills from accounts #51**

Kansas also infers from Section II G of the 1980 Operating Plan that the quantification of spills from accounts should also be based on the release (outflow) rate from the reservoir. Kansas notes that there is no specific provision in the 1980 Operating Plan for a separate *Flood Pool* account and concludes that water held in storage above the maximum allowable level of invasion into the flood control storage has not physically spilled and therefore should retain its original account identity. Based on these positions, the Assistant Operations Secretary has proposed an alternative accounting procedure that would permit the owners of spilling accounts to store water above the maximum allowable invasion of the flood control storage. This benefit occurs at the expense of conservation storage, which is to be allocated to both States pursuant to Section II D of the 1980 Operating Plan.

The Operations Secretary has consistently used inflow to the reservoir as the basis for determining the quantity of water in accounts. Support for the use of inflows as the basis for determining the amount of water in accounts can be found in Section II A and B of the 1980 Operating Plan, which refer to inflows into John Martin Reservoir. Therefore, the accounting by the Operations Secretary has allowed conservation storage to increase at the rate of inflows to the conservation pool. However, once the permanent pool has reached the maximum allowable invasion into the flood control storage, in order for inflow to be stored in conservation storage, other accounts must spill, which spills have been accounted for in the order prescribed by Section II G of the 1980 Operating Plan, except as modified by Section 13 of the Resolution Concerning an Offset Account in John Martin Reservoir for Colorado Well Pumping, approved March 17, 1997. A simplified representation of the procedure historically used is included as Appendix 8.

The *Flood Pool* account used by the Operations Secretary is merely a special account of convenience used to reconcile the difference between the total content of regular accounts to the total reservoir content.

Section II F of the 1980 Operating Plan provides that: “Evaporation charges shall be made against water stored in the accounts... using formulas and procedures approved by the Colorado Division Engineer and a representative of the Kansas Division of Water Resources... evaporation charges shall be prorated amongst conservation storage and the accounts according to the amounts in them.” [emphasis added] It is Kansas’ position that the procedure historically used by the Operations Secretary is not currently supported by the provisions of the 1980 Operations Plan, and the representatives of the States have not agreed upon a procedure. A comparative analysis of various procedures has previously been provided to the Operations Committee and is included as Appendix 9.

It is recommended that the Operations Committee consider the policy implications at issue when the reservoir content is above the maximum allowable level of invasion of the flood control storage and attempt to influence the resolution of differences separating the State’s representatives on this issue and the procedure to assess evaporation charges against water stored in accounts in such circumstances.

#### **Upstream storage during John Martin Reservoir spill events #52**

The Operations Secretary’s Reports for Compact years 1998, 1999, and 2000 document occasions when storage was allowed to occur in post-Compact reservoirs in Colorado at times when John Martin Reservoir was determined to be spilling. Kansas objects to allowing such storage unless water in conservation storage is spilling. The positions of the States are best documented by an exchange of letters between the Kansas Chief Engineer and the Colorado State Engineer (Pope to Simpson dated January 9, 1998; Simpson to Pope dated January 14, 1998; Pope to Simpson dated April 15, 1998; and Simpson to Pope dated November 25, 1998), which are included in Appendix 10.

This issue is viewed primarily as a legal issue and as such is believed to be a matter best referred to the Administrative and Legal Committee.

### **Adjustments to John Martin Reservoir inflows for affect of upstream storage during times of spill #53**

When storage was allowed to occur in post-Compact reservoirs, as described in connection with Issue #52 above, the effect of such storage was to reduce the inflow to John Martin Reservoir and the total volume of water that otherwise would have physically spilled from the reservoir. In order to account for the reduced inflow to conservation storage as a result of post-Compact development, an adjustment was made based on the amount and timing of additional inflow to John Martin Reservoir that would have occurred but for the upstream diversions. A release (transfer) equal to this adjustment was then made from the actively spilling account to conservation storage. Thus, accruals to conservation storage occurred at the rate of adjusted inflow until the spill ended to insure that the content of accounts was not affected by the upstream post-Compact storage. This process is illustrated by the figure in Appendix 11.

It appears unlikely that this practice can be approved by the Operations Committee as a matter of policy until the legal issue (#52) is resolved. Therefore, it is recommended that the matter be tabled pending resolution of that issue or until all other issues are resolved.

### **Section II spill volume limitation during summer storage events #54**

If I understand Kansas' concern correctly, it is that there does not appear to be clear authority in the 1980 Operating Plan to justify the practice of limiting the total volume of water spilled from Section II accounts to the amount contained in those accounts at the inception of spill of water from such accounts. (It should be noted that the simultaneous spill out of accounts and release into accounts pursuant to Section II B (3) as shown in Appendix 12, could result in the possibility that spill of either the transit loss account or of conservation storage would otherwise be precluded unless some stopping mechanism is established.) It is my understanding that no objection to the practice exists, only that there is a need clarify the intent of the Administration in this regard. I have justified this practice in reliance upon the following sentence from Section II G of the 1980 Operating Plan: "The amount of spill from the accounts should be amongst them according to the amounts in them at the beginning of the spill." However, admittedly, this same sentence is also relied upon for justification of the practice of proportioning the rate of spill between the Kansas Section II account and the Section II accounts of the Colorado ditches. Given this duality of purpose, the perceived ambiguity, and the apparent lack of controversy over this issue, it may be possible to agree upon a separate clarifying statement as an amendment to the 1980 Operating Plan to confirm the practice.

It is therefore recommended that the Operations Secretary and the Assistant Operations Secretary be directed to collaborate to determine if a mutually acceptable resolution can be proposed to dispose of this issue to be presented for consideration by the Operations Committee.

## **Section II C. (2) compliance question related to Colorado's Agreement B #60**

Kansas interprets Section II C (2) as requiring Colorado ditches upstream of John Martin Reservoir to deliver water to the priorities of Colorado Water District 67 ditches coincident with the exhaustion of conservation storage. Kansas, therefore, has asserted that any intrastate agreement by Colorado water users, such as Agreement B, which has the effect of causing Colorado Water District 67 ditches to defer the exercise of their water rights is improper.

Colorado contends that this arrangement is consistent with the administration of the priority system in Colorado, and that it is not inconsistent with either the Compact or the 1980 Operating Plan, and therefore the matter is not properly before the Operations Committee. Further, Colorado has advised the Committee that such an agreement is necessary to preserve the benefits to water users upstream from John Martin Reservoir under the Compact and in order to justify the continuation of the 1980 Operating Plan from Colorado's perspective. The Kansas representative to the Compact Administration were advised of the need for an agreement such as Agreement B shortly after the adoption of the 1980 Operation Plan, and they took the position that the agreement was a matter to be resolved by Colorado, which it was.

It is therefore my recommendation that this issue should be referred to the Administrative and Legal Committee with a recommendation that no further consideration be given to this issue.

## **Retroactive adjustments to accounting for prior years if accounting methods are revised #61**

Although this issue was previously addressed in this report as an impediment to the resolution of some issues, some further discussion of issue is appropriate. Kansas has indicated or implied that because of what it believes to be inappropriate handling of the operations and/or accounting associated with some of the issues discussed above, restitution for injury to Kansas should be made based on the Kansas accounting. Examples of issues where an expectation of restitution has been expressed include Issues #21 and #30, and there may also be an expectation of restitution associated with Issues #22, #51, and #52. It should be noted that a calculation of loss has been made by Colorado with respect to Issue #10 as listed in the issues matrix (see Attachment B of Appendix 4), but no claim for restitution has been made. This issue is not discussed in this report because it has been referred to the Engineering Committee.

Section V of the 1980 Operating Plan does provide a procedure for making restitution in the event of injury, but I urge consideration of the spill of conservation storage that occurred June 4, 1999, with respect to any claim of injury prior to that time, the practicality of making restitution after the passage of significant amounts of time, the equities associated with all claims of loss, and the effect that retroactive application might have on the likelihood that operational and accounting issues can be resolved.

It is my recommendation that the Operations Committee consider whether it continues to support the assignment of responsibility for the quantification of injury to the Engineering Committee as provided in Section V of the 1980 Operating Plan. Additionally, it is my recommendation that the Operations Committee consider the factors cited in the previous paragraph to determine on a case-by-case basis whether resolution of an issue on a prospective only basis would facilitate the resolution of the issue.

#

**Evaluation of alternating the offices of Operations Secretary and Assistant Operations Secretary between the States**

Kansas' representatives to the Administration suggested consideration of alternating the election of the offices of the Operations Secretary and the Assistant Operations Secretary at the reconvened 2002 meeting held on May 22, 23, 2003. The Operations Committee requested an evaluation of this idea based on discussions to be held by the Operations Secretary and the Assistant Operations Secretary to be reported at the December 2003 meeting of the Administration.

Although the basis for this request was not fully explained at that time, I assume that the suggestion was prompted by the idea that consideration of the prospect of such a rotation of responsibilities might cause the officers to consider the perspective of their counterpart and appreciate how it might feel to "have the shoe on the other foot". Another possible reason for alternating the positions is that Kansas might gain a better understanding of the intricacies and practical difficulties of implementing operational agreements that have been made. However, having considered the proposal from a practical perspective, I cannot recommend its implementation at the present time.

The respective duties of the Operations Secretary and the Assistant Operations Secretary are described by paragraphs 6 and 7 of Article II of the By-laws of the Arkansas River Compact Administration. One of the duties of the Operations Secretary is the preparation of reports of deliveries of water in connection with the operations of John Martin Reservoir to be presented to the Operations Committee. Section VII A. of the Resolution Concerning an Operating Plan for John Martin Reservoir specifies that the "Colorado Division Engineer" shall make an accounting of the operation under the resolution for the previous compact year. To a large extent, the duties of the Operations Secretary and the Division Engineer overlap. So long as the Colorado Division Engineer is elected as the Operations Secretary, these two documents would not be inconsistent. However, if the Water Commissioner of the Garden City Field Office or other qualified individual were to be elected, the resolution would need to be amended to prevent an unnecessary and wasteful duplication of effort.

Further, when I consider the qualifications for the office of Operations Secretary, I believe the Division Engineer for Division 2 is better suited for the position. The reason has nothing to do with the capabilities of the individual involved, but with the institutional responsibilities of their positions. The Division Engineer is accountable to water users upstream and downstream of John Martin Reservoir. One of the key principles of the Compact, set forth in Article IV C. (3), is that the conservation pool will be operated for the benefit of water users in Colorado and Kansas, both upstream and downstream of John Martin Reservoir. The Division Engineer must administer the water rights of water users in Colorado both upstream and downstream of John Martin Reservoir. The water users in Colorado downstream of John Martin Reservoir generally have same interests as water users in Kansas, at least with respect to diversions by water users in Colorado upstream of John Martin Reservoir. The Water Commissioner of the Garden City Field Office is only accountable to water users in Kansas and has

consistently and perhaps understandably advocated positions favorable to downstream water users. Given the institutional responsibilities of the Division Engineer and the Water Commissioner, I believe the Division Engineer is more likely to consider the interests of all water users in Colorado and Kansas under the Compact, and not just those of water users downstream of John Martin Reservoir. If the time ever becomes ripe to implement rotation of these offices between the states, I believe that it should only be done after all of the present operational and accounting issues have been resolved.

Article VIII H of the Compact states that it is the "intent of this Compact that enforcement of its terms shall be accomplished in general through State agencies and officials charged with the administration of water rights." Article VI provides that with exceptions the Compact reserves to each state authority over administration of the rights of water users awarded by the respective states. Furthermore, Article VIII G. encourages cooperation with State water administration officials "...in the procurement, interchange, compilation and publication of all factual data bearing upon the Administration of this Compact without, in general duplicating measurements, observations or publications made by State or Federal agencies."

For the Division 2 Engineer to fulfill the responsibilities of that position with respect to the administration of water rights within the Arkansas River basin of Colorado, almost all of the information necessary to conduct the operation and accounting associated with the 1980 operating plan for John Martin Reservoir must be ascertained and collected even if the responsibilities to maintain accounting and to report such information to the Operations Committee were to be transferred to another individual. In fact, because of intrastate agreements between Colorado water users, the Division 2 Engineer will have to continue accounting even more detailed, yet consistent with that required by the 1980 Operating Plan, even if the Administration were to elect someone else to the office of Operations Secretary. The reality is that any other person who assumes the responsibility for operating John Martin Reservoir and maintaining the accounting documenting such operations in accordance with the 1980 Operating Plan must obtain almost all of the necessary information from the office of the Colorado Division 2 Engineer, but because of the burden to verify the correctness of source data associated with the accounting responsibility, I expect that the Division 2 Engineer will be additionally burdened with the need to explain and justify each data element to the satisfaction of the person maintaining the accounting record. Thus, in my opinion, there will not only be a duplication of effort, but additional effort required on the part of the Division 2 Engineer and his staff if the positions of Operations Secretary and Assistant Operations Secretary are rotated between the states.

For the foregoing reasons, it is my recommendation that the offices of Operations Secretary and Assistant Operations Secretary should not be rotated between the states.

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**BY-LAWS  
OF THE  
ARKANSAS RIVER COMPACT ADMINISTRATION**

As readopted December 9, 1997

**PREAMBLE**

Pursuant to Article VIII B(1) of the Arkansas River Compact, these by-laws were readopted by the Arkansas River Compact Administration on the 9th day of December 1997, namely:

**ARTICLE I THE ADMINISTRATION**

1. The Arkansas River Compact Administration is herein referred to as "the Administration."
2. Membership of the Administration shall consist of three representatives from each of the States of Colorado and Kansas, designated or appointed as provided by the Arkansas River Compact and the law of each of such States, and, if designated by the President, one representative of the United States of America.
3. The credentials of each such representative shall be filed with the Secretary of the Administration.
4. Each representative shall advise in writing the Secretary of the Administration as to his address, to which all official notices and other communications of the Administration shall be sent and shall further promptly advise in writing the Secretary as to any change in such address.

## **ARTICLE II OFFICERS**

1. The officers of the Administration shall be: Chairman, Vice-Chairman, Recording Secretary, Treasurer, Operations Secretary, and Assistant Operations Secretary.
2. The representative of the United States of America shall be the Chairman of the Administration. The Chairman shall preside at meetings of the Administration. His duties shall be such as are usually imposed on such an officer and such as may be assigned to him by these by-laws or by the Administration from time to time.
3. The Vice-Chairman shall be a member of the Administration. He shall be elected at the annual meeting of the Administration, and shall hold office until the next annual meeting of the Administration and until his successor is elected. In the case of a vacancy in the office of Vice-Chairman, the Administration at its next meeting, whether regular or special, shall elect a Vice-Chairman to serve for the unexpired term; and the election of a Vice-Chairman may be made at any meeting of the Administration prior to the holding of its first annual meeting, and in such case he shall hold office until such annual meeting. The Vice-Chairman shall perform all duties of the Chairman when the latter is unable for any reason to act or when, for any reason, there is a vacancy in the office of the Chairman. In addition, the Vice-Chairman shall perform such other duties as may be assigned to him by these by-laws or by the Administration from time to time.
4. (a) The Recording Secretary may or may not be a member of the Administration. He shall be elected by the Administration at its annual meeting and shall serve until the next annual meeting or until his successor is elected. In the case of a vacancy in the office of the Recording Secretary, the Administration shall, at its next meeting, whether regular or special, elect a Recording Secretary to serve for the unexpired term. The Recording Secretary shall perform such duties as are imposed on such officer by subparagraph (b) of this paragraph 4, by other provisions of these by-laws, or by the Administration from time to time. He shall furnish a bond for the faithful performance of his duties if the Administration so directs. The cost of such bond shall be paid by the Administration.  
(b) The Recording Secretary's duties shall include, but not be limited to:
  - (i) Preparing, or causing to be prepared, the Administration's annual reports and printing and distributing, or causing to be printed and distributed, the same, the draft of such annual reports to be distributed to the members of the Administration not later than February 1st following the end of the immediately preceding compact year.
  - (ii) Preparing and distributing, or causing to be prepared and distributed, minutes of all meetings, whether special, special telephonic, or regular, of the Administration, drafts of which minutes shall be provided to the members of the Administration within thirty days of the meeting involved.
  - (iii) Maintaining the principal office and the records, equipment, and supplies therein, and maintaining the seal of the Administration.

- (iv) Sending notices of annual and special meetings to members of the Administration.
  - (v) Publishing the necessary public notices for proposed changes of the Administration's Rules and Regulations as required herein and compiling those Rules and Regulations.
5. The Treasurer may or may not be a member of the Administration; and the office of Secretary and Treasurer may be held by the same person if directed by the Administration. He shall be elected at the annual meeting of the Administration and shall hold office until his successor is elected and shall have qualified, except a treasurer may be elected prior to the first annual meeting of the Administration and in such case shall hold office until such annual meeting. He shall receive, hold, disburse and keep records of all funds of the Administration; and he shall furnish a bond for the faithful performance of his duties in such amount as the Administration may direct. The cost of such bond shall be paid by the Administration. In the case of a vacancy in the office of Treasurer, the Administration shall, at its next meeting, whether regular or special, appoint a successor to serve for the unexpired term.
6. (a) The Operations Secretary shall not be a member of the Administration, but may be the Division Engineer for Division 2, Colorado Division of Water Resources or the Water Commissioner of the Garden City Field Office, Division of Water Resources, Kansas Department of Agriculture or other qualified individual. He or she shall be elected by the Administration at its annual meeting and shall serve until the next annual meeting or until his successor is elected. In the case of a vacancy in the office of the Operations Secretary, the Administration shall, at its next meeting, whether regular or special, elect an Operations Secretary to serve for the unexpired term. The Operations Secretary shall perform such duties as are imposed on such officer by subparagraph (b) of this paragraph 6, by other provisions of these by-laws, or by the Administration, acting through the Operations Committee, from time to time.
- (b) The Operations Secretary's duties shall include, but not be limited to:
- (i) Regulating the gates of John Martin Reservoir in accordance with Compact and any operating plans or procedures adopted thereunder.
  - (ii) Keeping accurate daily records on the water stored in John Martin Reservoir, including all matters appurtenant thereto such as the amount of water residing in or being transferred to special reservoir accounts, evaporation of water from the reservoir which is to be prorated among such accounts, and the determination of transit losses and the procedures for computing such in all matters regarding water being transferred to or from said reservoir and accounts therein.
  - (iii) Preparing accurate reports of deliveries of water, which reports shall be presented to the Operations Committee.
  - (iv) Provide information, maintain open communications and consult with the Assistant Operations Secretary in the performance of the duties set forth

above.

(c) The Operations Secretary and the Assistant Operations Secretary shall not be residents of the same state. <sup>9/</sup>

7. (a) The Assistant Operations Secretary shall not be a member of the Administration, but may be the Water Commissioner for the Garden City Field Office, Division of Water Resources, Kansas Department of Agriculture; the Division Engineer for Division 2, Colorado Division of Water Resources; or other qualified individual. He or she shall be elected by the Administration at its annual meeting and shall serve until the next annual meeting or until his or her successor is elected. In the case of vacancy in the office of the Assistant Operations Secretary, the Administration shall, at its next meeting, whether regular or special, elect an Assistant Operations Secretary to serve for the unexpired term. The Assistant Operations Secretary shall perform such duties as are imposed on such officer by subparagraph (b) of this paragraph 7, by other provisions of these by-laws, or by the Administration, acting through the Operations Committee, from time to time.
- (b) The Assistant Operations Secretary's duties shall include, but not be limited to, assisting the Operations Secretary in the performance of his or her duties, as set forth in 6(b) herein, subject to the mutual agreement of the Operations Secretary and the Assistant Operations Secretary.
8. The Administration may employ such engineering, legal, clerical, and other personnel as, in its judgment, may be necessary. They shall receive such compensation and perform such duties as may be fixed by the Administration. Such employees shall not be considered as employees of either Colorado or Kansas.

### **ARTICLE III PRINCIPAL OFFICE**

1. The principal office and place of business of the Administration shall be located in the City of Lamar, Colorado.
2. The principal office shall be open for business on such hours and days as the Administration may from time to time direct.
3. All books and records of the Administration shall be kept in the principal office of the Administration.

#### **ARTICLE IV MEETINGS**

1. The annual meeting of the Administration shall be held on the second Tuesday in December of each year.
2. (a) Special meetings of the Administration may be called by the Chairman or, in the case of a vacancy in the office of Chairman or inability of the Chairman to act, by the Vice-Chairman. Upon the written request of two or more representatives, it shall be the duty of the Chairman, or Vice-Chairman, as the case may be, to call such a meeting.  
  
(b) Special telephonic meetings of the Administration may be held by telephonic communications between the several members of the Administration in respect to all matters arising under Article V F of the Compact; Provided that such special telephonic meetings may be called by the Chairman, Vice-Chairman or any member of the Operations Committee, and in any case at least two representatives of each State shall participate personally in such special telephonic meetings and concur in the action taken as a result of any such meeting. And provided further, that the Secretary of the Administration shall prepare minutes of any special telephonic meeting and such minutes shall be acted upon by the Administration at the next Annual meeting or special meeting held under sub-section (a) hereof.
3. Notices of all annual meetings of the Administration shall be sent by the Secretary, or in the case of a vacancy in the office of the Secretary, or the inability of the Secretary to act, by the Chairman or Vice-Chairman, as the case may be, to the members of the Administration by ordinary mail at least ten days in advance of such annual meetings. Notice of special meetings shall be given by the Secretary to the members of the Administration by the most expeditious method so as to allow as much time prior to such special meetings as conditions permit.
4. Unless otherwise agreed to in advance by all members of the Administration, all annual and special meetings shall be held at the principal office of the Administration.
5. (a) The Administration shall keep minutes of the proceedings of all of its meetings. Such minutes shall be preserved in a suitable manner as directed by the Administration. Until approved by the Administration, minutes shall not be official and shall be furnished only to the members of the Administration, its employees, and the members of its committees. Distribution of official minutes shall be made by the recording secretary or his designee in accordance with directives of the Administration.  
  
(b) Unless the requirements of this sub-section (b) are waived pursuant to sub-

section (c), a verbatim transcript of the proceedings of Administration meetings shall be made by a duly licensed, official court reporter. The recording secretary or his designee shall be responsible for arranging for the services of such duly licensed, official court reporter to take and transcribe the proceedings of the meeting. Copies of the draft transcript of a meeting shall be provided to one designated representative from each member state within two weeks of a meeting for corrections, but not editing. Corrections agreed upon by these two representatives shall be forwarded to the court reporter and the court reporter instructed to prepare within two weeks a final, corrected transcript. The recording secretary or his designee shall forward a copy of the final, corrected transcript of a meeting to the designated representative from each member state of the Administration within two weeks of his receipt of the transcript from the court reporter. The final, corrected transcript of a meeting shall, upon the approval of the Administration, become the official minutes of that meeting. The official minutes shall be appropriately marked indicating the date of and method of approval and be signed by the chairman.

(c) The requirements of using a duly licensed, official court reporter as set out in sub-section (b) may be waived in advance of a meeting upon the agreement of both states. In this event, the recording secretary or his designee shall be responsible for electronically recording a meeting, and for preparing as directed by both states, either a written summary which accurately reflects the proceedings of a meeting and all actions taken by the Administration at such meeting or a verbatim transcript of the meeting. Procedures for the distribution and approval of final corrected transcripts or summaries and designation as the official minutes of a meeting shall be as specified in subsection (b). Any electronic recording of a meeting shall be preserved by the recording secretary but shall not constitute the official minutes of a meeting.

6. A quorum for any meeting of the Administration and the casting of votes by representatives of the States on the Administration shall be in accord with Paragraph D of Article VIII of the Arkansas River Compact; and any action by the Administration shall be determined by vote as required by such paragraph D of Article VIII of the Compact. If a quorum is not present at any meeting, the members of the Administration present, one or more, may adjourn from time to time without further notice until a quorum is obtained.
7. At each meeting of the Administration, the order of business, unless otherwise agreed, shall be as follows: Call to order; Reading of minutes of last meeting; Approval of minutes of last meeting; Report of Chairman; Report of Secretary; Report of Treasurer; Report of Committees; Unfinished business; New business; Adjournment.
8. All meetings of the Administration, except executive sessions, shall be open to the

public.

9. Any meeting of the Administration may be adjourned or continued from time to time and from the place set for the meeting to another place.
10. Public notice of all annual, regular, and special meetings shall be given in an appropriate manner, determined by the Administration, except in cases where the Administration determines to hold an executive session.

#### **ARTICLE V COMMITTEES**

1. There shall be the following standing committees: Administrative and Legal Committee, Engineering Committee, and Operations Committee.
2. Each of such committees shall be made up of two representatives of the Administration and the Chairman shall be ex-officio member of all committees. In all committee action a vote shall be taken by States with each State having one vote.
3. The standing committees shall have the following duties:
  - (a) The Administrative and Legal Committee shall advise the Administration with respect to budgets and accounting, office personnel, equipment, records, and legal matters; and shall prepare the draft of the annual report of the Administration.
  - (b) The Engineering Committee shall advise the Administration on all engineering matters; and shall compile all pertinent engineering data and records.
  - (c) The Operations Committee shall advise the Administration concerning, and shall have direct supervision over, rules and regulations governing the storage and releases of water from John Martin Reservoir and over such other Arkansas River interstate administration and operation between the States of Colorado and Kansas as come within the purview of the Arkansas River Compact, subject at all times to the provisions of such compact and the directives of the Administration thereunder. This committee shall be responsible for maintaining appropriate relations, under the direction of the Administration, with the chief officials of each of the States of Colorado and Kansas charged with the administration of water rights, and for maintaining appropriate relations with interested Federal agencies. The Operations Committee shall also be responsible, under directives and orders of the Administration, for supervision over the employees of the Administration engaged in the interstate administration of the waters of the Arkansas River pursuant to the Arkansas River Compact.
4. The Chairman of each Committee shall be designated by the Administration.

5. The Administration may, from time to time, create special committees composed of such members of the Administration and others as it may determine and assign to such committees such tasks as the Administration may designate.
6. Each committee shall make a report to the Administration at each annual and regular meeting and shall make such further reports as may be directed by the Administration. Unless otherwise authorized, all such reports shall be in writing and filed with the Secretary of the Administration.
7. Written notice of the meetings of standing committees and of special committees shall be given to all officers and members of the Administration at least ten days prior to the date for any such committee meetings, said written notice to specify the time, date, location, and agenda for such meetings. A standing committee or special committee may waive such notice requirement if all members of a committee agree that circumstances so warrant. In the event of such a waiver, the chairman of a committee shall make every reasonable effort to inform all officers and members of the Administration of the time, date, location and agenda for a committee meeting.

#### **ARTICLE VI RULES AND REGULATIONS**

1. The Administration shall adopt Rules and Regulations necessary for the administration of the Arkansas River Compact, consistent therewith and with these by-laws.
2. All proposals for Rules and Regulations, or for changes in them, shall be presented to the Administration in writing and shall not be acted on at the meeting when first presented, but shall go over for action at a designated subsequent meeting of the Administration.
3. Following the presentation to the Administration, public notice of all proposed Rules and Regulations and changes in Rules and Regulations shall be given by two publications, at least one week apart, in some newspaper of general circulation in the area of each State affected by the Arkansas River Compact. The representatives of the Administration from each State shall designate the newspaper in their State in which such publication shall be made. No Rule or Regulation and no change in any Rule or Regulation shall be effective until a date specifically stated in the published notice, which date shall be at least ten days after the last publication.
4. The provisions, contained in this Article, for Rules and Regulations and notice thereof shall not be effective in the case of any notice which is otherwise required under the Arkansas River Compact or in any case where, in the judgment of the Administration, effective administration and the public interest under the Arkansas River Compact, require more expeditious action.



5. It shall be the duty of the Secretary to see that the necessary notices are published as herein required.
6. It shall be the duty of the Secretary to compile the Rules and Regulations of the Administration and to prepare copies for distribution to the public under such terms and conditions as the Administration may prescribe.

## **ARTICLE VII FISCAL**

1. All funds of the Administration shall be received by the Treasurer and deposited by him to the credit of the Administration in a depository or depositories designated by the Administration.
2. Disbursement of such Administration funds shall be made by check signed by the Treasurer and countersigned by the Chairman or Vice-Chairman of the Administration.
3. The Administration shall annually adopt and transmit to the Governor of each State, its budget covering anticipated expenses for the ensuing fiscal year, and the amount thereof payable by each State.
4. The fiscal accounts of the Administration and its employees shall not be subject to the auditing and accounting procedures of either the States of Colorado or Kansas; provided, that each State shall have the right to make an examination and audit of the accounts of the Administration at any time.
5. All receipts and disbursements of the Administration shall be audited yearly by a certified public accountant to be selected by the Administration, and the report of audit shall be included in the annual report to the Administration.
6. The Treasurer shall prepare and keep an up-to-date inventory of all the property of the Administration.
7. The fiscal year of the Administration shall begin July 1 of each year and end June 30 of the next succeeding year.

## **ARTICLE VIII ANNUAL REPORT**

1. The report-year referred to in this Article for the making of the annual report shall commence on November 1 and end on the succeeding October 31.
2. The Administration shall make and transmit on or before January first of each year to the Governors of the States of Colorado and Kansas and to the President of the United States a report covering its activities for the preceding report-year. The annual report shall include, among other things, the following:
  - (a) The receipts and expenditures of all funds of the Administration and all pertinent financial data.
  - (b) All hydrologic data relating to the Arkansas River which the Administration deems

pertinent.

(c) Statements as to cooperative studies of water supplies made during the preceding year, including cooperative studies and activities with any Federal agency.

(d) All findings of fact made by the Administration during the preceding year.

(e) Such other pertinent matters as the Administration may deem advisable.

#### **ARTICLE IX SEAL**

1. The official seal of the Administration shall be circular in form with the words "Arkansas River Compact Administration" imprinted around the border and the word "Seal" in the center thereof.
2. The Secretary of the Administration shall have custody of the seal of the Administration.

#### **ARTICLE X MISCELLANEOUS**

1. The Administration and its Secretary on request shall furnish to the Governor of each of the States of Colorado and Kansas any information within its possession at any time, and shall always provide free access by the public to its records. Except in the case of the Governor of each of the States of Colorado and Kansas, or interested Federal agencies, the cost of furnishing information shall be paid by the person seeking it at such rates as may be fixed by the Administration.
2. All contracts and other instruments in writing required to be signed for and on behalf of the Administration, except matters relating to the receipt and disbursement of funds, shall be signed by the Chairman or Vice-Chairman and Secretary. The seal of the Administration shall be affixed thereto.

#### **ARTICLE XI AMENDMENTS TO BY-LAWS**

1. Amendments to the By-Laws may be made at any meeting of the Administration, provided notice of the proposed amendment shall have been given in the notice of the meeting.

Readopted by the Arkansas River Compact Administration at the December 9, 1997

Annual Meeting in Lamar, Colorado.

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Larry E. Trujillo, Sr., Chairman

Mary Louise Clay, Recording Secretary



# Rules and Regulations of ARKANSAS RIVER COMPACT ADMINISTRATION

Effective April 15, 1950

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## Explanatory Statement

The Arkansas River Compact is herein referred to as the "Compact", and the Arkansas River Compact Administration is herein referred to as the "Administration".

Under the Compact, authority and responsibilities for the operation and maintenance of John Martin Dam and Reservoir, for the release of water therefrom, for the interstate operation of the Arkansas River between Colorado and Kansas and for the intrastate distribution of water of that river, are divided among these Federal and State agencies, viz: the Corps of Engineers, United States Army, the Administration and the Chief Official in each of the States of Colorado and Kansas charged with the administration of water rights.

The authority and responsibilities of each of these agencies and officials are recognized to be as follows:

### Corps of Engineers, United States Army.

1. The Corps of Engineers is authorized to operate and maintain the John Martin Dam and Reservoir for flood control and conservation purposes: Provided, that the conservation pool in such project shall be operated in a manner conforming with the Arkansas River Compact.

2. Under the provisions of the Compact, the maintenance of John Martin Dam and appurtenant works may at times require the Corps of Engineers to release water then impounded in the conservation pool, or to prohibit the storage of water therein, until such maintenance work is completed and that flood control operations may also involve temporary utilization of conservation storage.

### The Arkansas River Compact Administration

1. The conservation pool in John Martin Reservoir will be operated for the benefit of water users in Colorado and Kansas, both upstream and downstream from John Martin Dam, as provided in the Compact.

2. The administration has the authority and responsibility to effectuate the apportionment of water between the States of Colorado and Kansas in the manner provided for and in accordance with the Arkansas River Compact, including these provisions:

- (a) Article V A, B, C, D and E of the Compact relating to the releases, and reduction in releases, of water from storage in the conservation pool of John Martin Reservoir and of

river flow through such reservoir, and also to making such water available for use in each of the two States.

- (b) Article V F requiring the Administration to make findings and give notice with respect to the exhaustion of water in the conservation pool of John Martin Reservoir.
- (c) Article V H requiring the Administration to make findings of fact with respect to proposed transfer of priority rights to ditches in Colorado Water District Number 67 to points of diversion upstream from John Martin Reservoir and with respect to a proposed increase in diversion rights from the Arkansas River in Water District Number 67 and in Kansas between the Stateline and Garden City, Kansas.

3. The Administration is charged among other duties, with carrying out these additional provisions of the Compact:

- (a) Article VIII G (1), (2) and (3) requiring the Administration (1) to determine from time to time, in collaboration with appropriate Federal and State agencies, the location of gaging stations required for the proper administration of the Compact; (2) to require, if necessary for the administration of the Compact, the installation and maintenance of measuring devices in any ditch or group of ditches diverting water from the Arkansas River in Colorado or Kansas; (3) to cooperate with the Chief Official of each of the States of Colorado and Kansas charged with the administration of water rights and with Federal agencies in the procurement, interchange, compilation, and publication of all factual data bearing upon the administration of the Compact; and (4) to call upon interested Federal agencies and officials to collaborate with the Administration and with appropriate State officials to facilitate the administration of the Compact.
- (b) Article VIII H requiring the Administration to investigate violations of any of the provisions of the Compact or other action prejudicial thereto, which comes to the attention of the Administration, and, when deemed advisable, to report its findings and recommendations to the Chief Official of each of the States of Colorado and Kansas charged with the administration of water rights.
- (c) Article VIII B (1) and (2) requiring the Administration to adopt and revoke By-Laws, Rules and Regulations, prescribe procedures for the administration of the Compact, and to adopt and transmit to the Governors of each of the States of Colorado and Kansas in each even-numbered year its budget covering anticipated expenses for the forth-coming biennium.

**Chief Official of Each of the States of Colorado and Kansas Charged With the Administration of Water Rights.**

1. Nothing contained in the Compact, or in the By-Laws and Rules and Regulations of the Administration thereunder, supplants, or is intended to supersede, the authority of the Chief Official of each of the States of Colorado and Kansas charged with the administration of water rights, with respect to the administration and distribution of water which is available to each of such States under the provisions of the Compact.

2. The Chief Official charged with the administration of water rights in Kansas will exercise full jurisdiction and control over the

waters of the Arkansas River that originates in Kansas and over the waters that flow from Colorado across the Stateline into Kansas. (Article VI A (1)).

3. The Chief Official of Kansas charged with the administration of water rights is given and assumes exclusive administrative control, under the Compact, over the operations of the Frontier Canal and its headworks for irrigation uses in Kansas to the same extent as though such works were located entirely within the State of Kansas. (Article VI B).

4. Except as otherwise provided, nothing in the Compact shall be construed as supplanting the administration by Colorado of the rights of appropriators of water of the Arkansas River in that State as decreed to such appropriators by the courts of Colorado, nor as interfering with the distribution among such appropriators by Colorado, nor as curtailing the diversion and use for irrigation and other beneficial purposes in Colorado of the waters of the Arkansas River. (Article VI A (2)). Accordingly, the State Engineer of Colorado, by virtue of the authority given him under the Colorado statutes, and in conformity with the Arkansas River Compact, has authority and responsibility as follows:

- (a) During such periods of time when no water remains in storage in the conservation pool of John Martin Reservoir and after the Administration, pursuant to Article V F of the Compact, has made a finding that such storage will be or is liable to be exhausted and gives notice thereof as prescribed by Article V F of the Compact, he shall administer the decreed water rights of water users in Colorado Water District Number 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 Dam began to operate. (Article V F).
- (b) During such times as there is water in storage in the conservation pool of John Martin Reservoir and water is available for release from such storage or from river flows which may be passed through such reservoir under the provisions of the Compact, he shall administer diversions of water in Colorado Water District Number 67 in accordance with distribution agreements made from time to time by the water users in such District and filed with the Administration and with the State Engineer of Colorado, or in the absence of such agreements, upon the basis of respective priority decrees, as against each other, in said District. (Article V F).
- (c) During such times as there is water in storage in the conservation pool of John Martin Reservoir and water is available for release from such storage, or from river flows which may be passed through such reservoir under the provisions of the Compact, he shall administer 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 before John Martin Dam began to operate, as against each other and without regard to any priority rights in Colorado Water District Number 67 (Article V F).
- (d) He shall furnish pertinent factual data to the Administration upon its request; and he is required to supervise the instal-



lation of measuring devices required by the Administration under Article VIII G (3) of the Compact.

- (c) He shall collaborate, on behalf of his State, in providing such available facilities, equipment and other assistance as the Administration may need to carry out its duties, in accordance with the provisions of Article VIII F of the Compact.

## RULES AND REGULATIONS

Based on the foregoing delineation of authority and responsibilities, and with the approval of the Corps of Engineers, these Rules and Regulations for the administration of the Compact are adopted by the Administration, pursuant to Articles V E (6) and VIII B (1) of the Compact and in accordance with Article VI of the By-Laws of the Administration.

1. Under the general direction of the Administration, the Operations Committee, set up under Article V of the By-Laws of the Administration, shall have supervision over these Rules and Regulations governing the storage and release of water from the conservation pool of the John Martin Reservoir and over such other Arkansas River interstate administration and operation between the States of Colorado and Kansas as come within the purview of the Compact.

2. The Administration hereby delegates to the Secretary of the Administration, acting under the direct supervision of the Operations Committee, the following duties and functions:

- (a) (1) To receive calls from an authorized representative of the water users in Colorado and in Kansas for releases and reduction in releases of water in storage in the conservation pool of John Martin Reservoir and of river flow through such reservoir, under the provisions of the Compact; (2) to ascertain from day to day and from time to time the total quantities of water available and required to fulfill such calls; (3) to request the Reservoir Manager of John Martin Dam and Reservoir of the Corps of Engineers to make releases and reduction in releases of quantities of water required to meet such calls; and (4) to ascertain from time to time, as necessary, between the first day of April and the 31st day of October of each year, the water available at the Colorado-Kansas Stateline for use in Kansas in order to effectuate the apportionment of water to Kansas as provided by the Compact. For the purpose of carrying out the functions and duties set forth in this Paragraph 2 (a), and in compliance therewith, the Secretary of the Administration is hereby authorized, on behalf of the Administration, to make appropriate and cooperative use of the services of all interested Federal and State agencies and officials.
- (b) To be responsible for the day-by-day relations with the Chief Official of each of the States of Colorado and Kansas charged with the administration of water rights, and with the Corps of Engineers.
- (c) To maintain such records and prepare such reports covering the functions and duties delegated by these Rules and Regulations as may be required of him from time to time by the Administration.
- (d) To report to the Operations Committee, set up under Article V of the Administration's By-Laws, any violations of the pro-

visions of the Compact or other action prejudicial thereto which comes to his attention.

3. The District Engineer, Albuquerque District, Corps of Engineers, or his authorized representative, the Water Commissioner of Colorado Water District Number 67, and the local representative of the U. S. Geological Survey are hereby requested to communicate from time to time to the Secretary of Administration any information and recommendations which relate to, and will aid in, the conservation of water and in the performance of the functions and duties delegated to such Secretary. In the interest of the improvement of operation practices and cooperation, Federal and State officials and agencies are requested to advise the Administration of any complaints or suggestions with respect to the carrying out of these Rules and Regulations.

#### **EFFECTIVE DATE**

These Rules and Regulations shall become effective April 15, 1950, and after publication as required by Article VI 3 of the By-Laws of the Administration.



# ARKANSAS RIVER COMPACT ADMINISTRATION

112 W. Elm Street, P.O. Box 1600, Lamar, Colorado 81052  
719-336-2732

Chairman and Federal Representative

For Colorado

Rodney Kuharich, Denver  
James G. Rogers, Lamar

Thomas R. Pointon, Las Animas

Robin Jennison  
Healy Kansas

For Kansas

David L. Pope, Topeka  
David A. Brenn, Garden City

Randy Hayzlett, Lakin

September 2, 2003

Mr. David Brenn, Chairman  
Arkansas River Compact Administration, Operations Committee, 2002-2003

Mr. James Rogers, Member  
Arkansas River Compact Administration, Operations Committee, 2002-2003

Subject: Status report concerning attempts to resolve concerns raised by the Assistant  
Operations Secretary

Gentlemen,

At the most recent meeting of the Operations Committee and the Administration held on May 22<sup>nd</sup> and 23<sup>rd</sup> 2003, the committee requested the Operations Secretary to prepare a report describing each unresolved issue of concern regarding interpretation and implementation of the 1980 Operating Plan that has been raised by the Assistant Operations Secretary together with a specific justification in support of both sides of each issue, a recommendation concerning the most appropriate level of authority for resolution of each issue, and where possible a specific resolution proposal. It was recognized that legal assistance might be required to fulfill some of these objectives. It was also requested that some measure of the amount of water at stake in each issue be provided. Finally, the report is to include an analysis of the feasibility of periodically alternating the office and associated duties of Operations Secretary between the Division Engineer for Division 2, Colorado Division of Water Resources and the Water Commissioner of the Garden City Field Office, Division of Water Resources, Kansas Department of Agriculture. A status report is expected by September 1, 2003 and the report is to be submitted at the next regular meeting of the Administration scheduled in December 2003.

Two meetings have been held between Mr. Kevin Salter of the Kansas Division of Water Resources, representing the Assistant Operations Secretary and the Operations Secretary since the May 2003 meeting of the Administration.

The first of these meetings occurred on June 26, 2003 in Pueblo, Colorado. The subject of this meeting was the review of issues as summarized in matrix format following meetings of the Administration in Garden City, Kansas on May 9 and 10, 2002. The participants concurred that the best prospects for further progress in resolving differences are in those areas as ordered from top to bottom in the matrix. A copy (9/11 pgs) of the matrix of issues as it has been subsequently revised to reflect the Operations Secretary's understanding of certain issues is attached to this

report for reference. In this report, reference will sometimes be made to the issues as enumerated in the matrix for the sake of convenience. A summary of the issues and the action items from that meeting follow:

- |      |       |  |
|------|-------|--|
|      | 4A1&2 | <p>Contradiction concerning Permanent Pool evaporation assessment and alternative sources of water to replace evaporation</p> <ul style="list-style-type: none"> <li>• This issue was assigned to the Engineering Committee 5/02</li> </ul>  |
|      | 4B1&2 | <p>Winter Water Account of convenience and timely distribution of 35% storage charge</p> <ul style="list-style-type: none"> <li>• Kansas requested to review and comment on Colorado's 5/02 draft resolution to address these issues</li> </ul>  |
|      | 4B3   | <p>Criteria for determining storage of Section III vs. Compact water</p> <ul style="list-style-type: none"> <li>• Kansas committed to determine if changes to proposed alternative accounting procedure have been made to respond to Colorado's previous criticisms.</li> <li>• Kansas was requested to consider whether the comparison of current conservation storage to that of the 1950-1975 period required of the Operations Secretary by paragraph 8. J. of the Colorado Water Court decree entered in case 84CW179 provides significant reassurance concerning the determinations being made.</li> </ul> |
| Tech | 4C1   | <p>Appropriate determination of transit loss under Section II (E)(4)</p> <ul style="list-style-type: none"> <li>• Kansas requested to review and comment on "Evaluation of Kansas Article II Deliveries from John Martin Reservoir to Stateline (1980-2002) prepared by Thomas W. Ley, PE, PhD presented to Kansas 5/03</li> </ul>   |
| Tech | 4C2   | <p>Appropriate accounting procedure to be used in settlement for deficit in delivery of Article II to Kansas</p> <ul style="list-style-type: none"> <li>• Colorado to clarify position of Operations Secretary in matrix</li> <li>• Kansas was reminded of its 5/02 commitment to provide a proposed clarifying resolution on this issue.</li> </ul>   |
|      | 4D2   | <p>Non-reporting of Section II(C)(1) determination</p> <ul style="list-style-type: none"> <li>• Kansas agreed to verify whether or not an incident of inappropriate temporary storage or averaging of flows is alleged in 2002</li> </ul>  |
|      | 4E1&2 | <p>Interrupted transfers from conservation storage to accounts</p> <ul style="list-style-type: none"> <li>• Colorado to clarify its position in matrix</li> <li>• Kansas to provide a principled basis for this concern</li> </ul>   |

On July 15, 2003 the Operations Secretary provided clarifications concerning the positions included in the matrix for those issues indicated above. These changes appear in blue in the attachment.

The second meeting was held on August 7, 2003. At this meeting the following transpired with respect to the issues:

- 4B1&2 Winter Water Account of convenience and timely distribution of 35% storage charge
- Without providing comment concerning Colorado's 5/02 proposed resolution, Kansas verbally offered an alternative idea for consideration... Colorado requested consideration of and response to its proposal before entertaining additional ideas.
- 4B3 Criteria for determining storage of Section III vs. Compact water
- Kansas reported that it has not revised its alternative accounting procedure in response to Colorado's criticisms, however, they are in the process of converting the application to Excel format prior to making those changes
  - Colorado responded to a criticism of the comparison of current conservation storage to that of the 1950-1975 period that had been provided for review by revising the data used to be consistent with that in the ARCA annual reports and provided a revised summary for Kansas' review
  - Kansas also noted that the comparison would be more meaningful if it were to be adjusted to account for the fact that during the 1950-1975 period conservation storage was affected by the 100 cfs pass through provision pursuant to Article V (A) of the Compact.
- 4C1 Appropriate determination of transit loss under Section II (E)(4)
- Kansas reported no progress in reviewing the Ley report, however, a request was made for the underlying data and analysis in order to facilitate verification of the conclusions.
  - Colorado renewed its request for daily diversion records by Kansas ditches for the period concurrent with and subsequent to each demand for Section II account water releases from 1980 to the present to be used to determine the period of time following the end of a release made for Kansas during which Kansas ditches generally continue to benefit from the release operation. This should aid in formulating an appropriate definition of transit loss to be used in such determinations.
- 4C2 Appropriate accounting procedure to be used in settlement for deficit in delivery of Article II to Kansas
- Kansas did not present a proposed resolution to clarify the appropriate procedure.
- 4D2 Non-reporting of Section II(C)(1) determination
- Kansas provided no report to verify whether a complaint involving inappropriate temporary storage or averaging of flows is alleged in 2002
- 4E1&2 Interrupted transfers from conservation storage to accounts
- The principle behind Kansas' concerns remain unclear

A portion of this meeting was devoted to a discussion of the concept of alternating the office and associated duties of Operations Secretary between the states. While there seems to be some consensus that the prospect of the implementation of this idea may facilitate resolution of issues, however, it is also obvious that such resolution is a prerequisite in order to prevent either extreme vacillations of operational and accounting practices from one administration to the next, or dictating acts against conscience. Never the less, it was decided that the best way to proceed would be to schedule a meeting involving, at minimum, the personal participation of both the Operations Secretary and the Assistant Operations Secretary and as many of their staff as may seem appropriate and where a significant portion of the agenda is devoted to exploring the concept. It is believed that the purposes of this meeting will be facilitated if the Assistant Operations Secretary, as a Kansas official and representative of the state that proposed evaluation of the feasibility of the idea would prepare a brief concept paper outlining the potential benefits that might be derived from the proposed arrangement so that Colorado officials might have something concrete to consider and make response to. The Operations Secretary committed to write to the Assistant Operations Secretary to make this request and propose alternative meeting dates.

In a letter to Thomas R. Pointon, a co-member of the ARCA Engineering Committee, dated August 19, 2003, the Kansas Chief Engineer urged expedient disposition of matrix issue 4A1 by recommending confirmation of the practice of assessing evaporation to all accounts, including the Permanent Pool, based on a pro rata distribution in relation to the volume of water in each account. This suggestion was made without acknowledgement of the additional loss to the Permanent Pool associated with that methodology, which has been estimated to be between 300 to 1000 acre-feet per year and determined by the Operations Secretary to have been 508 acre-feet for CY 1998. Neither has any consideration been given to resolve matrix issue 4A2 regarding alternative sources of water that may be authorized to be used by Colorado to replace such additional losses.

On August 19, 2003, the Operations Secretary provided the electronic files containing data and analysis that formed the basis for Mr. Ley's conclusions included in his paper provided to Kansas for the purpose of facilitating discussions concerning a procedure that may be agreed upon by the state's administrative officials in determining transit losses as is their responsibility under Section II (E)(4) of the 1980 Operating Plan resolution. This pertains to matrix issue 4C1.

By letter dated August 26, 2003, Mr. Salter presented an interpretation of the 1980 Operating Plan that he believes obviates the need for Kansas to prepare a clarifying resolution thought to be necessary in formulating the description of matrix issue 4C2. While this paradigm shift is certainly worth considering and may indeed be the key to resolving how delivery deficits ought to be handled, the main focus of our energy needs to be on how the states should determine if deficits have occurred... the crux of the matter is matrix issue 4C1.

By email, also dated August 26, Mr. Salter advised of his plans to have comments pertaining to the Ley report prepared before our next meeting (not yet scheduled), which should advance matrix issue 4C1 discussions to define a mutually acceptable procedure for determining transit losses and delivery deficits that may occur in connection with Kansas Section II releases.

Additionally, in the same email, Mr. Salter stated his intentions to provide a letter within the next couple of weeks providing his comments concerning the 5/02 draft resolution offered by Colorado as a possible means of resolving matrix issues 4B1&2.

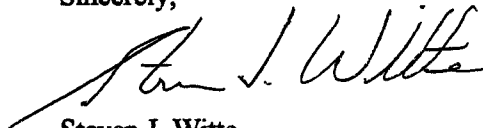
Looking forward, it is hoped that another meeting might be scheduled on Wednesday and/or Thursday, September 24, 25, 2003. Subjects ripe for further consideration include:

- 4B1&2      Winter Water Account of convenience and timely distribution of 35% storage charge
  - Discussion of Mr. Salter's response to Colorado's proposed resolution
- 4C1      Appropriate determination of transit loss under Section II (E)(4)
  - Discussion of Mr. Salter's comments pertaining to the Ley report
  - Discussion of additional work to be undertaken as proposed by Ley and the possibility of joint participation by both states
- 4C2      Appropriate accounting procedure to be used in settlement for deficit in delivery of Article II to Kansas
  - Discussion of Mr. Salter's August 26<sup>th</sup> interpretation of the 1980 Operating Plan
- 4D2      Non-reporting of Section II(C)(1) determination
  - Discuss whether or not Kansas believes that an incident of inappropriate temporary storage or averaging of flows occurred in 2002
- 4E1&2      Interrupted transfers from conservation storage to accounts
  - Discuss whether Kansas holds principled objections to the practices raised as concerns or if resolution is possible through the means suggested in the issues matrix.

The feasibility of alternating the office and duties of Operations Secretary between the states may also be discussed, assuming the Assistant Operations Secretary can deliver a concept paper advocating the procedure in time for this meeting. If not, those discussions may have to be deferred to a later date.

Finally, a final review of those matrix issues that have been previously debated and briefed before the Operations Committee and deemed less likely to be resolved at the staff level should be undertaken to see if agreement can be reached as to the elements requested to be included in the December 2003 Report to the Operations Committee.

Sincerely,



Steven J. Witte  
Arkansas River Compact Administration  
Operations Secretary

Attachment  
CC: Mark Rude





RECEIVED

NOV 17 2003

DIVISION ENGINEER  
PUEBLO, COLORADO

KANSAS DEPARTMENT OF AGRICULTURE

Division of Water Resources  
Garden City Field Office

MEMORANDUM

TO: Jim Rogers  
Dave Brenn  
Robin Jennison

DATE: November 13, 2003

FROM: Kevin L. Salter,  
Arkansas River Team

RE: Meeting between staffs  
October 23<sup>rd</sup> and 24<sup>th</sup>, 2003

On October 23<sup>rd</sup> and 24<sup>th</sup>, staff from Colorado Division II and the Garden City Field Office met in Pueblo, Colorado to discuss the following issues: process to improve coordination and issue resolution, determination of transit losses, categorization of water issues matrix, and rotating the Operations Secretary Responsibilities between the states. In addition, Steve Miller, CWCBC, presented a proposal concerning the evaporation of water from the JMR permanent pool. From this, three (3) work products were generated: tables of dates and communication levels, the water issues matrix, and a joint product to look at transit losses of Kansas deliveries, especially Kansas Section II.

**Dates and Communication**

The Operations Committee asked us to look at dates in the Compact Year (CY) where there were events that warranted communication between the respective state offices. We were also asked to look at which events may warrant communication with the Operations Committee. The stated goal was to establish a process to improve the communication and resolve issues as they occur. Attached are two tables that identify both set dates and other events during the year that may warrant some level of communication. See Attachment A.

These two tables detail events that occur during the CY, either those associated with a set date or events that may occur during the year. Communication was placed into one (1) of four (4) levels: 1) between OS and AOS, 2) with Operations Committee, 3) meeting between staffs, and 4) meeting with Operations Committee. Six (6) set dates associated with specific events were identified. In addition, three (3) meeting dates were identified within the CY. Two (2) of these three (3) meetings would be between the respective staffs to discuss operational issues and may also serve to identify and address emerging issues. The third meeting would be a regular scheduled meeting to address outstanding accounting issues and any emerging issues that couldn't be resolved between the States.

The second table identifies potential events that could occur during the CY. Here there are also four (4) levels of communication. The entirety of these events deals with communication between the respective staffs, but is broken up into those things that are being exchanged on a *daily, monthly, or as needed basis*.

As part of the discussions we had related to this topic, there were two (2) additional comments that were related to the communication that are shown at the bottom of the Events within the compact year.

If additional events are identified, they should be appropriately placed on these tables. It is my understanding that these tables are to start a process that can be followed by the respective staffs to ensure communication is occurring so that potential issues can be addressed as they occur. I would appreciate any feedback that the Operation Committee can provide, including input on the level of communication the committee wants to have on these events.

### **Water Issues Matrix**

The issues identified on the matrix were placed into one of three different categories, defined as follows:

- *Legal* – an issue that is not resolvable at this time or within ARCA
- *Policy* – an issue that needs to have input or guidance from either the Operation Committee or ARCA
- *Technical* – an issue that can be resolved by respective State staffs

During the process of review, a couple of issues were dropped from consideration and a couple of issues were added. It was also decided rather than referring to the issues as they were identified on the Agenda of the Special ARCA Meeting held in May 2002, the issues be renumbered and possibly regrouped. I have since renumbered and regrouped these issues. See Attachment B.

### **Transit Losses of Kansas Deliveries**

The issue of how delivery deficits on Kansas Section II were to be measured was discussed. The Tom Ley paper was summarized which lead to a discussion about how deliveries could be simply measured. The goal is to have a method / procedure to know that a delivery has been satisfied both in volume and flow rate. If not, then the quantities would need to be determined. The staffs will jointly work on this project with a goal of having something in place by April 1, 2004. Potential impediments were identified so that they can be addressed. The possibility of having a one (1) year agreement to test any method or procedure that might be developed was considered.

It was determined that other issues related to transit loss would be deferred at this time. This would include the issue of where delivery deficits would be replenished.

## **Summary**

The staffs meet and developed three work products related to improving communications, categorizing the water issues matrix and determining the delivery deficits on Kansas Section II releases. These work products should continue to advance issues towards resolution.

The staffs did discuss rotating the duties of the Operation Secretary between the respective States. There was no direct work product that could be associated with these discussions.

Steve Miller, CWCB, did present a proposal for permanent pool evaporation and an additional water source for the permanent pool and other Colorado Division of Wildlife projects along the Arkansas River mainstem. Those discussions will be reviewed with David Pope, the Kansas ARCA Commissioner who sits on the ARCA Engineering Committee.

cc: Mark Rude  
Steve Witte  
David Pope  
Steve Miller

# Event Dates within Compact Year

Date	Description	Communication between OS and AOS	Communication with Operation Committee	Meeting between staffs	Meeting with Operation Committee
November 1 <sup>st</sup>	Beginning of CY	X			
November 15 <sup>th</sup>	Beginning of PWSP	X			
November 20 <sup>th</sup> to 25 <sup>th</sup>	Meeting to: -- Rvw past CY -- Look at current CY -- Look at PWSP for current year			X	
December 1 <sup>st</sup>	OS and AOS Reports to Compact are due	X	X		
Second Tuesday in December	ARCA Annual meeting with Operations Committee meeting the prior day				X
March 15 <sup>th</sup>	End of PWSP season	X			
April 1 <sup>st</sup>	Earliest that water can be transferred from Conservation Storage	X			
Mid April	Meeting to: -- Rvw of CY operation from Nov 1 <sup>st</sup> to March 31 <sup>st</sup> -- Rvw of potential water supply -- Augmentation plans -- Coordination of calls: offset & section II			X	Optional
Mid-Summer	This meeting would be a regularly scheduled meeting to address outstanding accounting issues and identify emerging issues				X

## *Events within Compact Year*

Event	Communication between States	Communication with Operation Committee	Meeting between staffs	Meeting with Operation Committee
Summer Storage, or not	As needed			
Spill events	As needed			
Before, during and after delivery to Kansas / both Section II & Offset	As needed			
Pass thru questions: temporary retention, City of Lamar, etc.	As needed			
Delivery to permanent pool	As needed			
Exchange to allow storage in Trinidad Reservoir	As needed			
Exchange of gate orders and reservoir status	Daily (workdays)			
Exchange of JMAS data	Daily (workdays)			
High flow conditions and usable flow at stateline	As needed			
Exchange of information on Trinidad Reservoir	Daily (workdays) and monthly			
Advantages / unfavorable river conditions	As needed			

### *Additional Comments:*

OS recommends Operation Committee meetings should have formalized notes or minutes taken.

OS recommends that there should be a formalized complaint procedure. It was suggested that a standard protocol be developed for complaints: initial concern or complaint may be submitted via email, telephone or by any other means and shall be afforded an in kind response addressing the matter by the counterpart of the other State within a reasonable amount of time. Normally, such concerns or complaints should be raised initially within one week of the occurrence of the event at issue. In any instance where the explanation provided through this informal communication procedure does not satisfactorily resolve the issue the matter may be appealed to the Operations Committee for resolution by affirmatively stating a complaint or request in a written document with detailed documentation of the relevant facts provided to each member of the Operating Committee and the counterpart of the other State, at least one week in advance of any consideration of the matter or action by the Operations Committee.

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
10	<p>Permanent Pool evaporation charges calculated by pro rata volume vs. incremental area</p> <p><i>See Supplement A</i></p> <p>– Language of the 1980 Operating Plan and the 1976 Resolution establishing the Permanent Pool</p>		Policy		Evaporation should be pro rata by volume on all accounts. The permanent pool is recognized as an account in the 1980 Operating Plan.	<p>Agreed that pro rata by volume is fairest and simplest method, but need to clear up inconsistent provisions between 1980 Plan and 1976 resolution authorizing permanent pool and containing specific perm pool Operating Criteria</p>	<p>The Permanent Pool is a recognized account in the 1980 Operating Plan. As such, the 1980 Operating Plan does include the permanent pool in the pro rata by volume evaporation method. In review of documents related to the development of the 1980 Operating Plan, it would seem that the Permanent Pool was to be charged evaporation on a volume basis. The reference to the 1976 Resolution was to show that charging the Permanent Pool evaporation was nothing new.</p>	<p>Propose to resolve inconsistency by new resolution modifying the Operating Criteria attached to the 1976 resolution and superceding the provision as to evaporation calculation and authorizing at same time a new source of water for the perm pool based on consumptive use water from transfer of existing Colorado irrigation rights. "stand its pro rata share on the same basis as with all other accounts."</p>	<p>Recommend continued use of pro rata by volume for CY2002.</p> <p>Recommend that ARCA assign the Engineering Committee to consider other sources of Permanent Pool water and other ways to resolve the issue. The Engineering Committee should make a recommendation to ARCA in December. – ARCA formally adopted this as a resolution on 10 May 2002.</p>
12	Consideration of new sources of permanent pool.		Policy						See Issue 10 above.
20	Winter Water Account of convenience		Policy		See letter dated 21 October 2003 from Kevin Salter				

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
21	Timely distribution of Section III storage charge during Pueblo Winter Water Storage Program (PWWSWP)				<p>All Section III water delivered to JMR must be assessed the 35% charge at the time of delivery. There is no authority to store PWWSWP water in JMR except in one of the three Section III accounts. There is no provision to spill unauthorized accounts.</p>	<p>Understands Kansas concerns with delay of 35% of PWWSWP inflows to the transit loss account, but account is necessary to perform accounting and reconciliation of PWWSWP inflows on March 15<sup>th</sup> prior to allocating water to individual accounts.</p> <p>Section II (E) 1 &amp; 5 with KS calls</p>	<p>Restore any 35% charge water incorrectly reported as spilled in prior years, and operate accounts as required. Any amendments necessary to assist participants in the operation of the PWWSWP can be considered when properly presented to the administration.</p>	<p>Amend 1980 Operating Plan to allow continued existence of Winter Water Account subject to provisions that:</p> <p>1) In the event of a spill, distribution into Section III shall be made pursuant to terms of Section III (D).</p> <p>2) Kansas may call for distribution in order to call for a release of water from Kansas Section II account if prior to such distribution of the content of Kansas Section II Account is less than 5,000 acre feet.</p> <p>Colorado has drafted language for a separate resolution.</p>	<p>Colorado has proposed a resolution and Kansas has expressed concerns over language. Colorado would appreciate a response from Kansas or other suggested solution. (10 May 2002)</p> <p>Kevin Salter responded to the Colorado proposal by letter dated 21 October 2003</p>



## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
22	Criteria for determining Section III storage under the Pueblo Winter Water Storage Program (PWWSWP)	Legal 1 <sup>a</sup>		Technical 2 <sup>b</sup>	The criteria used by Colorado fails to adhere to what was established under the 1980 Operating Plan in that <i>other water</i> under Section III.		ARCA should establish criteria for determining the water available for Section III storage in JMR to protect inflows to conservation storage. Water delivered to JMR under the PWWSWP should meet those criteria.	Colorado feels that any consideration of changes is precluded during the pendency of the lawsuit, thus cannot be resolved.	The Operation Secretary and the Assistant Operation Secretary should continue to work on this issue. (10 May 2002)
23	Reporting of Winter Water vs. Winter Compact storage split calculation  <i>Resolved</i>		Resolved			Although it is not called for by the 1980 Operating Plan, the request is reasonable.		The Operation Secretary has committed to provide to ARCA the split ratios, how those were determined, and the basis for any adjustments to the split through the season.	Resolved: The Operation Secretary has agreed to provide the method and the data used to determine the split between winter water storage and conservation storage.
30	Determination of transit loss under Section II(E)(4)				Criteria for determining transit loss for Kansas Section II deliveries are needed, and should include timeliness of delivery.		Some base criteria are needed to address the timing of the measurements of Kansas Section II account releases. *Kansas concurs that there is a potential impediment to resolving this issue on how this is applied retroactively.	*Colorado believes that there is a <i>Policy</i> issue in how any criteria developed is applied retroactively. This is a potential impediment to resolving this issue.	The Operation Secretary and the Assistant Operation Secretary should continue to work on this issue. (10 May 2002)

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Joint work product – 24 October 2003

Draft Issues Table – For discussion purposes only

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
31	Sections II (E)(4) and III (D) are unclear as to where transfers to make up deficits should be made		Policy		Deficits of Kansas Section II deliveries due to transit loss shortage should be replenished to the Kansas Section II account.	Section III D states: "First transfers from deliveries shall make up any deficits, if any, in the <u>Kansas Transit Loss account</u> ..." (emphasis added)	Deficit to be restored to Kansas Section II account as soon as additional water becomes available in transit loss account. Kansas to propose clarifying resolution.	Deficit to be restored to Kansas transit loss account as soon as additional water becomes available in transit loss account. Kansas to propose clarifying resolution.	Kansas to work on this issue. Kevin Salter letter of 26 August 2003
32*	How should transit loss account be used?		Policy			Based on the interpretation proposed by Kevin Salter's letter (21 October 2003), there is a question of whether the transit loss releases are a front or back side operation.			*Issue added 24 October 2003 at meeting between staffs.
40	Exchange of daily reservoir status accounting <i>Resolved</i>		Resolved		Daily determinations of the difference between accounts and physical measurements at the reservoir are an integral part of the daily accounting.	Daily determinations of the difference between accounts and physical measurements at the reservoir are an integral part of the daily accounting.	The Operations and Assistant Operations Secretaries should continue to exchange data.	The Operations and Assistant Operations Secretaries should continue to exchange data.	Resolved
41	Non-reporting of Section II(C)(1) determinations		Policy		Need daily accounting of non account water for compliance with this Section of the 1980 Operating Plan.		All data and data interpretations related to JMR operations should be reported in annual reports.		Kansas will work on analyzing the accuracy of the amount of water passing through the reservoir under this section.

### Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
42	Summer season interruption of transfers from conservation storage to accounts		Policy – probably ought to make amendments for clarification		<p>Summer conservation storage releases should not be interrupted once those releases begin. The 1980 Operating Plan does not provide for an interruption of conservation storage releases. Section II accounts have a standing call for releases from summer conservation storage.</p>	<p>Interruption is an application of the 1980 Operating Plan provision that releases into accounts shall be delayed until 1<sup>st</sup> call for Section II or 48 hours after commencement of storage event. See Section II B (3). This reflects recognition that drafts on the conservation pool may have typically been deferred by up to two days by rainfall events resulting in storage, thus deferring implementation of Compact Article V F.</p>	<p>The 1980 Operating Plan implements Article V of the Compact. Continue all releases of summer conservation storage to accounts uninterrupted.</p>	<p>Operations Committee should direct the Operations Secretary to continue the present practice, or recommend amendment of the last sentence of Section II B (3) of the 1980 Operating Plan to read: "Releases of conservation storage shall be initiated or resumed into the accounts..."</p>	Unresolved

### Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
43	Winter storage period interruption of transfers from summer conservation storage to accounts		Policy – probably ought to make amendments for clarification		Summer conservation storage releases should not be discontinued on November 1 <sup>st</sup> . The 1980 Operating Plan does not provide for an interruption of conservation storage releases. Section II accounts have a standing call for releases from summer conservation storage.	To keep consistency with Article V A, of the Compact, all water entering JMR during the winter season must be stored and no releases made from conservation pool.	The 1980 Operating Plan implements Article V of the Compact. Continue all releases of summer conservation storage to accounts uninterrupted.	Operations Committee should direct the Operations Secretary to continue the present practice. Discontinue releases from conservation storage on November 1 <sup>st</sup> as operationally equivalent to the Compact requirement for discontinuing conservation pool releases. Or, amend 1980 Operating Plan to add new Section II D (4): "In the event that any conservation storage has not been released into accounts as of November 1 <sup>st</sup> of any year, further release shall be suspended until such release is provided for according to Section II A herein.	Unresolved

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
50	Commencement of a spill event		Policy		The language places the event on the physical operation of the projects control structure and not on the elevation of the water surface or some other trigger. Colorado's timing of spill accounting is not suggested in the governing language.	Contrary to express language of 1980 Operating Plan, water does not "spill physically over the project's spillway" during flood operations. Flood releases are normally made through the outlet works.	Rely on the physical operations of the project control structure to govern the loss of account water. No change to the language is required, unless clarifying language is desired.	Kansas' position ignores Corps of Engineers exclusive authority to determine flood control releases when JMR surface elevation rises into flood pool space.	Unresolved
51	Spilling accounts		Policy		The accounting practices should not change during a spill event. Accounts are adjusted as dictated by the physical operation of the dam. A <i>flood pool</i> account in the flood control space is not authorized by the 1980 Operating Plan and creates evaporation charge conflicts.	Accounting based on JMR inflows is used at all other times and has been demonstrated to produce identical results as outflow based accounting.	Use the normal accounting methods during spills that occurs at all other times. This also eliminates the issue of how to handle evaporation during a spill event. Tracking the extent that water invades the flood control storage space prior to release by the Army Corps of Engineers is useful.	Use inflow based accounting at all times	Unresolved

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
52	Upstream storage during JMR spill events				Upstream storage is not in priority until Section II accounts is completely spilled.	1980 Operating Plan not intended to address issues other than JMR conservations and therefore provides no guidance on upstream storage when JMR spilling	Discontinue the practice until authorized by resolution of ARCA.	Compact not intended to impair use of water by either state if no material depletion to useable stateline flows results. Apportioning water during flood operations may be a Compact issue for negotiation by ARCA, but is clearly not a 1980 Operating Plan issue to be determined by the Operations Committee. See earlier exchange of letters between Mr. Simpson and Mr. Pope on this issue.	Unresolved
53	Adjusted JMR inflows during times of spill		Policy *		The 1980 Operating Plan does not provide for these adjustments. *Only can be resolved if 52 is resolved		Discontinue the practice until authorized by resolution of ARCA.		Unresolved

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
54	Section II spill volume during summer storage season  <i>See Illustration</i>		Policy		The condition of Summer conservation storage releasing into accounts during a summer spill event has occurred, but is not specifically addressed by the 1980 Operating Plan. The issue concerns the ratio of spill from Section II accounts. This needs clarifying language.	<i>"The amount of spill from the accounts should be amongst them according to the amounts in them at the beginning of spill."</i> Colorado believes this language of Section II (G) properly addresses this issue.	Language to clarify the accounting under this condition if spill should occur.  Steve Witte suggests that language would limit Section II spill to the volume in the Section II accounts at the beginning of spill.		Not discussed during May 9 <sup>th</sup> Meeting of Operations Committee
60	Section II(C)(2) compliance  (Agreement B)	Legal			District 67 priority calls under pre-JMR conditions are to occur when conservation storage is exhausted into accounts. Colorado does not comply with this requirement of the 1980 Operating Plan.	Agreement B is a separate document, not part of the 1980 Operating Plan, whereby Colorado water right owners agreed to subordinate certain aspects of their entitlement to enforce the priority of their water rights and is entirely consistent with administration of the priority system in Colorado. This issue is not properly before the Operations Comm..	Operate according to the 1980 Operating Plan as written or propose changes to the plan for consideration by the administration.	Agreement B is necessary to maintain the respective benefits of JMR between Colorado water rights above and below JMR granted under the Compact. It is not inconsistent with either the Compact, the 1980 Operating Plan, or administration by Colorado of its priority system.	No further progress can be made at this time.

### Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
61	Retroactive adjustments of accounting for prior years if accounting methods are revised		Policy		To the degree that the issues can be resolved, they should be. Some weight should be given to the deep spill that occurred in 1997, which would have made any water equities mute.	If new procedures are adopted they should be only applied to future years, there should be no corrected accounting for prior years, certainly not prior to 1999!	The 1980 Operating Plan has a method to provide restitution that should be followed, and applied retroactively. (See Section V)		Not ripe for consideration at this time.
62	OS Report status for 1994 through 2004		Policy		There are several significant accounting issues that are preventing the Operations Secretary's reports mentioned from being adopted.		Since the 1994 and 1996 OS reports were presented, additional accounting issues have been discovered. These would include 1994 and 1996, as well as the other years mentioned. Until these issues are resolved it is difficult to act on the submitted reports.	For 1994 and 1996, the Operations Committee should find that ARCA's requirement for footnotes on tables regarding Stateline deliveries have been met and therefore these reports have been approved by ARCA.	Work in progress (10 May 2002)
63	Status of Assistant Operations Secretary Reports: 1998, 1999, 2000, 2001 & 2002		Policy						Determination of what records of the AOS are on file, are they final copies.



### Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
64	Assistant Operations Secretary Reports: purpose and timeliness  (A-by-law-issue)				Assistant Operations Secretary's reports have served to highlight certain operations and accounting issues for the compact year. Some issues may not be evident until a draft or final Operations Secretary report is circulated.	Colorado recognizes that the Assistant Operation Secretary should have a forum for dissent, but doesn't like receiving the report at the 11 <sup>th</sup> hour. Each of the reports submitted to date should be reviewed by ARCA and acted on.	No need to require an AOS report.	Colorado would like the Assistant Operations Secretary to provide report on the same time schedule as the Operations Secretary. Colorado further suggests that ARCA may want to either consider moving the Annual Meeting to later in the Winter, or deferring action on the OS Report until a subsequent meeting.	
65	Consider Moving Date of Annual Meetings to January or February		Policy						Leave meeting date as is, but look at an earlier exchange of data. (10 May 2002)
66*	Need for definite process for introducing and resolving operational issues.		Policy						*Issue added 24 October 2003 at meeting between staffs.

## Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
67*	When issues are resolved is it in the form of separate resolutions and /or revisions to the 1980 Operating Plan?		Policy					Colorado would like to institutionalize a method that makes changes without revising the 1980 Operating Plan.	*Issue added 24 October 2003 at meeting between staffs.
<i>Issues removed from consideration</i>									
	City of Lamar regulating account -- this issue is tabled (indefinitely)				The City of Lamar has requested a temporary re-regulation account and ARCA has granted such an account on a fairly regular basis. This is starting to appear as a regular account, to the degree that JMAS has an account built into the software for the City of Lamar.		The City of Lamar should propose an account in JMR to allow for the re-regulation of flows from other releases. Consideration should be given to conditions contained in the original resolution of ARCA.		Still being worked on (10 May 2002).  Kansas will not object to the temporary account for 2002. (10 May 2002)
	Transfer of Account water to Permanent Pool during flood control operations in JMR								

Colorado has withdrawn this proposal from consideration. Kansas doesn't object.

### Categorization of JMR Accounting Issues

Issue Number	Issue	L <sup>1</sup>	P <sup>2</sup>	T <sup>3</sup>	KS Staff position	CO Staff Position	KS Staff Comment	CO Staff Comment	Operations Committee or other general Comment(s)
	Seasonal variations								

Nobody remembers what this issue was, and is removed from consideration

## Categorization of JMR Accounting Issues

### Supplement A:

1976 Resolution

#### 1980 Operating Plan Language

II.F. Evaporation charges shall be made against water stored in the accounts, including those established in Section III, herein, and the Kansas transit loss account, using formulas and procedures approved by the Colorado Division Engineer and a representative of the Kansas Division of Water Resources and using, when available, pan evaporation data provided by the Corps of Engineers. The evaporation charges shall be prorated amongst conservation storage and the accounts according to the amounts in them.

IV. A permanent recreation pool has been authorized by the August 14, 1976, Resolution of the Administration. For purposes of the Resolution, this permanent recreation pool shall be considered a separate account and deliveries made to it are not subject to the transfers provided in Subsection III D. herein. The permanent recreation pool will, however, stand its pro rata share of evaporation as provided in the Administration's Resolution of August 14, 1976.

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*Joint work product – 24 October 2003*

*Draft Issues Table – For discussion purposes only*

## Categorization of JMR Accounting Issues

Supplemental A: Language of the 1980 Operating Plan and 1976 Permanent Pool Resolution

Illustration A: Illustrate the 1997 Spill, Need a concise way to illustrate the problem

### Resolutions:

Colorado should have a draft resolution on the Winter Water Program account. – May 2002

-- Kevin Salter responded to the Colorado draft resolution in October 2003

Kansas will have a draft resolution on making up deficit transit loss to Kansas Section II Account.

-- Kevin Salter has presented an interpretation of the 1980 Operating Plan that may negate the need for a resolution or amendment in August 2003.

City of Lamar is expected to submit at the May ARCA meeting a resolution for a regulating account in JMR.

-- Colorado indicated that this issue has been tabled indefinitely

### dnnotes

*gal* is defined as an issue that is not resolvable at this time or within ARCA.

*lity* is defined as an issue that needs to have input or guidance from either the Operation Committee or ARCA

*chnical* is defined as an issue that can be resolved by respective State staffs

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Joint work product – 24 October 2003

Draft Issues Table – For discussion purposes only



RECEIVED

OCT 27 2003

DIVISION ENGINEERING  
PUEBLO, COLORADO

KANSAS

DEPARTMENT OF AGRICULTURE  
ADRIAN J. POLANSKY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

October 21, 2003

Steve Witte  
Operations Secretary  
Arkansas River Compact Administration  
310 E. Abriendo Ave, Ste B  
Pueblo, CO 81006

RE: Draft Colorado Resolution concerning  
Winter Water Account

Dear Steve:

You requested written comments concerning the resolution presented by Colorado at the May 2002 Special Meeting of ARCA (copy attached). Let me apologize for just now getting this to you, since I had indicated that I would be providing you with this letter in September.

The overall comment is that a winter water holding account is not provided for in the 1980 Operating Plan; therefore, Kansas expects that all Section III water would be assessed the 35% storage charge upon delivery to John Martin Reservoir (JMR) and that water would be distributed immediately to the appropriate accounts. The proposed resolution limits the water available to a later time. This is not acceptable. However, I am sure that you are interested in specific comments and the paragraphs below will look at the specific sections of the proposed resolution.

Section 1. This section establishes a "winter water account" *pursuant to the same limitations set forth in Section III-A, B and C of the 1980 Operating Plan Resolution*. This section is not clear as to whether the winter water account is just subject to the specific limitations in these three sections, or all the limitations as imposed on Section III accounts.

Section 2. The result of this section is to delay the transfer of the 35% storage charge water contrary to Section III.D. of the 1980 Operating Plan. The reason you have provided to me for this delay is to allow you to appropriately distribute any excess charge water between the District 67 subaccounts. However, it would seem there are other ways that this could be handled without withholding all of the 35% storage charge on winter water until the end of the PWWSP.

Sections 3 & 4. These sections have been constructed to allow Kansas access to the withheld 35% storage charge under some very specific conditions. These sections also do not provide any directions on how or when transfers to the Colorado Section II accounts will be made.

Section 5. It has been the practice of the Operation Secretary to use a "winter water account." The result of this practice was the spill of transit loss water, according to your CY 2000 accounting. Based on your accounting, approximately 1,500 AF of water that should have been transferred to the transit loss account was lost. Though we don't agree with the overall resolution, it is good to see that this problem has been recognized.

Section 6. It is my understanding from our discussions, that you were not particularly interested in the exchange of water from the PWWSP winter water holding account out of JMR. It is also my understanding, that the exchange ability has not been needed in the history of the PWWSP. The authorization of exchanging water stored under the PWWSP from JMR is not acceptable to Kansas.

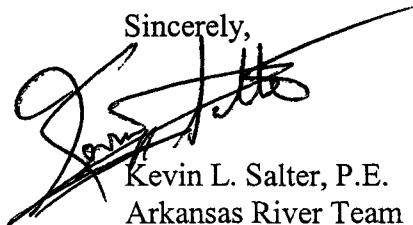
Additionally, the draft Colorado Resolution does not address evaporation charges or spill order for the winter water account. It would be my position that since this account would be one of several in JMR, it would be charged evaporation on a pro rata basis as is the case for all other accounts. This document, as written, is a stand alone resolution; therefore the winter water account does not fit into Section II.G. of the 1980 Operating Plan that addresses spill order.

On a related note, you asked if Kansas has ever called for an account release before April 1<sup>st</sup>. Without exhaustive review, it appears that Kansas has called for water before April 1<sup>st</sup> on four (4) occasions in: 1986, 1988, 1996, and 1997. During the last two (2) years river conditions have been adverse to summer delivery; therefore we are considering an early call next year to take advantage of possibly more favorable river conditions that may be present.

I would think that the Kansas delegation might consider an amendment of the 1980 Operating Plan to include a PWWSP winter water holding account. It may also be appropriate for such an amendment to address other issues related to Section III. If so, I expect such a resolution will need to provide for assessing the 35% charge as soon as water is delivered to the new "holding account" and then immediately distributing such water to the appropriate accounts.

Should you have any questions, please feel free to call.

Sincerely,



Kevin L. Salter, P.E.  
Arkansas River Team

KLS:kl

Enclosures

pc: Jim Rogers, ARCA  
Dave Brenn, ARCA



**Draft – Colorado – May 2002**  
**Resolution for an Amendment to the 1980 Operating Plan Resolution**  
**For a Winter Water Account in John Martin Reservoir**

**WHEREAS**, Article IV. C. (3) of the Arkansas River Compact provides as follows:

The conservation pool will be operated for the benefit of water users in Colorado and Kansas, both upstream and downstream from John Martin Dam, as provided in this Compact; and

**WHEREAS**, Article IV. D. of the Arkansas River Compact provides as follows:

This Compact is not intended to impede or prevent future beneficial development of the Arkansas River basin in Colorado and Kansas by Federal or State agencies, by private enterprise, or by combinations thereof, which may involve construction of dams, reservoirs and other works for the purposes of water utilization and control, as well as the improved or prolonged functioning of existing works. Provided that the waters of the Arkansas River as defined in Article III, shall not be materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under this Compact by such future development or construction; and

**WHEREAS**, the Colorado Division Engineer has used a Winter Water Account in John Martin Reservoir as an accounting tool to facilitate the Pueblo Winter Water Storage Program's ability to store "Other Water" in John Martin Reservoir, as provided in Section I. E. of the 1980 Operating Plan Resolution, but the Winter Water Account has never been approved by the Chief of Engineers of the Corp of Engineers or the Arkansas River Compact Administration; and

**WHEREAS**, the State of Colorado desires to continue to use the Winter Water Account in John Martin Reservoir for the purpose of properly operating the Pueblo Winter Water Storage Program (including the ability to exchange water out of the Winter Water Account to upstream storage entities participating in the Pueblo Winter Water Storage Program by transferring water out of the Winter Water Account into conservation storage at John Martin Reservoir); and

**WHEREAS**, Article IX.A. of the Compact provides in relevant part as follows:

(T)he Chief of Engineers is hereby authorized to operate the conservation features of the John Martin Reservoir Project in a manner conforming to such Compact with such exceptions as he and the Administration created pursuant to the Compact may jointly approve (;)

**NOW THEREFORE, BE IT RESOLVED** that, pursuant to Article IX.A. of the Compact, the Arkansas River Compact Administration and the Chief of Engineers of the Corps of Engineers or his duly authorized representative, jointly approve a Winter Water Account in John Martin Reservoir to be established and operated as follows:

- 1) The Pueblo Winter Water Storage Program may deliver "Other Water" into the Winter Water Account in John Martin Reservoir, pursuant to the same limitations set forth in Section III-A, B and C of the 1980 Operating Plan Resolution.

- 2) Transfers out of the Winter Water Account will be distributed on March 15 of each Compact Year according to Section III-D of the 1980 Operating Plan Resolution, except as provided for below.
- 3) Transfers out of the Winter Water Account will be distributed at Kansas' demand when all of the following conditions are met:
  - a) Kansas calls for a release from its Section II Account between 0000 hrs on November 15 and 2400 hrs on March 14, and
  - b) Kansas' Transit Loss Account contains less than 500 acre-feet of water, and
  - c) Kansas' Section II Account contains less than 5000 acre-feet of water.
- 4) Transfers out of the Winter Water Account will cease when the release from Kansas' Section II Account is discontinued.
- 5) In the event of a spill, the transfer of the 35 percent storage charge will occur the instant before the Winter Water Account begins to spill.
- 6) The Colorado Division Engineer may exchange water out of the Winter Water Account to upstream storage entities participating in the Pueblo Winter Water Storage Program, if so needed, by transferring water out of the Winter Water Account into conservation storage at John Martin Reservoir.
- 7) The effective date of this Resolution shall be the date on which the Chief of Engineers of the Corps of Engineers, or his duly authorized representative, gives his/her approval by signing and dating below the space provided. This Resolution shall be in full force and effect as long as the Resolution Concerning an Operating Plan for John Martin Reservoir adopted April 24, 1980 continues to be in effect.

## JOINTLY APPROVED:

\_\_\_\_\_  
Aurelio Sisneros, Chairman  
Arkansas River Compact Administration

\_\_\_\_\_  
Recording Secretary  
Arkansas River Compact Administration

\_\_\_\_\_  
Lt. Col. Raymond G. Midkiff, District Engineer  
U.S. Army Corps of Engineers Albuquerque District,  
Duly Authorized Representative of the Chief of Engineers  
U.S. Army Corps of Engineers

\_\_\_\_\_  
Date



NR 07 2003

KATHLEEN SEBELIUS, GOVERNOR  
Adrian J. Polansky, Secretary

STATE OF KANSAS



David L. Pope, Chief Engineer  
Division of Water Resources

Garden City Field Office  
Mark E. Rude, Water Commissioner  
2508 Johns Street  
Garden City, Kansas 67846-2804

(620) 276-2901 FAX (620) 276-9315

KANSAS DEPARTMENT OF AGRICULTURE

March 4, 2003

Steve Witte  
Operations Secretary  
Arkansas River Compact Administration  
310 E. Abriendo Ave, Ste B  
Pueblo, CO 81006

RE: 2002 Transit Losses

Dear Steve:

In your Compact Year (CY) 2002 Operations Secretary Report you indicated that transfers of water due to delivery deficits were not made for several reasons, including no determination on the amount of transit losses that occurred and uncertainty as to the account the delivery deficit should be replaced. The purpose of this letter is to quantify the transit losses incurred during deliveries of Kansas Section II releases and reaffirm the Kansas position on the Water Issues Matrix that the delivery deficit should be restored to the Kansas Section II account as agreed to in our talks last year.

Attached are tables detailing releases made from the Kansas Section II account in CY2002. On these tables, the Section II and Transit Loss account releases, stateline flow, Kansas release measured at the stateline and the delivery deficit are detailed. The delivery deficit is the difference between the amount of water released from the account and the actual amount measured at the stateline.

For purposes of consistency in referring to different water deliveries, Kansas called for four releases from John Martin Reservoir (JMR) involving either Offset or Kansas Section II:

First Kansas Run:	Offset water release from April 10 <sup>th</sup> to April 19 <sup>th</sup> .
Second Kansas Run:	Section II release from May 1 <sup>st</sup> to May 6 <sup>th</sup> .
Third Kansas Run:	Section II release from June 17 <sup>th</sup> to July 1 <sup>st</sup> .
Fourth Kansas Run:	Offset water release from July 1 <sup>st</sup> to July 4 <sup>th</sup> .

This letter deals only with the delivery deficits associated with the Kansas Section II account releases which occurred during CY 2002.

### ***Second Kansas Run***

The first Section II release began on Wednesday, May 1, 2002 @ 4:30 pm (CST) with a instantaneous release rate of 250 cfs. When determining the release from the Transit Loss account, the Division II staff ran the calculation that showed a 250 cfs release would yield 211 cfs at the stateline, suggesting a transit loss of 15.6%. A closer look at the river conditions, with Lamar having 20 cfs and Granada 20 cfs, suggested a 100 cfs release was more appropriate. The stateline flow peaked at 172 cfs (average daily) during the period of May 1<sup>st</sup> to May 9<sup>th</sup>. A concurrent release of 100 cfs was initiated from the Transit Loss account. On May 2<sup>nd</sup>, it was determined that the gate adjustment fell short of the additional 350 cfs release requested. Kevin Salter and Monique Moray agreed that the Kansas Section II account would be charged for a 190 cfs release over this period. On May 2<sup>nd</sup>, the accounting of the release was 250 cfs from the Kansas Section II account, and 75 cfs from the Transit Loss account. On May 3<sup>rd</sup>, the Section II release was cut to 200 cfs and the release from the Transit Loss was terminated. The 200 cfs Section II release was continued through the weekend and was terminated with the morning gate change on Monday morning, May 6<sup>th</sup>.

From Table 1, this Section II release is detailed. The Section II delivery deficit for this run was 437 acre feet, or a 22.3% loss on the 1,962 AF released from the Kansas Section II account. The total amount released from the Kansas Section II and the Transit Loss accounts between May 1<sup>st</sup> and May 6<sup>th</sup> was 2254 acre feet.

### ***Third Kansas Run***

The second Section II release began on Monday, June 17, 2002 @ noon (CST) with a instantaneous release rate of 400 cfs. A concurrent release of 250 cfs was initiated from the Transit Loss account. It is my understanding that the Transit Loss account was reduced to 150 cfs on June 19<sup>th</sup> at the request of the Corp of Engineers, since a 250 cfs release from this account would have emptied at 9:00 pm. The Corps did not want to make a gate change during the evening hours. On June 20<sup>th</sup>, the Transit Loss account was emptied. The 400 cfs Section II release was continued until the Kansas Section II account was emptied on July 1<sup>st</sup> @ 12:50 pm (MST).

During this run, the stateline flow peaked at 270 cfs (average daily) during the period of June 17<sup>th</sup> to July 1<sup>st</sup>. Ultimately, only 67.5% of this Section II release was measured at the stateline.

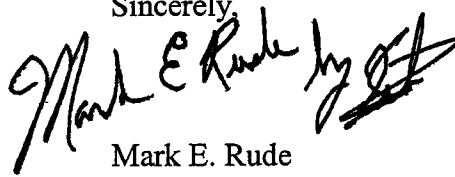
From Table 2, this Section II release is detailed. The Section II delivery deficit for this run was 4,166 acre feet, or a loss of 37.4% on 11,137 AF released from the Kansas Section II account. The total amount released from the Kansas Section II and the Transit Loss accounts during this run was 12,365 acre feet.

***Summary***

The combined delivery deficit for two Kansas Section II runs is 4,603 acre feet. This is the delivery deficit amount that will need to be made up when water is transferred to the Section III accounts. Pursuant to Section II E 4 of the 1980 Operating Plan, this is the amount of deficit that will need to be replenished when water is transferred to the Section III accounts. It is appropriate to replenish the Kansas Section II account because the delivery to the stateline was deficient by that amount.

Should you have any questions, please feel free to call this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Rude", followed by a stylized flourish or set of initials.

Mark E. Rude  
Water Commissioner

MER:KLS:kls

Enclosures

pc: David Pope  
Hal Simpson

# Analysis of May 1, 2002 Sec II Release

(Values in Acre-feet)

DATE	Sec II Release		Transit Loss Release		Stateline Flow	KS Release Meas @ Stateline		Delivery Deficit	
	Daily	Accum.	Daily	Accum.		Daily	Accum.	Daily	Accum.
4/30/02	0	0	0	0	151	0	0	0	0
5/1/02	118	118	61	61	147	0	0	0	0
5/2/02	448	565	169	230	141	0	0	0	0
5/3/02	438	1,003	61	292	149	144	144	-27	-27
5/4/02	397	1,400	0	292	256	256	400	192	165
5/5/02	397	1,797	0	292	341	341	741	97	262
5/6/02	165	1,962	0	292	329	329	1,071	67	329
5/7/02	0	1,962	0	292	327	327	1,398	69	399
5/8/02	0	1,962	0	292	276	127	1,525	38	437
5/9/02	0	1,962	0	292	210	0	1,525	0	437

The Sec II call of 225 cfs was initiated May 1, 2002 @ 4:30 p.m. and lasted until May 6, 2002 @ 10:00 a.m..

The Sec II water started arriving @ the SL May 3, 2002 @ 2:00 a.m. 54 hr travel time

# Analysis of May 1, 2002 Sec II Release

(Values in Acre-feet)

DATE	Sec II Release		Transit Loss Release		Stateline Flow	KS Release Meas @ Stateline		Delivery Deficit	
	Daily	Accum.	Daily	Accum.		Daily	Accum.	Daily	Accum.
6/16/02	0	0	0	0	89	0	0	0	0
6/17/02	397	397	248	248	99	0	0	0	0
6/18/02	793	1,190	496	744	87	0	0	0	0
6/19/02	793	1,984	373	1,117	137	89	89	308	308
6/20/02	793	2,777	111	1,228	417	417	505	377	685
6/21/02	793	3,570	0	1,228	506	506	1,011	288	972
6/22/02	793	4,364	0	1,228	482	482	1,493	311	1,284
6/23/02	793	5,157	0	1,228	468	468	1,961	325	1,609
6/24/02	793	5,951	0	1,228	502	502	2,463	292	1,900
6/25/02	793	6,744	0	1,228	506	506	2,969	288	2,188
6/26/02	793	7,537	0	1,228	528	528	3,497	266	2,454
6/27/02	793	8,331	0	1,228	534	534	4,030	260	2,714
6/28/02	793	9,124	0	1,228	526	526	4,556	268	2,981
6/29/02	793	9,918	0	1,228	520	520	5,075	274	3,255
6/30/02	793	10,711	0	1,228	516	516	5,591	278	3,533
7/1/02	426	11,137	0	1,228	536	536	6,127	258	3,791
7/2/02	0	11,137	0	1,228	555	555	6,682	238	4,029
7/3/02	0	11,137	0	1,228	555	289	6,971	138	4,166

The Sec II call of 400 cfs was initiated June 17, 2002 @ noon. The account was emptied July 1, 2002 @ 12:50 p.m.

The Sec II water started arriving @ the SL June 19, 2002 @ 3:00 p.m. 51 hr travel time



# ARKANSAS RIVER COMPACT ADMINISTRATION

307 South Fifth Street, Lamar, Colorado 81052

719-336-9696

Chairman and Federal Representative

For Colorado

Rodney Kuharich, Denver

James G. Rogers, Lamar

Thomas R. Pointon, Las Animas

Robin Jennison, Healy, KS

For Kansas

David L. Pope, Topeka

David A. Brenn, Garden City

Randy Hayzlett, Lakin

March 19, 2003

Mr. Mark Rude  
Assistant Operations Secretary  
Arkansas River Compact Administration  
2508 Johns Street  
Garden City, Kansas 67846-2804

Re: Your letter dated March 4, 2003 concerning 2002 transit losses

Dear Mr. Rude;

I am in receipt of the above referenced letter, signed on your behalf by Mr. Salter. This is to advise you that I do not agree with your analysis concerning the quantification of the transit losses associated with deliveries of water from Kansas' Section II account in 2002, as it fails to make an appropriate allowance for arrival times as is provided in Section II E. (4) of the Resolution Concerning An Operating Plan For John Martin Reservoir, adopted April 24, 1980, as amended (the Resolution). It is unfortunate that we have not been able to open discussions that will hopefully lead to a procedure that we can both support as being an appropriate method for making such determinations, until such a late date. Since we have failed to accomplish, what I believe was our joint intention to hold such discussions, and to fulfill our responsibility to make this determination, I can see no alternative other than to make an independent determination.

Please find enclosed revised copies of Table XI-B and XI-C to be included as amendments to the 2002 Annual Report of the Operations Secretary.

Based on the data as presented in amended Table XI-B, and using a nominal two day period to allow for the initial arrival of water released for the benefit of Kansas and a period of 7 days from the end of the Kansas account release in order to allow for the arrival of the receding release wave, it may be seen that there was no deficit in the release of Kansas account water during the period May 1, 2002 through May 6, 2002 as measured at the Stateline. Therefore, I have determined that there were no "transit losses" that occurred with respect to this operation.

As one may see from inspection of amended Table XI-C, an appropriate analysis of the Kansas account release that began on June 17, 2002 is complicated by the fact that at the point in time when Kansas' Section II account was depleted, at 12:54 p.m. on July 1, 2002, Kansas elected to continue calling for the release of water from a different account. Fortunately, the release rate

remained constant until all account releases were concluded on July 4, 2002. This fact allows the reasonable assumption that the conveyance response of the river was the same following the conclusion of the release on July 4, 2002 as if the Section II release had ended on that date. Therefore, one may still evaluate the delivery over a 7 day period in order to allow for the arrival of the receding release wave following the end of the actual Section II release simply by extracting the Offset Account affected period of Stateline flow from the record. In order to do this I have used a period of two days for both the initial arrival of water released from Kansas accounts and for the initial arrival of the first water released from the Offset Account. I also assigned full credit for delivery of all Offset Account released on July 4, 2002. Please refer to the enclosed Transit Loss Worksheet to review how I determined that a transit loss of 676 a.f. occurred as a consequence of Kansas' call for delivery of its Section II account water beginning on June 17, 2002.

I have directed that this deficit shall be made up from the transfers of water that occurred on March 15, 2003, under Section III D of the Resolution, even though Kansas continued calling for releases of water despite an advisory provided pursuant to Section II E (5) of the Resolution, on June 24, 2002.

Finally, I dispute the assertion that an agreement has been reached concerning the disposition of any water that may be provided to make up for delivery deficits. Neither the Administration nor the Operations Committee has taken any action to amend or interpret the Resolution in a manner conforming to your position. Therefore, the Operations Secretary's accounting shows that a transfer of 676 a.f. was made to the transit loss account in addition to the usual 1700 a.f., consistent with my understanding of Section III D of the Resolution.

Should you have any questions, please feel free to call this office.

Sincerely,



Steven J. Witte  
Operations Secretary  
Arkansas River Compact Administration

Enclosures -3

Cc: Hal Simpson  
David Pope

✓ Fax to Rude / Salter  
original to follow by mail

b.c. ✓ me

Didomenico

Morey

Tyner

Ley

Steve Miller

Jim Rogers

Table XI - B AMENDED<sup>6</sup>  
RELEASES OF KANSAS, TRANSIT LOSS AND OFFSET ACCOUNT WATERS

Transaction Date (dd-mm-yy)	Transaction Data (delta cfs@hh:mm)	Kansas Acct. #8 Release (cfs)	Transit Loss Acct. 18 Release (cfs)	Offset Acct. #53 Release <sup>1</sup> (cfs)	Offset Acct. #54 Release <sup>2</sup> (cfs)	Offset Acct. #55 Release <sup>3</sup> (cfs)	Total Account Releases (cfs)	Frontier Ditch <sup>4</sup> (cfs)	Arkansas @ Coolidge, KS. <sup>4</sup> (cfs)	Release Meas. @ State Line <sup>5</sup> (cfs)
1-May-02	0cfs>200cfs/100@15:45	59.38	31.25	0.00	0.00	0.00	90.63	30.00	44.00	N/A
2-May-02	100cfs>75cfs@09:45	225.63	85.16	0.00	0.00	0.00	310.79	33.00	38.00	N/A
3-May-02	75cfs>0cfs@09:00	220.83	31.25	0.00	0.00	0.00	252.08	25.00	50.00	75.00
4-May-02		200.00	0.00	0.00	0.00	0.00	200.00	25.00	104.00	129.00
5-May-02		200.00	0.00	0.00	0.00	0.00	200.00	26.00	146.00	172.00
6-May-02	200cfs>0cfs@09:50	83.34	0.00	0.00	0.00	0.00	83.34	26.00	140.00	166.00
7-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	139.00	165.00
8-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	113.00	139.00
9-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	80.00	106.00
10-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	70.00	96.00
11-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	69.00	95.00
12-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	55.00	81.00
13-May-02		0.00	0.00	0.00	0.00	0.00	0.00	26.00	56.00	82.00
Total (cfs/day)		989.18	147.66	0.00	0.00	0.00	1136.84	347.00	1104.00	1306.00
Total (a.f.)		1962.01	292.88	0.00	0.00	0.00	2254.89	688.26	2189.75	2590.41

<sup>1</sup> Offset Account #53 also referred to as Colorado Downstream Consumable

<sup>2</sup> Offset Account #54 also referred to as Kansas Consumable

<sup>3</sup> Offset Account #55 also referred to as Kansas Storage Charge

<sup>4</sup> Provisional United States Geological Survey data.

<sup>5</sup> State Line flows equal Frontier Ditch plus Arkansas at Coolidge, KS with consideration of arrival times

<sup>6</sup> Amended to correct Frontier Ditch data (use flow data and not gage ht. Data).

Table XI - C AMENDED<sup>7</sup>  
RELEASES OF KANSAS, TRANSIT LOSS AND OFFSET ACCOUNT WATERS

Transaction Date (dd-mm-yy)	Transaction Data (delta cfs@hh:mm)	Kansas Acct. #8 Release (cfs)	Transit Loss Acct. 18 Release (cfs)	Offset Acct. #53 Release <sup>1</sup> (cfs)	Offset Acct. #54 Release <sup>2</sup> (cfs)	Offset Acct. #55 Release <sup>3</sup> (cfs)	Total Account Releases (cfs)	Frontier Ditch <sup>4</sup> (cfs)	Arkansas @ Coolidge, KS. <sup>4</sup> (cfs)	Release Meas. @ State Line <sup>5</sup> (cfs)
17-Jun-02	0cfs>400cfs/250@09:00	200.00	125.00	0.00	0.00	0.00	325.00	16.00	34.00	N/A
18-Jun-02		400.00	250.00	0.00	0.00	0.00	650.00	14.00	30.00	N/A
19-Jun-02	250cfs>150cfs@09:00	400.00	187.50	0.00	0.00	0.00	587.50	19.00	50.00	69.00
20-Jun-02	150cfs>0cfs@09:00	400.00	56.37	0.00	0.00	0.00	456.37	25.00	185.00	210.00
21-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	25.00	230.00	255.00
22-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	25.00	218.00	243.00
23-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	24.00	212.00	236.00
24-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	24.00	229.00	253.00
25-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	24.00	231.00	255.00
26-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	24.00	242.00	266.00
27-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	23.00	246.00	269.00
28-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	21.00	244.00	265.00
29-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	23.00	239.00	262.00
30-Jun-02		400.00	0.00	0.00	0.00	0.00	400.00	22.00	238.00	260.00
1-Jul-02	Change @ 12:54	214.93	0.00	185.07	0.00	0.00	400.00	20.00	250.00	270.00
2-Jul-02		0.00	0.00	400.00	0.00	0.00	400.00	22.00	258.00	280.00
3-Jul-02		0.00	0.00	400.00	0.00	0.00	400.00	26.00	255.00	281.00
4-Jul-02		0.00	0.00	27.79	0.00	0.00	27.79	27.00	253.00	280.00
5-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	27.00	246.00	273.00
6-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	28.00	903.00	931.00
7-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	24.00	241.00	265.00
8-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	28.00	146.00	174.00
9-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	27.00	110.00	137.00
10-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	27.00	88.00	115.00
11-Jul-02		0.00	0.00	0.00	0.00	0.00	0.00	27.00	95.00	122.00
Total (cfs/day)		5614.93	618.87	1012.86	0.00	0.00	7246.66	592.00	5473.00	5971.00
Total (a.f.)		11137.05	1227.51	2008.98	0.00	0.00	14373.53	1174.21	10855.53	11843.30

<sup>1</sup> Offset Account #53 also referred to as Colorado Downstream Consumable

<sup>2</sup> Offset Account #54 also referred to as Kansas Consumable

<sup>3</sup> Offset Account #55 also referred to as Kansas Storage Charge

<sup>4</sup> Provisional United States Geological Survey data.

<sup>5</sup> State Line flows equal Frontier Ditch plus Arkansas at Coolidge, KS with consideration of arrival times

<sup>6</sup> Offset Account credit of 1036 AF determined in accordance with Paragraphs 2 & 3 of the stipulation Re: Offset Accounts In John Martin Reservoir dated March 17, 1997.

<sup>7</sup> Amended to correct Frontier Ditch data (use flow data and not gage ht. Data).

0												
Transit Loss Worksheet					Transit Loss Worksheet				Transit Loss Worksheet			
XI - C AMENDED 7												
317 LOSS AND OFFSET ACCOUNT WATERS												
Transaction Date	Transaction Data	Kansas Acct. #8 Release (cfs)	Transit Loss Acct. 18 Release (cfs)	Offset Acct. #53 Release1 (cfs)	Offset Acct. #54 Release2 (cfs)	Offset Acct. #55 Release3 (cfs)	Total Account Releases (cfs)	Frontier Ditch4 (cfs)	Arkansas @ Coolidge, KS.4 (cfs)	Release Meas. @ State Line5 (cfs)	Acct.#8 Release Meas @ State Line5 (af)	Transit Loss (af)
(dd-mm-yy, '0cfs>400cfs/250@09:00	(delta cfs@hh:mm)	200	125	0	0	0	325	16	34	N/A		
17-Jun-02		400	250	0	0	0	650	14	30	N/A		
18-Jun-02		400	187.5	0	0	0	587.5	19	50	69	136.86	
19-Jun-02	250cfs>150cfs@09:00	400	56.37	0	0	0	456.37	25	185	210	416.54	
20-Jun-02	150cfs>0cfs@09:00	400	0	0	0	0	400	25	230	255	505.79	
21-Jun-02		400	0	0	0	0	400	25	218	243	481.99	
22-Jun-02		400	0	0	0	0	400	24	212	236	468.11	
23-Jun-02		400	0	0	0	0	400	24	229	253	501.83	
24-Jun-02		400	0	0	0	0	400	24	231	255	505.79	
25-Jun-02		400	0	0	0	0	400	24	242	266	527.61	
26-Jun-02		400	0	0	0	0	400	23	246	269	533.56	
27-Jun-02		400	0	0	0	0	400	21	244	265	525.63	
28-Jun-02		400	0	0	0	0	400	23	239	262	519.68	
29-Jun-02		400	0	0	0	0	400	22	238	260	515.71	
30-Jun-02		400	0	0	0	0	400	20	250	270	535.55	
1-Jul-02	Change @ 12:54	214.93	0	185.07	0	0	400	22	258	280	555.38	
2-Jul-02		0	0	400	0	0	400	26	255	281	299.58	
3-Jul-02		0	0	400	0	0	400	26	255	280	0	
4-Jul-02		0	0	27.79	0	0	27.79	27	253	280	0	
5-Jul-02		0	0	0	0	0	0	27	246	273	0	
6-Jul-02		0	0	0	0	0	0	28	903	931	1818.85	
7-Jul-02		0	0	0	0	0	0	24	241	265	525.63	
8-Jul-02		0	0	0	0	0	0	28	146	174	345.13	
9-Jul-02		0	0	0	0	0	0	27	110	137	271.74	
10-Jul-02		0	0	0	0	0	0	27	88	115	228.1	
11-Jul-02		0	0	0	0	0	0	27	95	122	241.99	
Total (cfs/day)		5614.93	618.87	1012.86	0	0	7246.66	592	5473	5971	10461.03	676.01
Total (a.t.)		11137.05	1227.51	2008.98	0	0	14373.53	1174.21	10855.53	11843.3		

KATHLEEN SEBELIUS, GOVERNOR  
Adrian J. Polansky, Secretary

STATE OF KANSAS



Garden City Field Office  
Mark E. Rude, Water Commissioner  
2508 Johns Street  
Garden City, Kansas 67846-2804

(620) 276-2901 FAX (620) 276-9315

MAY 19 2003

KANSAS DEPARTMENT OF AGRICULTURE

May 16, 2003

DIVISION ENGINEER  
PUEBLO, COLORADO

Steve Witte  
Operations Secretary  
Arkansas River Compact Administration  
310 E. Abriendo Ave, Ste B  
Pueblo, CO 81006

RE: CY 2002 Delivery Deficit

Dear Steve:

The purpose of this letter is to respond to your letter of March 19, 2003 and to re-iterate our previously-expressed concerns with respect to the determination of delivery deficit as presented in my March 4<sup>th</sup> letter.

The following deals only with the delivery deficits associated with the Kansas Section II account releases which occurred during CY 2002. We will address the Offset Account deliveries at a later date, but I can tell you that we do not agree that the water released from the Offset Account was properly accounted for.

I disagree with your contention that you had no alternative but to make an independent determination of the delivery deficit. There has been ample opportunity to have discussions on this issue. Our office had provided you with analysis of the Section II releases on at least two occasions before your March 19<sup>th</sup> letter.

The CY2002 delivery deficit should be included in the discussions of the Operations Committee at next week's ARCA meeting.

**Rundown Considerations**

A key part of our disagreement regarding the quantification of delivery deficits deals with rundown considerations. Your analysis uses a rundown period to which we have not agreed to. The 1980 Operating Plan provides Section II E (4), "Releases of Kansas account water shall be measured at the Stateline as provided in Compact Article V E (3) allowing appropriate arrival times." Further, this section provides, "If transit losses occur, those losses shall be determined by the Colorado Division Engineer and a representative of the Kansas Division of Water Resources ... " We both agree that there was delivery deficit, but have not reached an agreement on the amount. Below is discussion of each of the Kansas Section II runs in question.

***First Kansas Section II Release***

Your letter states that our analysis did not allow for an appropriate arrival time when considering this Section II release. We disagree. The Section II release began on Wednesday, May 1, 2002 at 4:30 pm (CST). The water began arriving at the stateline approximately 54 hours later. See attached hydrograph which represents the stateline flows and the calls on Section II. The Kansas Section II release was continued through the weekend and was terminated with the morning gate change on Monday morning, May 6<sup>th</sup>. The stateline flows do not support the conclusion that no delivery deficit occurred during this operation. A delivery deficit was suffered by the Kansas Section II release and should be made up to that account.

Our office did re-evaluate the delivery made to the stateline for this release. The delivery deficit for this release is now considered to be 209 AF. The reason for adjustment was to fully account for the receding release at the stateline based on the enclosed hydrograph.

***Second Kansas Section II Release***

The second Section II release began on Monday, June 17, 2002 at noon (CST) with a instantaneous release rate of 400 cfs. The water began arriving at the stateline approximately 52 hours later.

Early in this run, I was in contact with you as the stateline flow did not reflect what was being release from the Kansas Section II Account, even with a significant transit loss account release. Kansas called for a release of 400 cfs from our account, yet during the period of the release, the stateline flow only briefly reached 300 cfs.

The Kansas Section II release was terminated when this account was exhausted on July 1, 2002 at 12:50 pm. At that time, the remaining water in the Offset account was released. The Offset account release continued until it was exhausted on July 4<sup>th</sup> at 2 am. The stateline flow dropped off approximately 30 hours afterwards. The stateline flows do not support the conclusion that no delivery deficit occurred during this operation. A delivery deficit was incurred to the Kansas Section II account and should be made up to this account.

My staff reviewed this release and the deficit was determined as set out in my March 4<sup>th</sup> letter. Kansas feels the release measurement should terminate 48 hours after the Kansas Section II Account was emptied as is consistent with normal practice for arrival times. This is an appropriate accounting as the Section II release was followed immediately by a release from the Offset Account. During the 48 hours, the full amount at the stateline was credited to the Kansas Section II. Therefore, there have been no adjustments to the original determination indicated in my letter of March 4<sup>th</sup>. The delivery deficit for this Kansas Section II release is 4,166 AF.

Further, we do not agree with your inclusion of the runoff event that occurred after the Offset Account release that followed the second Kansas Section II Release. It is inappropriate to turn any portion of this precipitation runoff event into a Kansas Section II reservoir release.

***Summary***

I do not agree with your independent determination that the delivery deficit in CY2002 was just 676 acre feet. I also disagree with putting any delivery deficit replacement in the Transit Loss Account. The two (2) Kansas Section II releases from JMR, measured at the stateline, suffered delivery deficits totaling 4,375 acre feet. We expect that the full 4,375 acre feet will be made up to the Kansas Section II account.

Sincerely,



Mark E. Rude  
Water Commissioner

MER:KLS:klb

Enclosures

pc: David Pope  
Hal Simpson

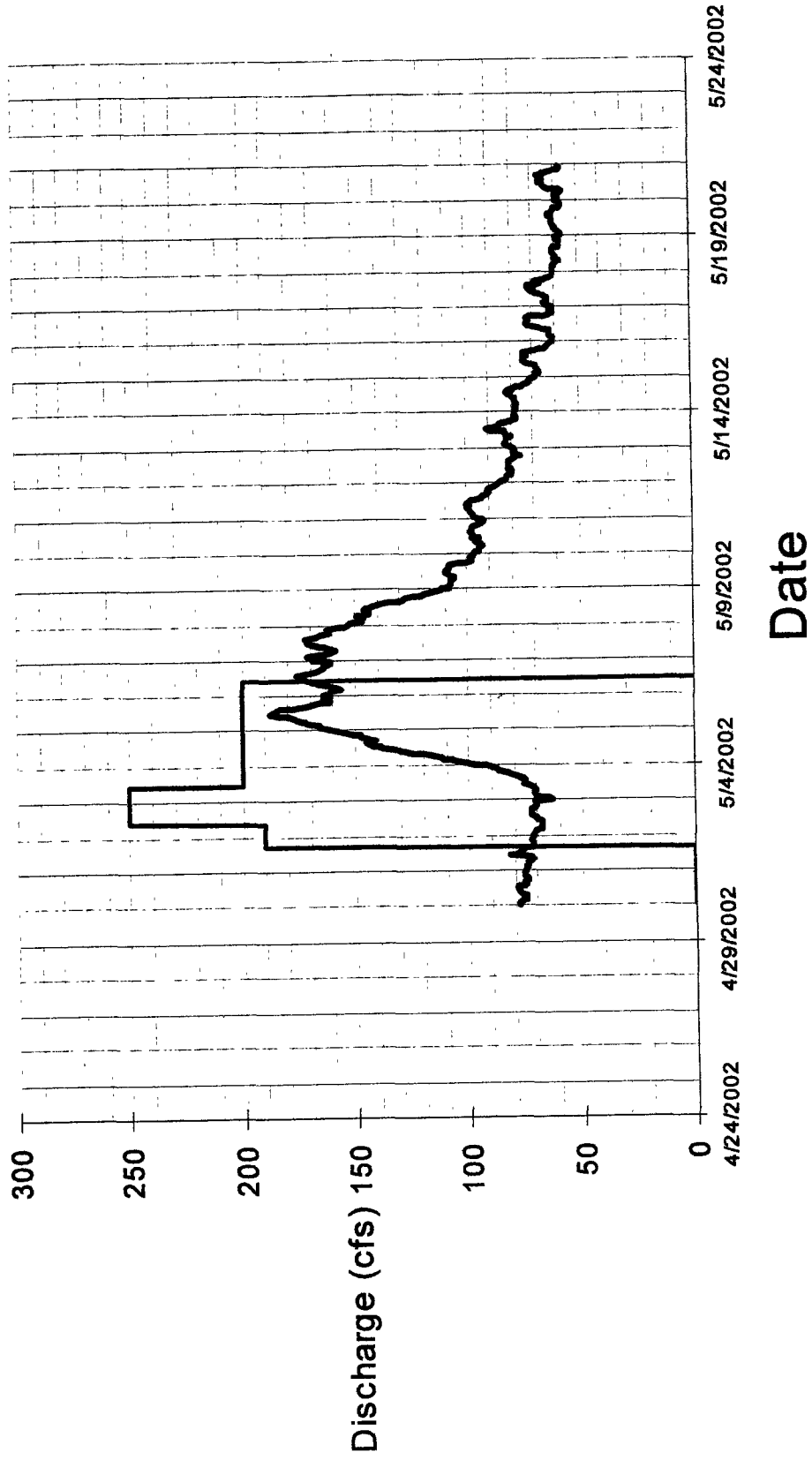


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MAY 19 2003

DIVISION OF WATER  
BUREAU OF COLORADO

# **May 1, 2002 Sec. II Release Stateline Discharge**



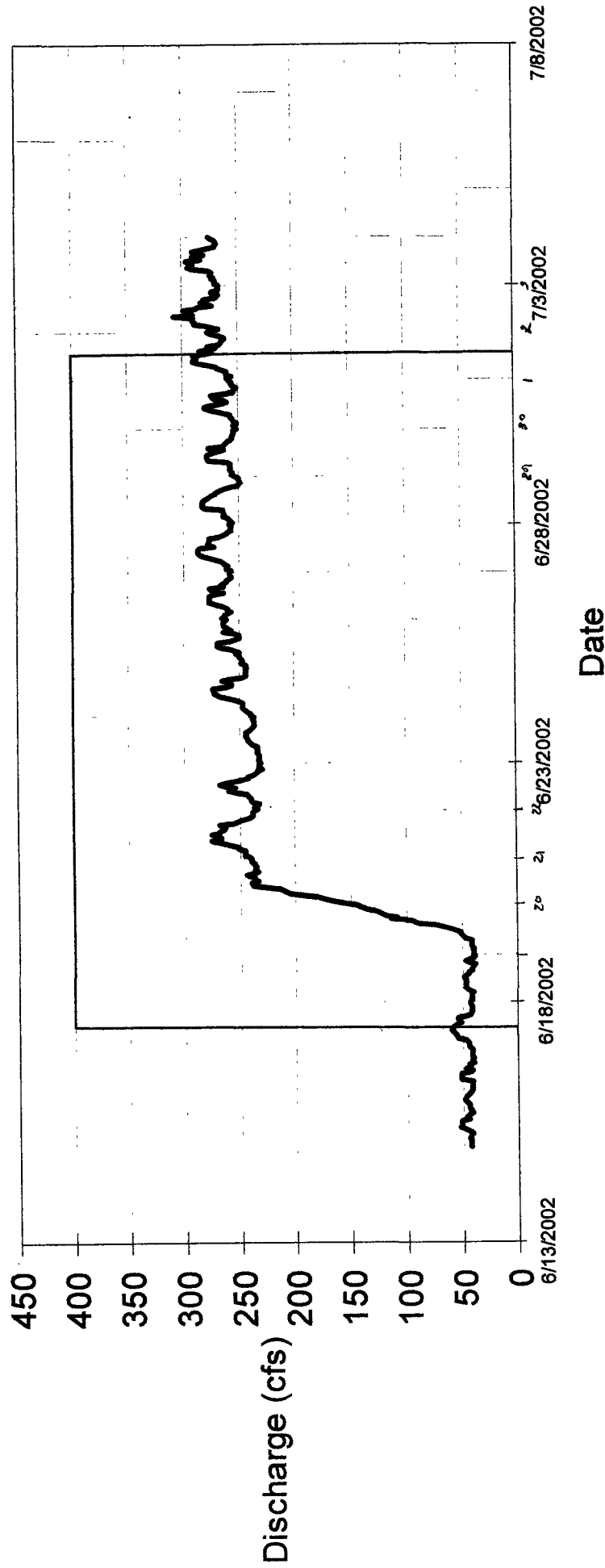
— StatelineQ — Section II release

Page 1 of 1

MAY 19 2003

STATISTICAL CENTER  
BUREAU OF CENSUS

# June 17, 2002 Sec II Release Stateline Discharge



— Stateline Discharge — Series2



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AUG 29 2003

DIVISION ENGINEER  
PUEBLO, COLORADO

# KANSAS

DEPARTMENT OF AGRICULTURE  
ADRIAN J. POLANSKY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

August 26, 2003

Steve Witte  
Operations Secretary  
Arkansas River Compact Administration  
310 E. Abriendo Ave, Ste B  
Pueblo, CO 81006

RE: Delivery Deficits in the Kansas  
Transit Loss Account

Dear Steve:

In our recent meetings, we have discussed which account should be credited if Kansas suffers delivery losses in excess of the quantity available in the Kansas Transit Loss account. Your interpretation of Section III.D., is that any delivery deficits should be made up to the Kansas Transit Loss account. I agree, however, I believe that the water should be immediately transferred from the Transit Loss account to the Kansas Section II account to *replenish* any outstanding delivery deficits.

Section II.E.(4) of the 1980 Operating Plan provides,

"Releases of Kansas account water shall be measured at the Stateline as provided in Compact Article V E (3) allowing appropriate arrival times. If transit losses occur, those losses shall be determined by the Colorado Division Engineer and a representative of the Kansas Division of Water Resources and shall be *replenished* from the Kansas transit loss account. *In the event that such losses at the end of the delivery are greater than the total in the Kansas transit loss account, then the deficit shall be made up from the next available transfers of other water under Subsection III D.*" – *Emphasis added.*

Section III.D. of the 1980 Operating Plan provides,

"Thirty-five percent of all water deliveries to John Martin Reservoir, under Subsections III A, III B, and III C, herein, during any compact year shall be transferred into the accounts for Kansas transit losses, for Kansas, and for Colorado Water District 67 ditches at the time of delivery in the following manner: First, *transfers from deliveries shall make up deficits, if any, in the Kansas transit loss account which result from Subsection II E (4), herein, and shall then also fill the said Kansas transit loss account to the amount of 1,700 acre-feet.*

Then, of all such water delivered in excess of this specified amount, 11 percent of those deliveries shall be transferred to the Kansas account and 24 percent of those deliveries shall be transferred to the account of the Colorado Water District 67 ditches. Transfers into the accounts for Colorado Water District 67 ditches shall be distributed according to the percentages in Subsection II D (3). herein; except the Amity shall not share in distributions of deliveries under Subsection III A, herein." – *Emphasis added.*

These sections provide that if there is a transit loss (delivery deficit) on a Kansas release, then the extent of those losses are determined and replenished from the Transit Loss account. For example, if the delivery deficit is 600 AF and there is at least 600 AF in the Transit Loss account, then 600 AF is transferred to the Kansas Section II account, thus replenishing that account.

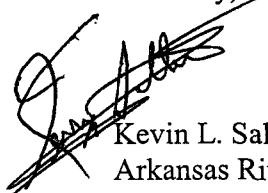
However, if a transit loss occurs that exceeds what is available in the Transit Loss account, then the deficit is to be replenished from the next available water under Section III.D., which in part provides:

*"First, transfers from deliveries shall make up deficits, if any, in the Kansas transit loss account which result from Subsection II E (4), herein, and shall then also fill the said Kansas transit loss account to the amount of 1,700 acre-feet."* – *Emphasis added*

Under this condition, the Kansas release as physically measured at the stateline resulted in a delivery deficit in an amount that exceeded the water available in the Transit Loss account. The Transit Loss account cannot fully *replenish* the Kansas Section II account. The actual deficit can only be attributable to the Kansas Section II account. Section III.D. is very clear that any deficit is to be made up first. After any deficit is made up, the 35% charge fills the Transit Loss account to 1700 AF. Please note that under this description, there does not exist an amount greater than 1700 AF in this account, because the transfer into and out of the Transit Loss account satisfies the outstanding delivery deficit first. This section even goes on to say that the 35% charge in excess of the 1700 AF is to be allocated between the Colorado and Kansas Section II accounts.

We have discussed the need to look at this language, and possibly propose clarifying language. The current language seems to provide a well defined process to address any delivery deficits that may occur as the result of a Kansas Section II release. Therefore, I do not see any need for clarifying language. Should you have any questions, please feel free to call this office.

Sincerely,



Kevin L. Salter, P.E.  
Arkansas River Team

KLS:cls

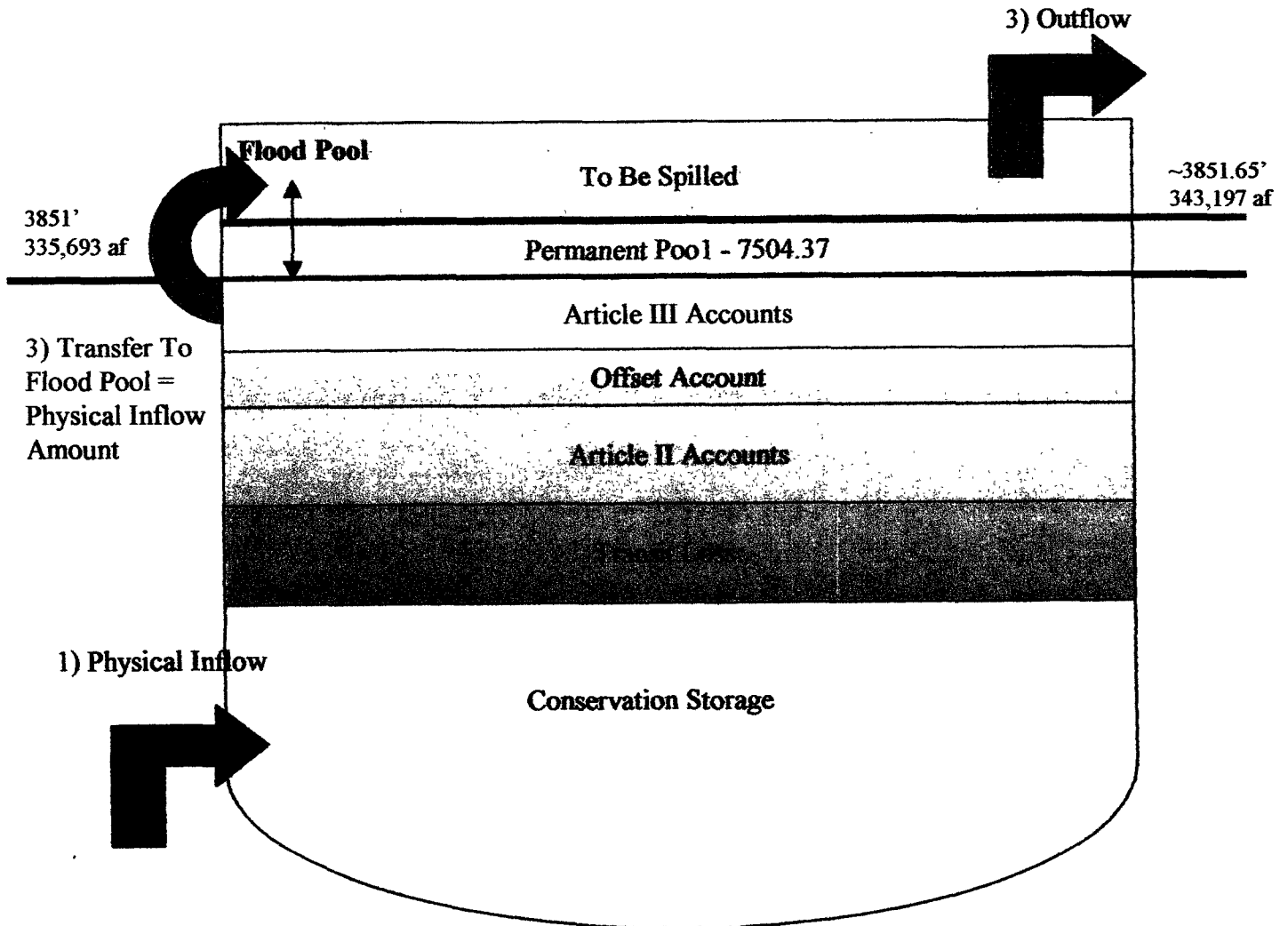
pc: Jim Rogers, ARCA Rep  
David Brenn, ARCA Rep



# OS Spill Accounting Methodology

12/14/97 to 4/26/98

At inception of spill







**Comparative Analysis  
of Alternative Methods  
of Accounting for Evaporation  
During Periods of Spill  
John Martin Reservoir**

# 1)Operations Secretary's Historical Practice

## 30 AF Evap Applied Only to Flood Pool

	A	B1	A+B1	CPMax	B2
<b>Initial Contents</b>	100	100	200	200	100
<b>Evap</b>	0	0	0		-30
<b>Final Contents</b>	100	100	200	200	70

### Variable Definitions:

A = Conservation Storage

B1 =Spilling Account Below Elevation Max

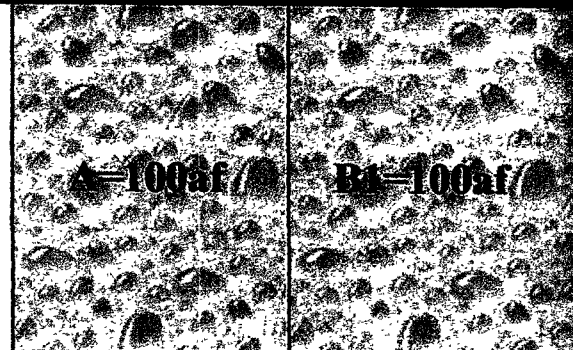
B2 =Flood Pool

CPMax = Max Allowable Acre Feet

Below Flood Pool

a.k.a “Conservation Pool”

**CPMax=200 af**



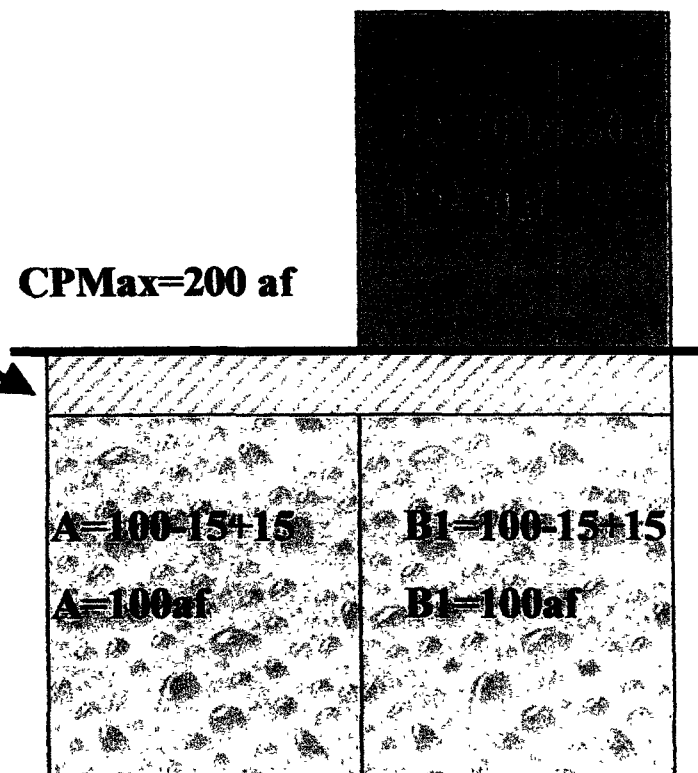
## 2) Most Literal Interpretation of Section II,F

**30 AF Evap Applied Only to Conservation Storage and Accounts Pro Rata ( A and B1) :**

	A	B1	A+B1	CPMax	B2
<b>Initial Contents</b>	100	100	200	200	100
<b>Evap</b>	-15	-15	-30		0
<b>Minus Evap</b>	85	85	170	200	100
<b>Pro Rata Inflow</b>	15	15	30		-30
<b>Results</b>	100	100	200	200	70

**30 af deficit**

**CPMax=200 af**



### 3) AOS Pro Rata Evap Theory

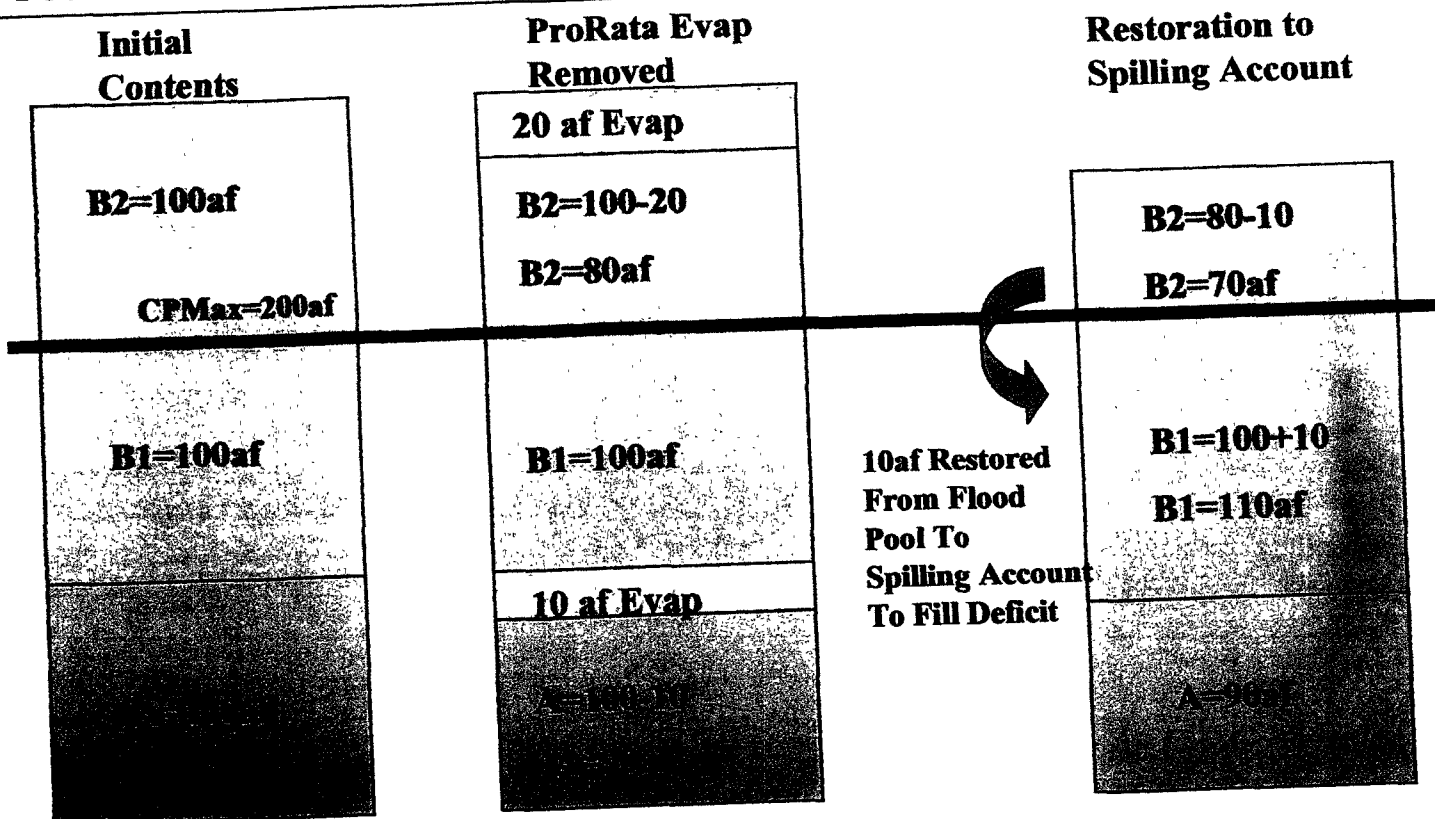
30 AF Evap Applied Pro Rata To All Accounts (A+B);

Restoration Applied Only to Spilling Account (B)

	A	B1	B2	B	A+B1	CPMax
Initial Contents	100	100	100	200	200	200
Evap	-10	0	-20	-20	-10	
Minus Evap	90	100	80	180	190	200
Inflow	0	10	-10	0	10	
Results	90	110	70	180	200	200

#### Variable Definitions:

A = Conservation Storage      B = B1 + B2 ( Spilling Account Total)  
 B1 = Spilling Accnt Below Elev Max  
 B2 = Spilling Accnt Above Elev Max  
 CPMax = Max Allowable Acre Feet Below Flood Pool a.k.a "Conservation Pool"



## **1980 Operating Plan - Section II, F:**

**“Evaporation charges shall be made against water stored in the accounts ... using formulas and procedures approved by the Colorado Division Engineer and a representative of the Kansas Division of Water Resources ...**

**... evaporation charges shall be prorated amongst conservation storage and the accounts according to the amounts in them “**

**(emphasis added)**

**Water detained in the flood pool (though physically subject to evaporation) is not part of conservation storage nor in an account defined by the 1980 Operating plan.**

**It has been asserted that the procedure historically used by the Operations Secretary in such situations is not currently supported by the provisions of the 1980 plan and the representatives of the states have not agreed to alternative procedures.**

## **Evaporation Charge Conclusion:**

Although the procedure historically used by the Operations Secretary in accounting evaporation charges is not the same as that described in Section II, F of the 1980 Operating Plan, the result has been the same as that intended therein.

### **OS Historic Practice- Evap from Flood Pool**

	<b>A</b>	<b>B1</b>	<b>A+B1</b>	<b>CPMax</b>	<b>B2</b>
<b>Initial Contents</b>	100	100	200	200	100
<b>Evap</b>	0	0	0		-30
<b>Final Contents</b>	100	100	200	200	70

### **Most Literal Interpretation of Section II, F - Pro Rata Evap**

	<b>A</b>	<b>B1</b>	<b>A+B1</b>	<b>CPMax</b>	<b>B2</b>
<b>Initial Contents</b>	100	100	200	200	100
<b>Evap</b>	-15	-15	-30		0
<b>Minus Evap</b>	85	85	170	200	100
<b>Pro Rata Inflow</b>	15	15	30		-30
<b>Results</b>	100	100	200	200	70

## 4) OS Alternative

**30 AF Evap Applied Pro Rata To All Accounts (A & B1);**

**Restoration Applied to Conservation Storage (A).**

The OS is unable to find any basis within the 1980 Operating Plan to justify proration of evaporation over water contained within the flood pool.

Arguably, any "restoration" must be interpreted as an inflow and therefore, pursuant to Section II A and/or II B3, must accrue to conservation storage.

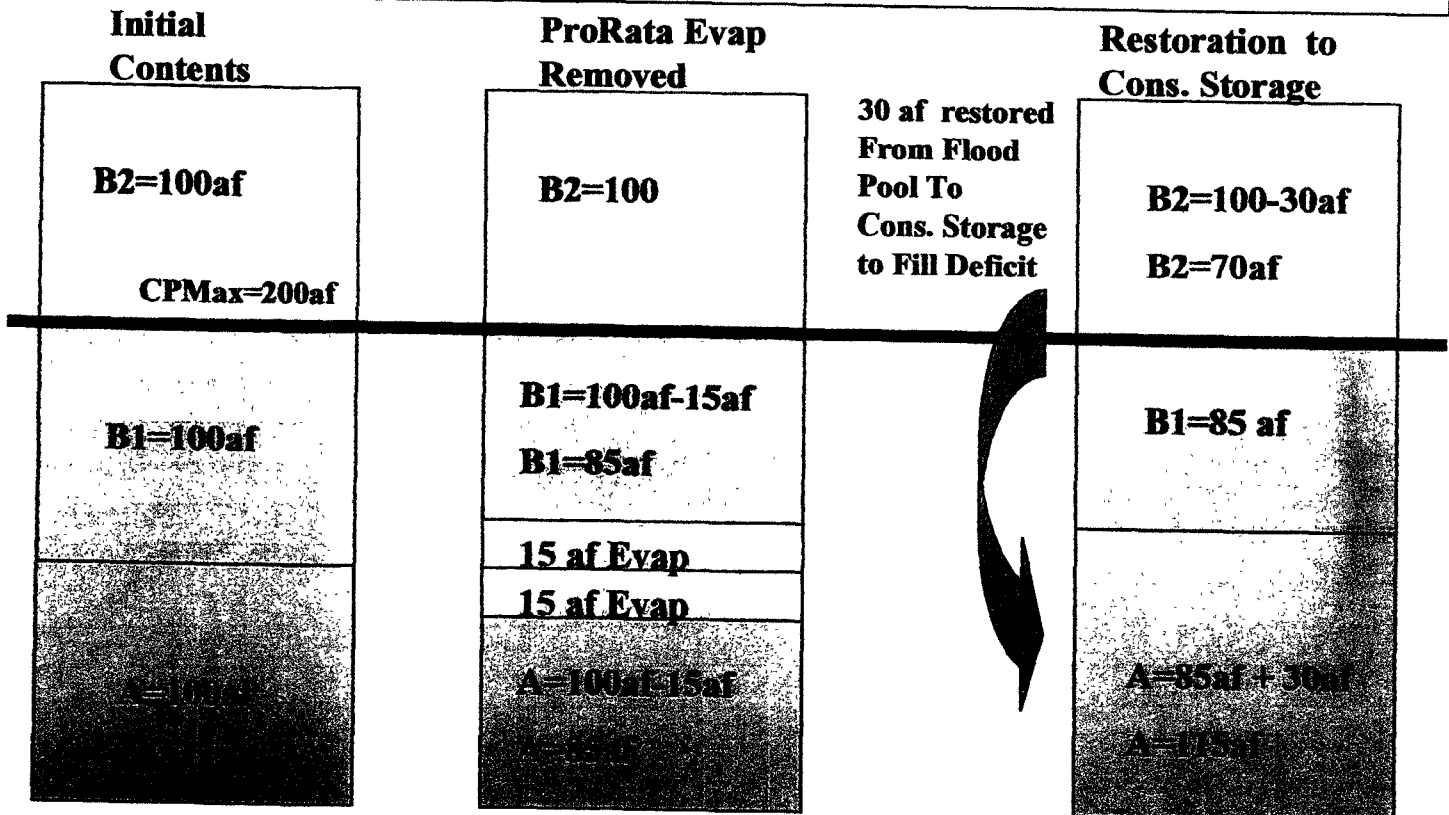
	A	B1	A+B1	CPMax	B2
<b>Initial Contents</b>	100	100	200	200	100
<b>Evap</b>	-15	-15	-30		0
<b>Minus Evap</b>	85	85	170	200	100
<b>Pro Rata Inflow</b>	30	0	30		-30
<b>Results</b>	115	85	200	200	70

A = Conservation Storage

B1=Spilling Acct Below Elev Max

B2 =Flood Pool

CPMax = Max Acre Feet Below Flood Pool a.k.a "Conservation Pool"



# Comparison of 4 Evap Methods

## 1)OS Historic Practice- Evap from Flood Pool

	A	B1	A+B1	CPMax	B2
Initial Contents	100	100	200	200	100
Evap	0	0	0		-30
Final Contents	100	100	200	200	70

## 2)Most Literal Interpretation of Section II, F - Pro Rata Evap

	A	B1	A+B1	CPMax	B2
Initial Contents	100	100	200	200	100
Evap	-15	-15	-30		0
Minus Evap	85	85	170	200	100
Pro Rata Inflow	15	15	30		-30
Results	100	100	200	200	70

## 3)AOS Pro Rata Evap : Restoration to Spilling Account

	A	B1	B2	B	A+B1	CPMax
Initial Contents	100	100	100	200	200	200
Evap	-10	0	-20	-20	-10	
Minus Evap	90	100	80	180	190	200
Inflow	0	10	-10	0	10	
Results	90	110	70	180	200	200

## 4)OS Alternative: Restoration to Conservation Storage

	A	B1	A+B1	CPMax	B2
Initial Contents	100	100	200	200	100
Evap	-15	-15	-30		0
Minus Evap	85	85	170	200	100
Pro Rata Inflow	30	0	30		-30
Results	115	85	200	200	70



# Evap Methodology Accounting Comparisons

1) Evap from Flood Pool- OS Historic Practice								
			$A = A + Q_{in}$					Compact Water
			$B = B - (.625 * Q_{in})$					Art II - Kansas
			$C = C - (.375 * Q_{in})$					Art II - Colorado
			$D = D + ((Q_{in} - Q_{out}) - Evap)$					Flood Pool
Day	Qin	Qout	Evap	A	B	C	D	Total
				200.00	500.00	300.00	0.00	1000.00
1	100.00	75.00	10.00	300.00	437.50	262.50	15.00	1015.00
2	100.00	75.00	10.00	400.00	375.00	225.00	30.00	1030.00
3	50.00	75.00	5.00	450.00	343.75	206.25	0.00	1000.00
Sum	250.00	225.00	25.00					

2) Most Literal Interpretation of Section II,F (Rev 6)								
Pro Rata Evap Only to Conservation Storage and Accounts Pro Rata								
			$A = A + Q_{in} - (Evap * (A/Total)) + (Evap * (A/Total))$					Compact Water
			$B = B - (.625 * Q_{in}) - (Evap * (B/Total)) + (Evap * (B/Total))$					Art II - Kansas
			$C = C - (.375 * Q_{in}) - (Evap * (C/Total)) + (Evap * (C/Total))$					Art II - Colorado
			$D = (Q_{in} - Q_{out}) - Evap$					Flood Pool
			$Total = A + B + C$					Total of Accounts
Day	Qin	Qout	Evap	A	B	C	D	Total
				200.00	500.00	300.00	0.00	1000.00
1	100.00	75.00	10.00	300.00	437.50	262.50	25.00	1000.00
				297.00	433.13	259.88	25.00	990.00
				300.00	437.50	262.50	15.00	1000.00
2	100.00	75.00	10.00	400.00	375.00	225.00	40.00	1000.00
				396.00	371.25	222.75	40.00	990.00
				400.00	375.00	225.00	30.00	1000.00
3	50.00	75.00	5.00	450.00	343.75	206.25	5.00	1000.00
				447.75	342.03	205.22	5.00	995.00
				450.00	343.75	206.25	0.00	1000.00
Sum	250.00	225.00	25.00					

# Evap Methodology Accounting Comparisons- (con't)

3) AOS Pro Rata Evap: Restoration to Spilling Account									
				$A = A + Q_{in} - (Evap * (A/Total))$				Compact Water	
				$B = B - (.625 * Q_{out}) - (Evap * (B/Total))$				Art II - Kansas	
				$C = C - (.375 * Q_{out}) - (Evap * (C/Total))$				Art II - Colorado	
				$D = Total - 1000$				Informational Only ... Not an Accot	
				$Total = A + B + C$				Total of Accts	
Day	Q <sub>in</sub>	Q <sub>out</sub>	Evap	A	B	C	D	Total	ResTotal
				200.00	500.00	300.00	0.00	1000.00	
1	100.00	75.00	10.00	298.00	448.13	268.88	15.00	1015.00	1015.00
2	100.00	75.00	10.00	395.06	396.83	238.10	30.00	1030.00	1030.00
3	50.00	75.00	5.00	443.15	348.03	208.82	0.00	1000.00	1000.00
Sum	250.00	225.00	25.00						

4) OS Alternative Pro Rata Evap: Restoration to Conservation Storage									
				* $A = A + Q_{in} - (Evap * (A/Total)) + Evap$				Compact Water	
				$B = B - (.625 * Q_{in}) - (Evap * (B/Total))$				Art II - Kansas	
				$C = C - (.375 * Q_{in}) - (Evap * (C/Total))$				Art II - Colorado	
				* $D = D + (Q_{in} - Q_{out}) - Evap$				Flood Pool	
				$Total = A + B + C$				Total of Accts	
Day	Q <sub>in</sub>	Q <sub>out</sub>	Evap	A	B	C	D	Total	
				200.00	500.00	300.00	0.00	1000.00	
1	100.00	75.00	10.00	300.00	437.50	262.50	25.00	1000.00	
				297.00	433.13	259.88	25.00	990.00	
				307.00	433.13	259.88	15.00	1000.00	
2	100.00	75.00	10.00	407.00	370.63	222.38	40.00	1000.00	
				402.93	366.92	220.15	40.00	990.00	
				412.93	366.92	220.15	30.00	1000.00	
3	50.00	75.00	5.00	462.93	335.67	201.40	5.00	1000.00	
				460.62	333.99	200.39	5.00	995.00	
				465.62	333.99	200.39	0.00	1000.00	
Sum	250.00	225.00	25.00						

\* Assumes Permanent Pool Balance of Zero

If Permanent Pool Balance is > Zero, the following equations would be used :

				$A = A + Q_{in} - (Evap * (A/Total)) + (Evap - Evap * (P/Total))$				Compact Water	
				$B = B - (.625 * Q_{in}) - (Evap * (B/Total))$				Art II - Kansas	
				$C = C - (.375 * Q_{in}) - (Evap * (C/Total))$				Art II - Colorado	
				$D = D + (Q_{in} - Q_{out}) - (Evap - Evap * (P/Total))$				Flood Pool	
				$P = P - (Evap * (P/Total))$				Perm Pool	
				$Total = A + B + C$				Total of Accts	

# Evap Methodology Accounting

## Final Balance Comparisons

		<b>Account Ending Balances from Various Evap Methods</b>								
							<b>0.625</b>	<b>0.375</b>		
						<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>B+C</b>
<b>1) OS Historic Practice</b>						450.00	343.75	206.25	0.00	550.00
<b>2) Most Literal Interpretation of Section II,F</b>						450.00	343.75	206.25	0.00	550.00
<b>3) AOS Pro Rata Evap: Restoration to Spilling Accnt</b>						443.15	348.03	208.82	0.00	556.85
<b>4) OS AlternativePro Rata Evap: Restoration to Cons. Storage</b>						465.21	334.25	200.55	0.00	534.80

# **Evaporation Methodology Conclusion**

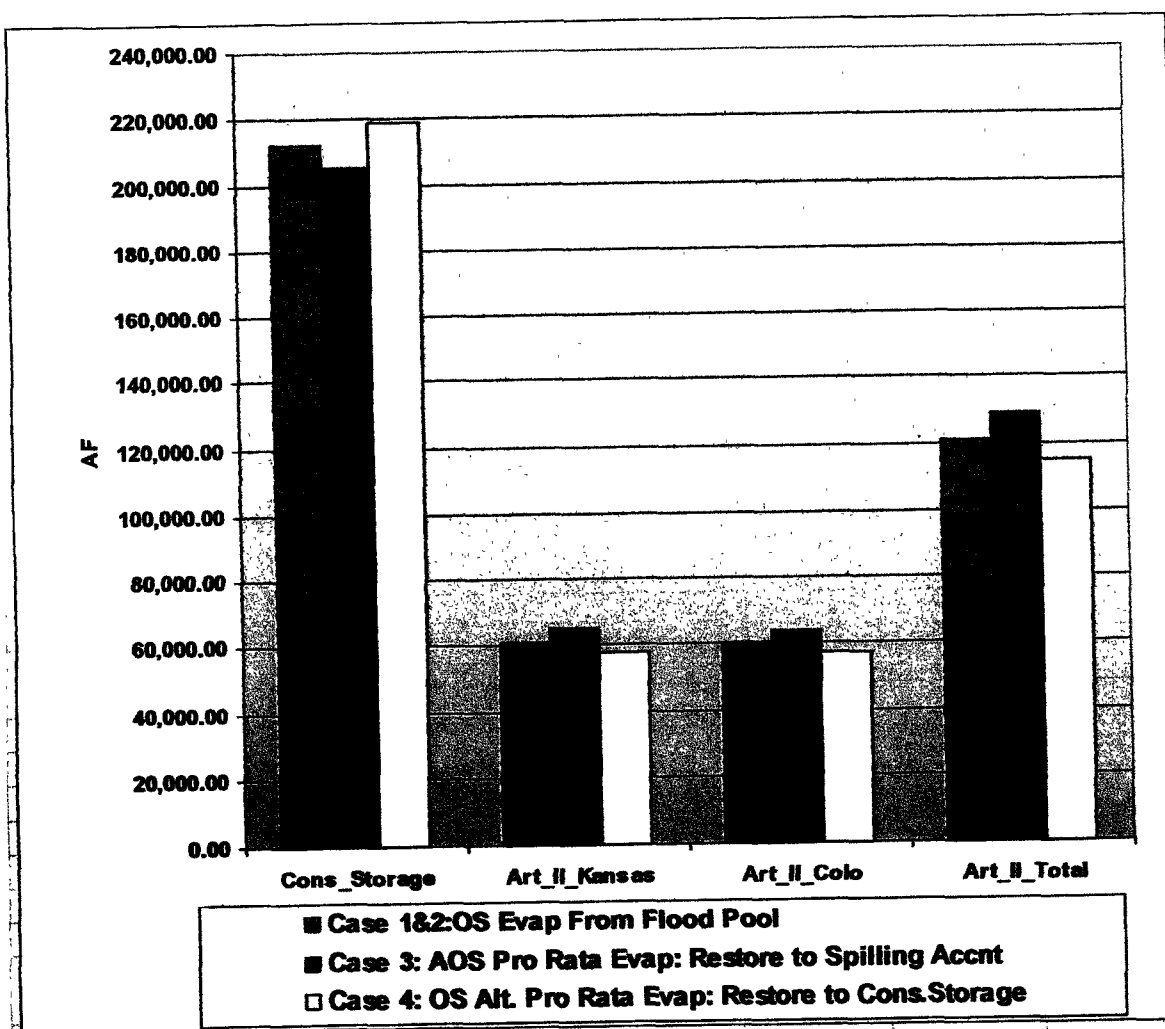
In summary, the results so far are :

- 1) Inflow vs. Outflow-based accounting produce identical results in final balances;
- 2) The OS Evap method produces results that are identical to the method outlined in the 1980 Operating Plan - Section II,F.
- 3) A decision clarifying the appropriate evaporation methodology to be applied in future spill circumstances is needed.

# Final Balance Comparisons for 97-98 Accounting Year at End Of Spill Using 3 Evap Methods

Note: Cases 3 and 4 both cause water to remain in the Flood Pool at end of spill.

Case Description	Cons_Storage	Art_II_Kansas	Art_II_Colo	Art_II_Total	Flood Pool
Case 1&2:OS Evap From Flood Pool	212,495.04	60,583.94	60,407.56	120,991.50	0.00
Case 3: AOS Pro Rata Evap: Restore to Spilling Acct	205,021.61	65,079.98	63,771.12	128,851.10	305.25
Case 4: OS Alt. Pro Rata Evap: Restore to Cons.Storage	218,715.78	57,544.69	57,307.52	114,852.21	306.85





STATE OF KANSAS

BILL GRAVES, GOVERNOR  
Alice A. Devine, Secretary of Agriculture



DIVISION OF WATER RESOURCES  
David L. Pope, Chief Engineer-Director  
901 South Kansas Avenue, 2nd Floor  
Topeka, Kansas 66612-1283  
(913) 296-3717 FAX (913) 296-1176

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DEC 30 1997

DIVISION ENGINEER  
PUEBLO, COLORADO

KANSAS DEPARTMENT OF AGRICULTURE

December 22, 1997

TELECOPY & MAIL

Mr. Hal D. Simpson  
Colorado State Engineer  
818 State Centennial Building  
1313 Sherman Street  
Denver, Colorado 80203

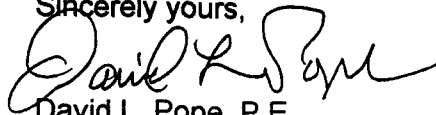
Dear Hal:

I understand from Steve Witte's statements to Mark Rude, that Steve is allowing water to be diverted or stored upstream of John Martin Reservoir under postcompact priorities. If this is true, Colorado would appear to be in violation of the Arkansas River Compact, the 1980 Resolution, and the spill provision of the Resolution Concerning An Offset Account in John Martin Reservoir For Colorado Pumping.

The Compact protects flows into John Martin Reservoir until conservation storage water spills. Pursuant to the 1980 Resolution as construed by you and the Colorado Supreme Court, no conservation storage water has spilled this year, nor is it expected to spill until the Article III and Article II water stored pursuant to the 1980 Resolution and water stored in the Offset Account have fully spilled from John Martin Reservoir. Water stored under Article III-A of the 1980 Resolution cannot be rolled over to other accounts or uses in John Martin Reservoir or exchanged out of John Martin Reservoir, but must be spilled pursuant to Article II-G of the 1980 Resolution and paragraph 13 of the Offset Account Resolution adopted this year.

Please confirm by return telecopy that you have taken all necessary steps to ensure that no water is diverted or stored upstream of John Martin Reservoir pursuant to postcompact water rights until Article III, Article II, and Offset Account water has fully spilled and conservation storage water is spilling from John Martin Reservoir, and that Article III water is not being rolled over or exchanged.

Sincerely yours,

  
David L. Pope, P.E.  
Chief Engineer-Director

DLP:dlo  
cc: (Telecopy & Mail)  
Steve Witte  
Mark Rude

DEC 29 1997

DIVISION ENGINEER  
PUEBLO COLORADO

## STATE OF COLORADO

## OFFICE OF THE STATE ENGINEER

Division of Water Resources  
Department of Natural Resources1313 Sherman Street, Room 818  
Denver, Colorado 80203  
Phone (303) 866-3581  
FAX (303) 866-3589Roy Romer  
GovernorJames S. Lochhead  
Executive DirectorHal D. Simpson  
State Engineer

December 23, 1997

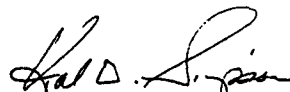
Mr. David L. Pope  
Chief Engineer - Director  
Division of Water Resources  
Kansas State Board of Agriculture  
109 SW 9th Street, Suite 202  
Topeka, KS 66612-1283

Dear David:

In response to your letter of December 22, 1997, your understanding is correct that Steve Witte is allowing water to be diverted or stored upstream of John Martin Reservoir under post-Compact priorities during times when water is being spilled from Section III accounts in John Martin Reservoir; however, there is an important fact that needs to be pointed out. At times when Steve is allowing water to be diverted or stored upstream of John Martin Reservoir under post-Compact priorities, he is including any upstream diversions and storage in the rate at which he is converting water in the Section III accounts to conservation storage. The effect of permitting such upstream storage and diversions is to reduce the rate at which water is physically spilling from John Martin Reservoir, but it has no effect on the rate at which water in Section III accounts is converted into conservation storage.

In my opinion, permitting upstream diversion or storage under post-Compact priorities under these conditions at the present time is good water management and is not in violation of the Arkansas River Compact, the 1980 Operating Plan, or the Resolution Concerning an Offset Account in John Martin Reservoir for Colorado Pumping. At the present time, there is approximately 700 cfs at the stateline and 400 cfs passing Garden City. Therefore, it does not appear to me that upstream diversion or storage in Colorado under post-Compact priorities is depleting waters of the Arkansas River in usable quantity or availability for use to the water users in Colorado or Kansas under the Compact. If you feel I am wrong in that regard, I would appreciate hearing the basis for your opinion.

Sincerely,

  
Hal D. Simpson  
State Engineer

cc: Steve Witte  
Wendy Weiss  
David Robbins  
Dennis Montgomery



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STATE OF KANSAS

JAN 23 1998  
BILL CLAYTON, GOVERNOR  
Alisa A. Devine, Secretary of Agriculture  
DIVISION ENGINEER  
PUEBLO, COLORADO



DIVISION OF WATER RESOURCES  
David L. Pope, Chief Engineer-Director  
901 South Kansas Avenue, 2nd Floor  
Topeka, Kansas 66612-1283  
(913) 296-3717 FAX (913) 296-1176

KANSAS DEPARTMENT OF AGRICULTURE

January 9, 1998

TELECOPY & MAIL

Mr. Hal D. Simpson  
Colorado State Engineer  
818 State Centennial Building  
1313 Sherman Street  
Denver, Colorado 80203

Dear Hal:

I have received your letter of December 23, 1997. In that letter you confirm that you are allowing water to be diverted or stored upstream of John Martin Reservoir under postcompact priorities during times when water is being spilled from Section III accounts in John Martin Reservoir. This is a matter of substantial concern to Kansas, and we therefore need immediate detailed accounting of such diversion and storage. Please be so kind as to provide that accounting within the next few days.

In your letter of December 23 you also indicate that your office is "converting water in the Section III accounts to conservation storage." Section III of the 1980 Operating Plan, however, does not allow such "conversion." In addition, the spill provision of the 1980 Operating Plan, Section II-G, specifically provides that, "in the event that runoff conditions occur in the Arkansas River basin upstream from John Martin Reservoir that cause water to spill physically over the project's spillway," certain mandatory spill procedures must be followed. Such runoff conditions presently exist. Those spill procedures do not allow exchange or "conversion" of water that is to be spilled. Consequently, such "conversion" would appear to violate the 1980 Operating Plan. The spill provision of the recently adopted Resolution Concerning an Offset Account in John Martin Reservoir for Colorado Pumping is to similar effect. It would also appear to violate the Arkansas River Compact which protects usable flows to Kansas.

You seek to justify your actions on the basis of (1) "good water management" and (2) a daily usability analysis. It is not altogether clear that your recent actions constitute good water management, given the inevitable evaporation of the water stored and the reduction in transmountain importation of water that such storage causes. Even if such storage is good water management for

Mr. Hal D. Simpson  
January 9, 1998  
Page 2

Colorado, it is not acceptable to Kansas if it deprives Kansas of water to which it is entitled. Further, the mandatory spill provisions of the 1980 Operating Plan and the Offset Account Resolution referred to above are not subject to exceptions based on usability.

In view of the foregoing, I would reaffirm the request in my December 22, 1997 letter to you that you take all necessary steps to insure that no water is diverted or stored upstream of John Martin Reservoir pursuant to postcompact water rights until Section III, Section II and Offset Account water has fully spilled and conservation storage water is spilling from John Martin Reservoir, and that Section III water not be rolled over or exchanged (i.e., "converted to conservation storage"). Since some of this unauthorized diversion and storage of water has already occurred, I would ask that you take immediate steps to rectify those violations and that you provide the detailed accounting requested.

Sincerely yours,

A handwritten signature in black ink, appearing to read "David L. Pope".

David L. Pope, P.E.  
Chief Engineer-Director

DLP:dlo

cc: By Telecopy & Mail  
Steve Witte  
Mark Rude

RECEIVED

JAN 22 1998

# STATE OF COLORADO

OFFICE OF THE STATE ENGINEER  
Division of Water Resources  
Department of Natural Resources  
1313 Sherman Street, Room 818  
Denver, Colorado 80203  
Phone (303) 866-3581  
FAX (303) 866-3589



Roy Romer  
Governor

James S. Lochhead  
Executive Director

Hal D. Simpson  
State Engineer

January 14, 1998

Mr. David L. Pope  
Chief Engineer-Director  
Division of Water Resources  
Kansas State Board of Agriculture  
109 S.W. 9th St., Ste. 202  
Topeka, KS 66612-1283

Dear David:

In response to your letter of January 13, 1998, enclosed is the accounting that you requested concerning water diverted or stored upstream of John Martin Reservoir under post-compact priorities during times when water was being spilled from Section III accounts in John Martin Reservoir. Steve Witte is available to answer any questions you or your staff have concerning these diversions. It was our intention that such diversions or storage have no impact on storage in John Martin Reservoir, except to reduce the rate at which water was or would have been released from John Martin Reservoir during the spill of water in the Section III accounts. If you disagree with our accounting in any regard, I request that you inform me as soon as possible so that we can try to resolve any disagreements. It was certainly not our intention that such diversion or storage cause injury either to entities in Colorado or to Kansas, or that any entity upstream from John Martin Reservoir receive any improper benefits.

With regard to your interpretation of the "spill" provisions of the 1980 Operating Plan and the Resolution Concerning an Offset Account in John Martin Reservoir for Colorado Pumping, Colorado does not agree with your interpretation. Section II G of the 1980 Operating Plan states, in pertinent part: "In the event that runoff conditions occur in the Arkansas River basin upstream that cause water to spill physically over the project's spillway, then...". Paragraph 13 of the Offset-account Resolution is similar, but this language was modified to read "that cause water to spill from the Reservoir" in recognition that the Corps of Engineers does not spill water physically over the project's spillway. However, Section II G of the 1980 Operating Plan and paragraph 13 of the Offset-account Resolution simply describe the runoff conditions that must occur to trigger a spill of water stored in the accounts. Those runoff conditions have occurred; however, I do not read Section II G or paragraph 13 to preclude upstream diversion or storage of water when those runoff conditions occur, so long as the upstream diversion or storage is properly accounted for and does not affect the amount of the spill from the accounts. Your

interpretation of Section II G and paragraph 13 would require water to spill from John Martin Reservoir even though there is no water user in Colorado or Kansas under the Compact who would benefit from the water.

You also state: "It would also appear to violate the Arkansas River Compact which protects usable flows to Kansas." And you further state: "Even if such storage is good water management for Colorado, it is not acceptable to Kansas if it deprives Kansas of water to which it is entitled."

It was not our intention to deprive Kansas of water to which it is entitled. During times when water was being diverted or stored upstream of John Martin Reservoir under post-compact priorities, we kept careful track of Stateline flow and the flow at Garden City to ensure that the water users in Colorado and Kansas under the Compact were not injured by such diversion or storage. At all times there was substantial flow at the Stateline and at Garden City. Beyond simply stating that it would appear to violate the Arkansas River Compact and that it is not acceptable to Kansas if it deprives Kansas of water to which it is entitled, you have provided no information on how such diversions or storage would appear to violate the Compact or how they would deprive Kansas of water to which it is entitled. If you have such information, I request that you provide it to me.

You also state: "It is not altogether clear that your recent actions constitute good water management, given the inevitable evaporation of the water stored and the reduction in transmountain importation of water that such storage causes." It has always seemed to me that storage of water higher in the basin during periods of high streamflow represents good water management, particularly when such water would otherwise flow past Garden City unused. Admittedly, there may be inevitable evaporation of the water stored; but, Pueblo Reservoir is relatively efficient compared to other reservoirs in the basin. Nor does storage of water necessarily reduce transmountain importation because the Fryingpan-Arkansas Project has a limit on the amount of water that can be diverted in any year and a limit on the aggregate that can be diverted in any period of 34 consecutive years. Thus, upstream storage in Pueblo Reservoir does not necessarily reduce the amount of transmountain diversions. Furthermore, the present snowpack is about 20 percent below normal in the Colorado River basin, so the opportunity for importing water may be limited this year.

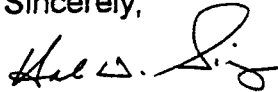
In conclusion, based on information currently available to me, I do not intend to preclude diversions or storage upstream of John Martin Reservoir pursuant to post-compact water rights until Section III, Offset Account, and Section II water has fully spilled and conservation storage water is spilling from John Martin Reservoir, at least so long as no water user in Colorado or Kansas under the Compact is injured. We will continue to carefully monitor flows at the Stateline and Garden City to insure that such diversions or storage has not caused injury to water users in Colorado and Kansas. If, after reviewing

Mr. David L. Pope  
January 14, 1998

Page 3

the accounting provided or the explanation of the basis on which such diversions or storage is permitted, you continued to have concerns about such diversions or storage, I urge you to provide additional information so that we can try to resolve any disagreements. Because this is an issue which involves the interpretation of resolutions adopted by the Arkansas River Compact Administration, I am copying Chairman Trujillo and the Colorado representatives of the Compact Administration.

Sincerely,



Hal D. Simpson  
State Engineer

cc: David W. Robbins/Dennis M. Montgomery  
Larry Trujillo, Chairman, ARCA  
Jim Rogers  
Tom Pointon  
Chuck Lile, Director, CWCB  
Steve Witte, Div. Eng.  
Wendy C. Weiss, First Assistant Attorney General

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APR 20 1998

DIVISION ENGINEER  
BILL GRAVES, GOVERNOR  
Alice A. Devine, Secretary of Agriculture

STATE OF KANSAS



DIVISION OF WATER RESOURCES  
David L. Pope, Chief Engineer-Director  
901 South Kansas Avenue, 2nd Floor  
Topeka, Kansas 66612-1283  
(913) 296-3717 FAX (913) 296-1176  
785 785

KANSAS DEPARTMENT OF AGRICULTURE

April 15, 1998



Mr. Hal D. Simpson  
Colorado State Engineer  
Division of Water Resources  
Department of Natural Resources  
1313 Sherman Street - Room 818  
Denver, Colorado 80203

Dear Hal:

I am writing to follow up on my comments at the March 25, 1998 telephonic meeting of the Arkansas River Compact Administration regarding Kansas' complaints that Colorado has been improperly administering and accounting for the ongoing John Martin Reservoir spill and to address additional concerns. Kansas continues to be dissatisfied with the administration and accounting of the spill, as explained in our earlier letters of December 22, 1997 and January 9, 1998. You most recently responded on January 14, 1998, confirming that the effect of that administration has been to decrease the water physically spilled from John Martin Reservoir.

We interpret the spill provisions of the 1980 Operating Plan and the Offset Account Resolution to be mandatory. We also interpret the word "spill" to mean "spill" and not "exchange." It is the purpose of those two resolutions to allow reservoir operations that would not be permitted under the Compact absent the resolutions. Therefore, further spill operations not provided for in the Compact, the 1980 Resolution or the Offset Account Resolution, are not permitted. In other words, the "exchange" of water allowed by Colorado Division II is an unauthorized action. Also, your suggestion that the express wording of the 1980 Resolution and the Offset Account Resolution can be ignored unless Kansas can show that the water in question would be usable in Kansas, is not correct. Moreover, Colorado should not be making unilateral determinations that the terms of ARCA resolutions can be ignored.

The effect of your actions has been to deprive Kansas of water to which it is entitled, including water in the Kansas Article II Account and recharge in Kansas above and below Garden City. This effect has been achieved in two ways: (1) your administration of water rights above John Martin Reservoir, and (2) your accounting of the spill from accounts established by the 1980 Operating Plan and the Offset Account Resolution. As explained in the earlier correspondence, no Colorado water right above John Martin Reservoir with a priority junior to the Arkansas River


Mr. Hal D. Simpson  
April 15, 1998  
Page 2

Compact should be allowed to divert until conservation storage as defined in the 1980 Operating Plan is spilling. You have drawn a clear distinction between conservation storage and account water in the conservation pool. This distinction was affirmed by your Supreme Court in the recent Highland/Nine-Mile litigation. The result of your allowing premature diversions upstream of John Martin has been less water flowing into conservation storage in John Martin.

The second way by which you have deprived Kansas of water to which it is entitled is your accounting of the John Martin spill. You enclosed the Colorado accounting with your last letter. We believe that accounting is inconsistent with the spill provisions of the 1980 Operating Plan and the Offset Account Resolution. The primary problems with your accounting include the following: (1) the rate of spill of account water should be equal to the rate of physical spill from the reservoir; and (2) release of conservation storage to the Article II accounts which was occurring at the end of the summer storage season should have continued until complete. The correct spill accounting, for the period October 1, 1997 to March 31, 1998, is attached. It shows that some 33,000 acre-feet more water should be accounted to be in the Kansas Article II Account on March 31, 1998 than the Division II accounting shows.

You recently informed me that 20,000 acre-feet would be evacuated from Pueblo Reservoir over a five-day period ending April 15 at a rate of 2000 cfs to meet dam safety requirements. As we have argued in our previous correspondence, this is water that should never have been stored in the first place. The problems created by the improper storage of this water, in the context of the ongoing spill from John Martin, have been exacerbated by your failure to require its release over a longer period at a more manageable rate. The April 15 deadline has been known by you for a number of months. Your handling of the present release will create difficulties that would not otherwise exist with using the water in Kansas. I request that the next such reduction in storage of 20,000 acre-feet, which must be accomplished by May 1, 1998, be made at a lower, more manageable rate, beginning immediately.

Sincerely yours,

  
David L. Pope, P.E.  
Chief Engineer-Director

DLP:dr

Enclosure

pc: (via Telecopy & U. S. Mail)  
Larry Trujillo, Chairman, ARCA  
Steve Witte, Colorado Division II Engineer  
Mark Rude, Kansas Water Commissioner, Garden City

Kansas John Martin Spill Accounting

John Martin Reservoir  
\* Calculated

Oct 97	Inflow	Agreement Water			Summer Compact Water			Ovn	Evap	Article III			Evap	Ovn
		Oct 97	Inflow	Release	Oct 97	Inflow	Release			Oct 97	Inflow	Release		
1	28.92	169.07	146.00	128.16	1	0.00	0.00	273342.53	138.85	1	0.00	0.00	32.04	63078.01
2	28.26	215.12	209.00	161.23	2	0.00	0.00	273077.52	165.91	2	0.00	0.00	32.04	63048.97
3	28.64	298.90	182.00	243.01	3	0.00	0.00	272728.38	172.15	3	0.00	0.00	32.04	63001.74
4	22.66	334.95	181.00	280.78	4	0.00	0.00	272304.27	173.10	4	0.00	0.00	39.98	62981.75
5	20.40	334.95	187.00	280.78	5	0.00	0.00	271981.36	177.87	5	0.00	0.00	39.98	62921.85
6	20.28	334.95	187.00	280.78	6	0.00	0.00	271662.73	177.86	6	0.00	0.00	41.17	62880.78
7	20.01	276.90	270.00	223.01	7	0.00	0.00	271342.08	177.86	7	0.00	0.00	41.22	62838.96
8	20.54	53.89	132.00	125.86	8	0.00	0.00	271024.21	177.86	8	0.00	0.00	59.58	62790.82
9	20.26	40.17	142.00	125.86	9	0.00	0.00	270708.52	177.86	9	0.00	0.00	59.58	62750.82
10	17.73	31.83	245.00	223.14	10	0.00	0.00	270394.94	177.86	10	0.00	0.00	42.31	62678.37
11	17.73	31.83	245.00	223.14	11	0.00	0.00	269981.80	177.86	11	0.00	0.00	54.08	62625.28
12	0.00	31.83	245.00	223.14	12	0.00	0.00	269568.37	177.86	12	0.00	0.00	51.45	62573.84
13	0.00	31.83	245.00	223.14	13	0.00	0.00	269154.82	177.86	13	0.00	0.00	51.45	62532.38
14	1619.12	362.70	284.028.00	328.53	14	1619.12	1239.69	268741.54	177.86	14	0.00	0.00	51.45	62490.83
15	576.20	152.83	66.00	118.91	15	576.20	955.55	268328.16	177.86	15	0.00	0.00	51.45	62448.83
16	0.00	33.92	72.00	68.58	16	0.00	0.00	267914.24	177.86	16	0.00	0.00	17.18	62407.87
17	0.00	33.92	72.00	68.58	17	0.00	0.00	267500.36	177.86	17	0.00	0.00	15.84	62367.36
18	0.00	33.92	72.00	68.58	18	0.00	0.00	267086.48	177.86	18	0.00	0.00	15.84	62326.84
19	0.00	33.92	72.00	68.58	19	0.00	0.00	266672.60	177.86	19	0.00	0.00	15.84	62286.32
20	0.00	33.92	72.00	68.58	20	0.00	0.00	266258.72	177.86	20	0.00	0.00	15.84	62245.80
21	0.00	200.54	200.54	166.62	21	0.00	0.00	265844.84	177.86	21	0.00	0.00	15.84	62205.28
22	0.00	200.54	200.54	166.62	22	0.00	0.00	265430.96	177.86	22	0.00	0.00	15.84	62164.76
23	0.00	200.54	200.54	166.62	23	0.00	0.00	265017.08	177.86	23	0.00	0.00	15.84	62124.24
24	2471.87	200.54	90.00	166.62	24	2471.87	26597.73	264603.20	177.86	24	0.00	0.00	15.84	62083.72
25	653.25	35.25	0.00	0.00	25	653.25	26597.73	264189.32	177.86	25	0.00	0.00	11.64	62043.20
26	676.00	0.00	54.00	0.00	26	676.00	26597.73	263775.44	177.86	26	0.00	0.00	11.64	62002.68
27	262.00	0.00	54.00	0.00	27	262.00	26597.73	263361.56	177.86	27	0.00	0.00	11.64	61962.16
28	1106.00	0.00	67.00	0.00	28	1106.00	26597.73	262947.68	177.86	28	0.00	0.00	14.42	61921.64
29	2511.00	0.00	110.00	0.00	29	2511.00	26597.73	262533.80	177.86	29	0.00	0.00	23.58	61881.12
30	3982.00	0.00	112.00	0.00	30	3982.00	26597.73	262119.92	177.86	30	0.00	0.00	23.58	61840.60
31	2983.00	0.00	112.00	0.00	31	2983.00	26597.73	261706.04	177.86	31	0.00	0.00	23.58	61799.08
	16774.02	4170.54	3944.00	3174.89		16550.24	12112.74		4.31		0.00	695.64		61518.24

Transf Loss Account

Oct 97	Inflow	Kansas			Codo Summer Stored Water			Evap	Ovn	1987 Water Stored Water			Evap	Ovn
		Release	Oct 97	Inflow	Release	Oct 97	Inflow			Oct 97	Inflow	Release		
1	0.00	0.00	11817.23	0.00	0.00	1	0.00	128.16	27575.20	1	0.00	0.00	16.18	31848.17
2	0.00	0.00	11817.23	0.00	0.00	2	0.00	128.16	27575.20	2	0.00	0.00	22.84	31809.15
3	0.00	0.00	11817.23	0.00	0.00	3	0.00	128.16	27575.20	3	0.00	0.00	20.18	31769.96
4	0.00	0.00	11817.23	0.00	0.00	4	0.00	128.16	27575.20	4	0.00	0.00	20.18	31730.78
5	0.00	0.00	11817.23	0.00	0.00	5	0.00	128.16	27575.20	5	0.00	0.00	20.18	31691.59
6	0.00	0.00	11817.23	0.00	0.00	6	0.00	128.16	27575.20	6	0.00	0.00	20.18	31652.40
7	0.00	0.00	11817.23	0.00	0.00	7	0.00	128.16	27575.20	7	0.00	0.00	20.18	31613.21
8	0.00	0.00	11817.23	0.00	0.00	8	0.00	128.16	27575.20	8	0.00	0.00	20.18	31574.02
9	0.00	0.00	11817.23	0.00	0.00	9	0.00	128.16	27575.20	9	0.00	0.00	20.18	31534.83
10	0.00	0.00	11817.23	0.00	0.00	10	0.00	128.16	27575.20	10	0.00	0.00	20.18	31495.64
11	0.00	0.00	11817.23	0.00	0.00	11	0.00	128.16	27575.20	11	0.00	0.00	20.18	31456.45
12	0.00	0.00	11817.23	0.00	0.00	12	0.00	128.16	27575.20	12	0.00	0.00	20.18	31417.26
13	0.00	0.00	11817.23	0.00	0.00	13	0.00	128.16	27575.20	13	0.00	0.00	20.18	31378.07
14	485.88	0.00	11817.23	0.00	0.00	14	743.81	328.53	14.13	14	0.00	0.00	8.03	31547.73
15	382.22	0.00	11817.23	0.00	0.00	15	573.33	464.28	15.35	15	0.00	0.00	8.03	31508.54
16	0.00	0.00	11817.23	0.00	0.00	16	0.00	118.91	13.01	16	0.00	0.00	8.03	31469.35
17	0.00	0.00	11817.23	0.00	0.00	17	0.00	0.00	14.17	17	0.00	0.00	8.03	31430.16
18	0.00	0.00	11817.23	0.00	0.00	18	0.00	0.00	14.17	18	0.00	0.00	8.03	31390.97
19	0.00	0.00	11817.23	0.00	0.00	19	0.00	0.00	14.17	19	0.00	0.00	8.03	31351.78
20	0.00	0.00	11817.23	0.00	0.00	20	0.00	0.00	11.81	20	0.00	0.00	8.03	31312.59
21	0.00	0.00	11817.23	0.00	0.00	21	0.00	0.00	55793.07	21	0.00	0.00	2.87	31488.39
22	0.00	0.00	11817.23	0.00	0.00	22	0.00	0.00	55793.07	22	0.00	0.00	12.57	31449.20
23	0.00	0.00	11817.23	0.00	0.00	23	0.00	0.00	55793.07	23	0.00	0.00	10.03	31410.01
24	0.00	0.00	11817.23	0.00	0.00	24	0.00	0.00	55793.07	24	0.00	0.00	5.85	31370.82
25	0.00	0.00	11817.23	0.00	0.00	25	0.00	0.00	55793.07	25	0.00	0.00	5.85	31331.63
26	0.00	0.00	11817.23	0.00	0.00	26	0.00	0.00	55793.07	26	0.00	0.00	5.85	31292.44
27	793.40	0.00	11817.23	0.00	0.00	27	1190.10	0.00	10.52	27	0.00	0.00	5.85	31253.25
28	793.40	0.00	11817.23	0.00	0.00	28	1190.10	0.00	13.32	28	0.00	0.00	7.36	31214.06
29	793.40	0.00	11817.23	0.00	0.00	29	1190.10	0.00	22.24	29	0.00	0.00	12.05	31174.87
30	793.40	0.00	11817.23	0.00	0.00	30	1190.10	0.00	23.08	30	0.00	0.00	12.05	31135.68
31	793.40	0.00	11817.23	0.00	0.00	31	1190.10	0.00	23.08	31	0.00	0.00	12.05	31096.49
	4845.10	0.00	1644.63	0.00	2479.25		7267.64		780.20		0.00	0.00	437.74	



**Kansas: John Martin Spill Accounting**

John Martin Reservoir	Agreement Water				Coto Summer Stored Water				Winter Compact Water				Article III			
	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	Nov 87	
1	3063.00	296008.00	66.00	1963.50	278529.78	82.66	1	0.00	1963.50	0.44	4433.18	0.00	0.00	3140.43	1	
2	3298.00	296008.00	66.00	1963.50	278440.38	81.77	2	0.00	1963.50	0.46	2446.86	0.00	1	3140.43	2	
3	3183.00	302316.00	67.00	1963.50	278400.38	81.77	3	0.00	1963.50	0.46	461.86	0.00	2	3140.43	3	
4	3183.00	309481.00	67.00	1963.50	278371.25	81.77	4	0.00	0.00	0.00	0.00	0.00	3	3140.43	4	
5	2698.00	311332.00	67.00	0.00	278709.74	81.81	5	0.00	0.00	0.00	0.00	0.00	4	3140.43	5	
6	2470.00	313744.00	67.00	0.00	278687.82	81.82	6	0.00	0.00	0.00	0.00	0.00	5	3140.43	6	
7	3272.00	313658.00	68.00	0.00	278908.31	81.81	7	0.00	0.00	0.00	0.00	0.00	6	3140.43	7	
8	2168.00	316158.00	68.00	0.00	278950.40	81.82	8	0.00	0.00	0.00	0.00	0.00	7	3140.43	8	
9	2058.00	320168.00	68.00	0.00	278950.40	81.82	9	0.00	0.00	0.00	0.00	0.00	8	3140.43	9	
10	321828.00	321828.00	68.00	0.00	278463.96	80.45	10	0.00	0.00	0.00	0.00	0.00	9	3140.43	10	
11	1944.00	323813.00	68.00	0.00	278463.96	80.45	11	0.00	0.00	0.00	0.00	0.00	10	3140.43	11	
12	1944.00	323813.00	68.00	0.00	278463.96	80.45	12	0.00	0.00	0.00	0.00	0.00	11	3140.43	12	
13	1456.00	326827.00	68.00	0.00	278931.64	80.45	13	0.00	0.00	0.00	0.00	0.00	12	3140.43	13	
14	1071.00	327539.00	68.00	0.00	278931.64	80.45	14	0.00	0.00	0.00	0.00	0.00	13	3140.43	14	
15	848.00	328329.00	68.00	0.00	278201.23	80.45	15	0.00	0.00	0.00	0.00	0.00	14	3140.43	15	
16	620.00	328989.00	68.00	0.00	278161.24	80.45	16	0.00	0.00	0.00	0.00	0.00	15	3140.43	16	
17	658.17	329454.00	68.00	0.00	278101.34	80.45	17	0.00	0.00	0.00	0.00	0.00	16	3140.43	17	
18	548.87	329809.00	68.00	0.00	279081.81	80.45	18	0.00	0.00	0.00	0.00	0.00	17	3140.43	18	
19	511.00	330358.00	68.00	0.00	279081.81	80.45	19	0.00	0.00	0.00	0.00	0.00	18	3140.43	19	
20	625.00	330924.00	68.00	0.00	279081.81	80.45	20	0.00	0.00	0.00	0.00	0.00	19	3140.43	20	
21	517.07	331101.00	68.00	0.00	279081.81	80.45	21	0.00	0.00	0.00	0.00	0.00	20	3140.43	21	
22	81.11	331282.00	68.00	0.00	279081.81	80.45	22	0.00	0.00	0.00	0.00	0.00	21	3140.43	22	
23	748.11	332062.00	68.00	0.00	279081.81	80.45	23	0.00	0.00	0.00	0.00	0.00	22	3140.43	23	
24	300.17	332509.00	68.00	0.00	277763.52	80.45	24	0.00	0.00	0.00	0.00	0.00	23	3140.43	24	
25	530.21	332963.00	68.00	0.00	277763.52	80.45	25	0.00	0.00	0.00	0.00	0.00	24	3140.43	25	
26	530.21	333304.00	68.00	0.00	277763.52	80.45	26	0.00	0.00	0.00	0.00	0.00	25	3140.43	26	
27	417.21	333304.00	68.00	0.00	277763.52	80.45	27	0.00	0.00	0.00	0.00	0.00	26	3140.43	27	
28	644.21	333304.00	68.00	0.00	277763.52	80.45	28	0.00	0.00	0.00	0.00	0.00	27	3140.43	28	
29	304.21	334100.00	68.00	0.00	277763.52	80.45	29	0.00	0.00	0.00	0.00	0.00	28	3140.43	29	
30	304.21	334100.00	68.00	0.00	277763.52	80.45	30	0.00	0.00	0.00	0.00	0.00	29	3140.43	30	
30	304.21	334100.00	68.00	0.00	277763.52	80.45	30	0.00	0.00	0.00	0.00	0.00	30	3140.43	30	
40770.86	203.86	1760.00	3981.45	1516.32	0.00	4431.88	1.30	0.00	4431.88	1.30	0.00	44762.31	0.00	171.17	0.00	
203.86	1760.00	3981.45	1516.32	0.00	4431.88	1.30	0.00	4431.88	1.30	0.00	44762.31	0.00	171.17	0.00	0.00	
793.40	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
793.40	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
1071.00	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92	0.00	23.14	0.00	0.31	1644.02	0.00	0.00	0.31	1644.02	0.00	0.00	0.00	0.00	3140.43	0.00	
22.92																

John Martin Reservoir	Agreement Water				Summer Compact Water				Winter Compact Water				Article III			
	Dec. 97				Dec. 97				Dec. 97				Dec. 97			
	Release	Evap	Own	Inflow	Release	Evap	Own	Inflow	Release	Evap	Own	Inflow	Release	Evap	Own	
1	738.19	53.00	334895.00	0.00	0.00	43.81	277453.90	1	0.00	0.00	0.00	1	738.18	0.00	7.08	
2	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	2	0.00	0.00	0.00	2	738.00	0.00	7.18	
3	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	3	0.00	0.00	0.00	3	738.00	0.00	7.18	
4	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	4	0.00	0.00	0.00	4	738.00	0.00	7.18	
5	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	5	0.00	0.00	0.00	5	738.00	0.00	7.18	
6	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	6	0.00	0.00	0.00	6	738.00	0.00	7.18	
7	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	7	0.00	0.00	0.00	7	738.00	0.00	7.18	
8	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	8	0.00	0.00	0.00	8	738.00	0.00	7.18	
9	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	9	0.00	0.00	0.00	9	738.00	0.00	7.18	
10	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	10	0.00	0.00	0.00	10	738.00	0.00	7.18	
11	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	11	0.00	0.00	0.00	11	738.00	0.00	7.18	
12	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	12	0.00	0.00	0.00	12	738.00	0.00	7.18	
13	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	13	0.00	0.00	0.00	13	738.00	0.00	7.18	
14	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	14	0.00	0.00	0.00	14	738.00	0.00	7.18	
15	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	15	0.00	0.00	0.00	15	738.00	0.00	7.18	
16	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	16	0.00	0.00	0.00	16	738.00	0.00	7.18	
17	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	17	0.00	0.00	0.00	17	738.00	0.00	7.18	
18	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	18	0.00	0.00	0.00	18	738.00	0.00	7.18	
19	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	19	0.00	0.00	0.00	19	738.00	0.00	7.18	
20	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	20	0.00	0.00	0.00	20	738.00	0.00	7.18	
21	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	21	0.00	0.00	0.00	21	738.00	0.00	7.18	
22	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	22	0.00	0.00	0.00	22	738.00	0.00	7.18	
23	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	23	0.00	0.00	0.00	23	738.00	0.00	7.18	
24	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	24	0.00	0.00	0.00	24	738.00	0.00	7.18	
25	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	25	0.00	0.00	0.00	25	738.00	0.00	7.18	
26	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	26	0.00	0.00	0.00	26	738.00	0.00	7.18	
27	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	27	0.00	0.00	0.00	27	738.00	0.00	7.18	
28	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	28	0.00	0.00	0.00	28	738.00	0.00	7.18	
29	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	29	0.00	0.00	0.00	29	738.00	0.00	7.18	
30	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	30	0.00	0.00	0.00	30	738.00	0.00	7.18	
31	738.00	53.00	335078.00	0.00	0.00	43.81	277453.90	31	0.00	0.00	0.00	31	738.00	0.00	7.18	
18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	18943.19	
28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	28008.19	
107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	107.39	
57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	57273.21	
3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	3724.10	
8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	
3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	3717.10	
57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	57168.10	
57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	57150.12	
57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	57132.10	
57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	57123.03	
57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	57104.96	
56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	56981.65	
56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	56875.95	
53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	53809.85	
50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	50494.85	
48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	48807.95	
47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	47110.95	
4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	4703.85	
43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	43213.85	
42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	42126.85	
41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	41085.85	
40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	40030.85	
38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	38877.85	
38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	38848.85	
128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	128.26	

**Kansas John Martin Spill Accounting**

John Mearns Reservoir	Agreement Water				Summer Stored Water				Compact Water				Official Account				
	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	
1	1212.00	1168.00	54.00	344192.00	258903.64	0.00	1168.00	0.00	0.00	1	1168.00	0.00	0.00	71212.84	0.00	0.00	5316.12
2	1479.00	1194.00	54.00	344423.00	257446.84	0.00	1194.00	0.00	0.00	2	1194.00	0.00	0.00	72370.84	0.00	0.00	5316.12
3	1506.00	1219.00	54.00	344654.00	256281.84	0.00	1219.00	0.00	0.00	3	1219.00	0.00	0.00	73584.84	0.00	0.00	5316.12
4	1506.00	1219.00	54.00	344885.00	255116.84	0.00	1219.00	0.00	0.00	4	1219.00	0.00	0.00	74798.84	0.00	0.00	5316.12
5	1880.00	1610.00	54.00	345003.00	262304.64	0.00	1610.00	0.00	0.00	6	1610.00	0.00	0.00	76011.84	0.00	0.00	5316.12
6	1534.00	1154.00	54.00	344771.00	250562.64	0.00	1154.00	0.00	0.00	7	1154.00	0.00	0.00	77223.84	0.00	0.00	5316.12
7	1534.00	1154.00	54.00	344539.00	248990.64	0.00	1154.00	0.00	0.00	8	1154.00	0.00	0.00	78436.84	0.00	0.00	5316.12
8	1419.00	1171.00	53.00	344192.00	247187.84	0.00	1171.00	0.00	0.00	9	1171.00	0.00	0.00	79649.84	0.00	0.00	5316.12
9	1037.00	1441.00	48.00	343728.00	246726.84	0.00	1441.00	0.00	0.00	10	1441.00	0.00	0.00	80862.84	0.00	0.00	5316.12
10	843.00	1028.00	48.00	343497.00	244700.84	0.00	1028.00	0.00	0.00	11	1028.00	0.00	0.00	82075.84	0.00	0.00	5316.12
11	1307.00	1028.00	48.00	343728.00	243874.84	0.00	1028.00	0.00	0.00	12	1028.00	0.00	0.00	83288.84	0.00	0.00	5316.12
12	1212.00	1462.00	48.00	344076.00	241188.84	0.00	1462.00	0.00	0.00	13	1462.00	0.00	0.00	84501.84	0.00	0.00	5316.12
13	1488.00	1462.00	48.00	344076.00	241188.84	0.00	1462.00	0.00	0.00	14	1462.00	0.00	0.00	85714.84	0.00	0.00	5316.12
14	1888.00	1725.00	48.00	344192.00	238463.84	0.00	1725.00	0.00	0.00	15	1725.00	0.00	0.00	86927.84	0.00	0.00	5316.12
15	1537.00	1720.00	49.00	343960.00	236743.64	0.00	1720.00	0.00	0.00	16	1720.00	0.00	0.00	88140.84	0.00	0.00	5316.12
16	1488.00	1666.00	49.00	343944.00	235178.64	0.00	1666.00	0.00	0.00	17	1666.00	0.00	0.00	89353.84	0.00	0.00	5316.12
17	1600.00	1441.00	49.00	343960.00	234173.64	0.00	1441.00	0.00	0.00	18	1441.00	0.00	0.00	90566.84	0.00	0.00	5316.12
18	1373.00	1440.00	49.00	343964.00	233297.84	0.00	1440.00	0.00	0.00	19	1439.00	0.00	0.00	91779.84	0.00	0.00	5316.12
19	1482.00	1439.00	43.00	343964.00	231695.84	0.00	1439.00	0.00	0.00	20	1439.00	0.00	0.00	92992.84	0.00	0.00	5316.12
20	1320.00	1608.00	43.00	343613.00	230560.64	0.00	1608.00	0.00	0.00	21	1608.00	0.00	0.00	94205.84	0.00	0.00	5316.12
21	1463.00	1420.00	43.00	343613.00	228935.84	0.00	1420.00	0.00	0.00	22	1420.00	0.00	0.00	95418.84	0.00	0.00	5316.12
22	1363.00	1320.00	43.00	343613.00	227310.84	0.00	1320.00	0.00	0.00	23	1320.00	0.00	0.00	96631.84	0.00	0.00	5316.12
23	1363.00	1320.00	43.00	343613.00	225685.84	0.00	1320.00	0.00	0.00	24	1320.00	0.00	0.00	97844.84	0.00	0.00	5316.12
24	1428.00	1260.00	43.00	343960.00	224060.64	0.00	1260.00	0.00	0.00	25	1260.00	0.00	0.00	99057.84	0.00	0.00	5316.12
25	1609.00	1355.00	43.00	343960.00	222435.64	0.00	1355.00	0.00	0.00	26	1355.00	0.00	0.00	100270.84	0.00	0.00	5316.12
26	1282.00	1330.00	43.00	343944.00	220810.64	0.00	1330.00	0.00	0.00	27	1330.00	0.00	0.00	101483.84	0.00	0.00	5316.12
27	1787.00	1390.00	49.00	344182.00	219185.64	0.00	1390.00	0.00	0.00	28	1390.00	0.00	0.00	102696.84	0.00	0.00	5316.12
28	1146.00	1444.00	48.00	343944.00	217560.64	0.00	1444.00	0.00	0.00	29	1444.00	0.00	0.00	103909.84	0.00	0.00	5316.12
29	1306.00	1487.00	48.00	343613.00	215935.64	0.00	1487.00	0.00	0.00	30	1487.00	0.00	0.00	105122.84	0.00	0.00	5316.12
30	1606.00	1411.00	48.00	343728.00	214310.64	0.00	1411.00	0.00	0.00	31	1411.00	0.00	0.00	106335.84	0.00	0.00	5316.12
31	44236.00	43357.00	1510.00		39848.96	0.00	43357.00	0.00	0.00			0.00	0.00	114099.34	0.00	0.00	5316.12
Karnes Reservoir	Transak Loss				Colorado Summer Stored Water				1987 Winter Stored Water				Official Account				
	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	Jan 98	Inf	Rel	Own	
1	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	1	0.00	0.00	0.00	31170.89	0.00	0.00	39848.96
2	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	2	0.00	0.00	0.00	31170.89	0.00	0.00	37690.95
3	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	3	0.00	0.00	0.00	31170.89	0.00	0.00	36498.95
4	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	4	0.00	0.00	0.00	31170.89	0.00	0.00	35306.95
5	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	5	0.00	0.00	0.00	31170.89	0.00	0.00	34114.95
6	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	6	0.00	0.00	0.00	31170.89	0.00	0.00	32922.95
7	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	7	0.00	0.00	0.00	31170.89	0.00	0.00	31730.95
8	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	8	0.00	0.00	0.00	31170.89	0.00	0.00	30538.95
9	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	9	0.00	0.00	0.00	31170.89	0.00	0.00	29346.95
10	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	10	0.00	0.00	0.00	31170.89	0.00	0.00	28154.95
11	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	11	0.00	0.00	0.00	31170.89	0.00	0.00	26962.95
12	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	12	0.00	0.00	0.00	31170.89	0.00	0.00	25770.95
13	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	13	0.00	0.00	0.00	31170.89	0.00	0.00	24578.95
14	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	14	0.00	0.00	0.00	31170.89	0.00	0.00	23386.95
15	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	15	0.00	0.00	0.00	31170.89	0.00	0.00	22194.95
16	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	16	0.00	0.00	0.00	31170.89	0.00	0.00	21002.95
17	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	17	0.00	0.00	0.00	31170.89	0.00	0.00	19810.95
18	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	18	0.00	0.00	0.00	31170.89	0.00	0.00	18618.95
19	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	19	0.00	0.00	0.00	31170.89	0.00	0.00	17426.95
20	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	20	0.00	0.00	0.00	31170.89	0.00	0.00	16234.95
21	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	21	0.00	0.00	0.00	31170.89	0.00	0.00	15042.95
22	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	22	0.00	0.00	0.00	31170.89	0.00	0.00	13850.95
23	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	23	0.00	0.00	0.00	31170.89	0.00	0.00	12658.95
24	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	24	0.00	0.00	0.00	31170.89	0.00	0.00	11466.95
25	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	31170.89	0.00	0.00	10274.95
26	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	26	0.00	0.00	0.00	31170.89	0.00	0.00	9082.95
27	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	27	0.00	0.00	0.00	31170.89	0.00	0.00	7890.95
28	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	28	0.00	0.00	0.00	31170.89	0.00	0.00	6698.95
29	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	29	0.00	0.00	0.00	31170.89	0.00	0.00	5506.95
30	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	30	0.00	0.00	0.00	31170.89	0.00	0.00	4314.95
31	0.00	0.00	0.00	123199.50	1631.48	0.00	0.00	0.00	0.00	31	0.00	0.00	0.00	31170.89	0.00	0.00	3122.95

Kansas John Martin Spill Accounting

John Martin Reservoir

Feb 98	Agreement Water				Summer Compact Water				Own	Winter Compact Water				Own	Feb 98				Offset Account Release	Evap	Own
	Release	Infrow	Evap	Own	Release	Infrow	Evap	Own		Release	Infrow	Evap	Own		Release	Infrow	Evap	Own			
1	1025.00	1408.00	79.00	343613.00	590.63	1	0.00	218754.89	1	1408.00	0.00	0.00	114569.94	1	0.00	808.07	0.00	0.00	0.00	0.00	
2	1165.00	982.00	88.00	343151.00	0.00	2	0.00	218154.76	2	0.00	0.00	0.00	115977.94	2	0.00	0.00	0.00	0.00	0.00	0.00	
3	819.00	735.00	83.00	343296.00	0.00	3	0.00	217436.78	3	796.00	0.00	0.00	116859.94	3	0.00	0.00	0.00	0.00	0.00	0.00	
4	941.00	742.00	83.00	343296.00	0.00	4	0.00	216994.78	4	0.00	0.00	0.00	118437.94	4	0.00	0.00	0.00	0.00	0.00	0.00	
5	802.00	718.00	83.00	343382.00	0.00	5	0.00	216975.78	5	718.00	0.00	0.00	118437.94	5	0.00	0.00	0.00	0.00	0.00	0.00	
6	572.00	720.00	83.00	343151.00	0.00	6	0.00	216525.76	6	720.00	0.00	0.00	118752.94	6	0.00	0.00	0.00	0.00	0.00	0.00	
7	686.00	718.00	83.00	343035.00	0.00	7	0.00	214526.78	7	718.00	0.00	0.00	120585.94	7	0.00	0.00	0.00	0.00	0.00	0.00	
8	582.00	614.00	83.00	343292.00	0.00	8	0.00	213622.78	8	614.00	0.00	0.00	121205.94	8	0.00	0.00	0.00	0.00	0.00	0.00	
9	853.00	306.00	83.00	343382.00	0.00	9	0.00	213614.78	9	306.00	0.00	0.00	121517.94	9	0.00	0.00	0.00	0.00	0.00	0.00	
10	733.00	303.00	83.00	343728.00	0.00	10	0.00	213311.76	10	303.00	0.00	0.00	121820.94	10	0.00	0.00	0.00	0.00	0.00	0.00	
11	424.00	341.00	83.00	343729.00	0.00	11	0.00	212870.76	11	341.00	0.00	0.00	122161.94	11	0.00	0.00	0.00	0.00	0.00	0.00	
12	511.00	428.00	83.00	343729.00	0.00	12	0.00	212542.78	12	428.00	0.00	0.00	122586.94	12	0.00	0.00	0.00	0.00	0.00	0.00	
13	530.00	558.00	88.00	343613.00	0.00	13	0.00	211984.76	13	558.00	0.00	0.00	123147.94	13	0.00	0.00	0.00	0.00	0.00	0.00	
14	683.00	605.00	88.00	343613.00	0.00	14	0.00	211378.76	14	605.00	0.00	0.00	123752.94	14	0.00	0.00	0.00	0.00	0.00	0.00	
15	154.00	528.00	88.00	343151.00	0.00	15	0.00	210851.76	15	528.00	0.00	0.00	124280.94	15	0.00	0.00	0.00	0.00	0.00	0.00	
16	1019.00	343.00	88.00	343729.00	0.00	16	0.00	210468.76	16	353.00	0.00	0.00	124633.94	16	0.00	0.00	0.00	0.00	0.00	0.00	
17	632.00	429.00	88.00	343844.00	0.00	17	0.00	210089.76	17	429.00	0.00	0.00	125062.94	17	0.00	0.00	0.00	0.00	0.00	0.00	
18	568.00	480.00	88.00	343844.00	0.00	18	0.00	209558.76	18	480.00	0.00	0.00	125542.94	18	0.00	0.00	0.00	0.00	0.00	0.00	
19	504.00	480.00	88.00	343729.00	0.00	19	0.00	209058.76	19	531.00	0.00	0.00	126073.94	19	0.00	0.00	0.00	0.00	0.00	0.00	
20	343.00	602.00	88.00	343382.00	0.00	20	0.00	208456.78	20	602.00	0.00	0.00	126575.94	20	0.00	0.00	0.00	0.00	0.00	0.00	
21	572.00	602.00	88.00	343296.00	0.00	21	0.00	207856.76	21	600.00	0.00	0.00	127075.94	21	0.00	0.00	0.00	0.00	0.00	0.00	
22	680.00	602.00	88.00	343296.00	0.00	22	0.00	207254.78	22	602.00	0.00	0.00	127575.94	22	0.00	0.00	0.00	0.00	0.00	0.00	
23	416.00	448.00	88.00	343151.00	0.00	23	0.00	206658.76	23	446.00	0.00	0.00	128073.94	23	0.00	0.00	0.00	0.00	0.00	0.00	
24	983.00	317.00	88.00	343729.00	0.00	24	0.00	206180.76	24	317.00	0.00	0.00	128573.94	24	0.00	0.00	0.00	0.00	0.00	0.00	
25	42.00	301.00	88.00	343382.00	0.00	25	0.00	205680.76	25	301.00	0.00	0.00	129041.94	25	0.00	0.00	0.00	0.00	0.00	0.00	
26	272.00	300.00	88.00	343382.00	0.00	26	0.00	205180.76	26	300.00	0.00	0.00	129541.94	26	0.00	0.00	0.00	0.00	0.00	0.00	
27	620.00	301.00	88.00	343382.00	0.00	27	0.00	204680.76	27	301.00	0.00	0.00	129942.94	27	0.00	0.00	0.00	0.00	0.00	0.00	
28	273.00	300.00	88.00	343382.00	0.00	28	0.00	204180.76	28	300.00	0.00	0.00	129942.94	28	0.00	0.00	0.00	0.00	0.00	0.00	
29						29		203680.76	29				129942.94	29							
30						30		203180.76	30				129942.94	30							
31						31		202680.76	31				129942.94	31							

Feb 98	Trans Loss				Kans				Own	Article III				Own
	Feb 98	Inf	Rel	Evap	Feb 98	Inf	Rel	Evap		Feb 98	Inf	Rel	Evap	
1	338.84	123189.50	123189.50	0.00	1	0.00	0.00	0.00	1631.46	1	0.00	281.09	0.00	30909.80
2	0.00	554.63	0.00	0.00	2	0.00	0.00	0.00	1631.46	2	0.00	427.37	0.00	30482.23
3	0.00	415.08	0.00	0.00	3	0.00	0.00	0.00	1631.46	3	0.00	323.81	0.00	30161.92
4	0.00	415.08	0.00	0.00	4	0.00	0.00	0.00	1631.46	4	0.00	312.81	0.00	29830.00
5	0.00	406.08	0.00	0.00	5	0.00	0.00	0.00	1631.46	5	0.00	312.81	0.00	29526.09
6	0.00	406.08	0.00	0.00	6	0.00	0.00	0.00	1631.46	6	0.00	312.81	0.00	29212.75
7	0.00	406.08	0.00	0.00	7	0.00	0.00	0.00	1631.46	7	0.00	312.81	0.00	28899.84
8	0.00	348.79	0.00	0.00	8	0.00	0.00	0.00	1631.46	8	0.00	287.21	0.00	28632.63
9	0.00	173.96	0.00	0.00	9	0.00	0.00	0.00	1631.46	9	0.00	134.04	0.00	28488.59
10	0.00	173.96	0.00	0.00	10	0.00	0.00	0.00	1631.46	10	0.00	131.87	0.00	28366.72
11	0.00	182.60	0.00	0.00	11	0.00	0.00	0.00	1631.46	11	0.00	148.40	0.00	28218.32
12	0.00	241.73	0.00	0.00	12	0.00	0.00	0.00	1631.46	12	0.00	186.27	0.00	28032.05
13	0.00	315.16	0.00	0.00	13	0.00	0.00	0.00	1631.46	13	0.00	242.84	0.00	27789.21
14	0.00	341.70	0.00	0.00	14	0.00	0.00	0.00	1631.46	14	0.00	283.30	0.00	27525.91
15	0.00	268.21	0.00	0.00	15	0.00	0.00	0.00	1631.46	15	0.00	228.78	0.00	27288.12
16	0.00	198.37	0.00	0.00	16	0.00	0.00	0.00	1631.46	16	0.00	153.63	0.00	27142.49
17	0.00	242.30	0.00	0.00	17	0.00	0.00	0.00	1631.46	17	0.00	186.70	0.00	26955.78
18	0.00	271.10	0.00	0.00	18	0.00	0.00	0.00	1631.46	18	0.00	208.90	0.00	26748.89
19	0.00	269.91	0.00	0.00	19	0.00	0.00	0.00	1631.46	19	0.00	231.09	0.00	26515.80
20	0.00	340.01	0.00	0.00	20	0.00	0.00	0.00	1631.46	20	0.00	281.99	0.00	26253.81
21	0.00	338.88	0.00	0.00	21	0.00	0.00	0.00	1631.46	21	0.00	281.12	0.00	25992.69
22	0.00	340.01	0.00	0.00	22	0.00	0.00	0.00	1631.46	22	0.00	281.99	0.00	25730.70
23	0.00	251.90	0.00	0.00	23	0.00	0.00	0.00	1631.46	23	0.00	194.10	0.00	25538.60
24	0.00	179.04	0.00	0.00	24	0.00	0.00	0.00	1631.46	24	0.00	131.96	0.00	25308.64
25	0.00	170.00	0.00	0.00	25	0.00	0.00	0.00	1631.46	25	0.00	130.56	0.00	25267.64
26	0.00	169.44	0.00	0.00	26	0.00	0.00	0.00	1631.46	26	0.00	130.56	0.00	25137.08
27	0.00	169.44	0.00	0.00	27	0.00	0.00	0.00	1631.46	27	0.00	130.56	0.00	25006.69
28	0.00	169.44	0.00	0.00	28	0.00	0.00	0.00	1631.46	28	0.00	130.56	0.00	24875.52
29	0.00	169.44	0.00	0.00	29	0.00	0.00	0.00	1631.46	29	0.00	130.56	0.00	24744.36
30	0.00	169.44	0.00	0.00	30	0.00	0.00	0.00	1631.46	30	0.00	130.56	0.00	24613.20
31	0.00	8169.76	0.00	0.00	31	0.00	0.00	0.00	1631.46	31	0.00	6295.17	0.00	24482.04

Kansas John Martin Spill Accounting

John Martin Reservoir

Agreement Water				Summer Compact Water				Winter Compact Water				Offset Account			
Mar '98	Inflow	Release	Evap	Own	Mar '98	Inflow	Release	Evap	Own	Mar '98	Inflow	Release	Evap	Own	
1	442.00	300.00	142.00	343382.00	1	0.00	0.00	0.00	205286.76	1	300.00	0.00	0.00	12642.94	
2	326.00	300.00	142.00	343296.00	2	0.00	0.00	0.00	204986.76	2	300.00	0.00	0.00	130142.94	
3	398.00	300.00	142.00	343296.00	3	0.00	0.00	0.00	204446.76	3	0.00	0.00	0.00	130442.94	
4	448.00	188.00	142.00	343392.00	4	0.00	0.00	0.00	204287.76	4	188.00	0.00	0.00	130686.94	
5	416.00	159.00	142.00	343487.00	5	0.00	0.00	0.00	203943.76	5	159.00	0.00	0.00	131033.94	
6	591.00	155.00	142.00	343496.00	6	0.00	0.00	0.00	203786.76	6	155.00	0.00	0.00	131186.94	
7	891.00	155.00	142.00	343986.00	7	0.00	0.00	0.00	203534.76	7	154.00	0.00	0.00	131342.94	
8	45.00	155.00	142.00	343986.00	8	0.00	0.00	0.00	203400.76	8	154.00	0.00	0.00	131342.94	
9	472.00	324.00	142.00	344078.00	9	0.00	0.00	0.00	203008.76	9	234.00	0.00	0.00	131497.94	
10	484.00	332.00	142.00	344078.00	10	0.00	0.00	0.00	202968.76	10	332.00	0.00	0.00	131731.94	
11	445.00	419.00	142.00	343864.00	11	0.00	0.00	0.00	202968.76	11	419.00	0.00	0.00	132063.94	
12	484.00	458.00	142.00	343864.00	12	0.00	0.00	0.00	202182.76	12	458.00	0.00	0.00	132422.94	
13	420.00	509.00	142.00	343913.00	13	0.00	0.00	0.00	201862.76	13	509.00	0.00	0.00	132840.94	
14	924.00	551.00	142.00	343944.00	14	0.00	0.00	0.00	201131.76	14	551.00	0.00	0.00	133446.94	
15	581.00	554.00	142.00	343729.00	15	0.00	0.00	0.00	200577.76	15	554.00	0.00	0.00	134554.94	
16	927.00	554.00	142.00	343960.00	16	0.00	0.00	0.00	200023.76	16	554.00	0.00	0.00	134554.94	
17	522.00	757.00	142.00	343613.00	17	0.00	0.00	0.00	199266.76	17	757.00	0.00	0.00	135685.94	
18	1902.00	718.00	142.00	344655.00	18	0.00	0.00	0.00	198546.76	18	718.00	0.00	0.00	136583.94	
19	1244.00	1102.00	142.00	344655.00	19	0.00	0.00	0.00	197446.76	19	1102.00	0.00	0.00	137685.94	
20	1844.00	2313.00	142.00	343844.00	20	0.00	0.00	0.00	195133.76	20	2313.00	0.00	0.00	139688.94	
21	2355.00	2906.00	142.00	343151.00	21	0.00	0.00	0.00	192227.76	21	2906.00	0.00	0.00	142604.94	
22	1895.00	1522.00	142.00	343382.00	22	0.00	0.00	0.00	180705.76	22	1522.00	0.00	0.00	144426.94	
23	1493.00	773.00	142.00	343960.00	23	0.00	0.00	0.00	186932.76	23	773.00	0.00	0.00	145189.94	
24	1773.00	1052.00	142.00	344539.00	24	0.00	0.00	0.00	188880.76	24	1052.00	0.00	0.00	146251.94	
25	1532.00	1288.00	142.00	344539.00	25	0.00	0.00	0.00	187982.76	25	1288.00	0.00	0.00	147539.94	
26	1998.00	1408.00	142.00	344539.00	26	0.00	0.00	0.00	186186.76	26	1408.00	0.00	0.00	148945.94	
27	1350.00	1698.00	142.00	344539.00	27	0.00	0.00	0.00	184528.76	27	1698.00	0.00	0.00	150603.94	
28	1820.00	1980.00	142.00	343944.00	28	0.00	0.00	0.00	182538.76	28	1980.00	0.00	0.00	152563.94	
29	2808.00	1980.00	142.00	344307.00	29	0.00	0.00	0.00	180548.76	29	1980.00	0.00	0.00	154583.94	
30	3613.00	1892.00	0.00	345628.00	30	0.00	0.00	0.00	178546.76	30	1892.00	0.00	0.00	156575.94	
31	3026.00	2570.00	108.00	348278.00	31	0.00	0.00	0.00	176986.76	31	2570.00	0.00	0.00	159145.94	
	39712.00	29303.00	4515.00			0.00	0.00	0.00			29303.00	0.00	0.00		

Curb Summer Stored Water				1997 Winter Stored Water					
Mar '98	Inflow	Release	Evap	Own	Mar '98	Inflow	Release	Evap	Own
1	0.00	0.00	0.00	1631.46	1	0.00	130.56	0.00	24973.52
2	0.00	0.00	0.00	1631.46	2	0.00	130.56	0.00	24944.96
3	0.00	0.00	0.00	1631.46	3	0.00	104.19	0.00	24509.41
4	0.00	0.00	0.00	1631.46	4	0.00	81.62	0.00	24426.39
5	0.00	0.00	0.00	1631.46	5	0.00	89.20	0.00	24357.19
6	0.00	0.00	0.00	1631.46	6	0.00	24299.73	0.00	24289.73
7	0.00	0.00	0.00	1631.46	7	0.00	67.02	0.00	24222.71
8	0.00	0.00	0.00	1631.46	8	0.00	67.46	0.00	24155.25
9	0.00	0.00	0.00	1631.46	9	0.00	161.84	0.00	24053.41
10	0.00	0.00	0.00	1631.46	10	0.00	144.48	0.00	23908.92
11	0.00	0.00	0.00	1631.46	11	0.00	182.35	0.00	23776.57
12	0.00	0.00	0.00	1631.46	12	0.00	189.32	0.00	23527.25
13	0.00	0.00	0.00	1631.46	13	0.00	231.52	0.00	23306.73
14	0.00	0.00	0.00	1631.46	14	0.00	239.80	0.00	23065.83
15	0.00	0.00	0.00	1631.46	15	0.00	241.10	0.00	22824.83
16	0.00	0.00	0.00	1631.46	16	0.00	22824.83	0.00	22583.73
17	0.00	0.00	0.00	1631.46	17	0.00	328.45	0.00	22563.28
18	0.00	0.00	0.00	1631.46	18	0.00	312.47	0.00	21941.81
19	0.00	0.00	0.00	1631.46	19	0.00	479.59	0.00	21462.22
20	0.00	0.00	0.00	1631.46	20	0.00	1006.62	0.00	20455.00
21	0.00	0.00	0.00	1631.46	21	0.00	662.37	0.00	19526.91
22	0.00	0.00	0.00	1631.46	22	0.00	1264.69	0.00	18528.13
23	0.00	0.00	0.00	1631.46	23	0.00	336.41	0.00	18126.13
24	0.00	0.00	0.00	1631.46	24	0.00	457.83	0.00	17734.39
25	0.00	0.00	0.00	1631.46	25	0.00	560.54	0.00	17173.76
26	0.00	0.00	0.00	1631.46	26	0.00	611.88	0.00	16561.67
27	0.00	0.00	0.00	1631.46	27	0.00	721.56	0.00	15840.31
28	0.00	0.00	0.00	1631.46	28	0.00	895.05	0.00	14974.26
29	0.00	0.00	0.00	1631.46	29	0.00	968.92	0.00	14108.21
30	0.00	0.00	0.00	1631.46	30	0.00	116.46	0.00	13241.29
31	0.00	0.00	0.00	1631.46	31	0.00	1118.48	0.00	12122.83
						0.00	12752.69	0.00	

Kansas				Article III					
Mar '98	Inflow	Release	Evap	Own	Mar '98	Inflow	Release	Evap	Own
1	0.00	169.44	0.00	114960.30	1	0.00	0.00	0.00	24973.52
2	0.00	169.44	0.00	114890.86	2	0.00	0.00	0.00	24944.96
3	0.00	137.81	0.00	114553.05	3	0.00	0.00	0.00	24509.41
4	0.00	106.18	0.00	114449.87	4	0.00	0.00	0.00	24426.39
5	0.00	86.80	0.00	114357.07	5	0.00	0.00	0.00	24357.19
6	0.00	87.54	0.00	114299.53	6	0.00	0.00	0.00	24289.73
7	0.00	86.98	0.00	114182.55	7	0.00	0.00	0.00	24222.71
8	0.00	87.54	0.00	114095.01	8	0.00	0.00	0.00	24155.25
9	0.00	132.16	0.00	113962.85	9	0.00	0.00	0.00	24053.41
10	0.00	187.51	0.00	113775.34	10	0.00	0.00	0.00	23908.92
11	0.00	239.65	0.00	113538.68	11	0.00	0.00	0.00	23776.57
12	0.00	259.68	0.00	112980.01	12	0.00	0.00	0.00	23527.25
13	0.00	287.48	0.00	112692.53	13	0.00	0.00	0.00	23306.73
14	0.00	311.20	0.00	112368.43	14	0.00	0.00	0.00	23065.83
15	0.00	312.90	0.00	112055.53	15	0.00	0.00	0.00	22824.83
16	0.00	312.90	0.00	111627.98	16	0.00	0.00	0.00	22583.73
17	0.00	427.55	0.00	111222.45	17	0.00	0.00	0.00	22563.28
18	0.00	405.53	0.00	110600.04	18	0.00	0.00	0.00	21941.81
19	0.00	622.41	0.00	109283.66	19	0.00	0.00	0.00	21462.22
20	0.00	1306.38	0.00	107652.35	20	0.00	0.00	0.00	20455.00
21	0.00	1041.31	0.00	105793.68	21	0.00	0.00	0.00	19526.91
22	0.00	859.63	0						

Steve Witte

RECEIVED

DEC 14 1998

STATE OF COLORADO

OFFICE OF THE STATE ENGINEER  
Division of Water Resources  
Department of Natural Resources

1313 Sherman Street, Room 818  
Denver, Colorado 80203  
Phone (303) 866-3581  
FAX (303) 866-3589

DIVISION ENGINEER  
PUEBLO, COLORADO



Roy Romer  
Governor

James S. Lochhead  
Executive Director

Hal D. Simpson  
State Engineer

November 25, 1998

David L. Pope  
Chief Engineer-Director  
Division of Water Resources  
Kansas State Board of Agriculture  
109 S.W. 9th St., Ste. 202  
Topeka, KS 66612-1283

Re: John Martin Reservoir Accounting

Dear David:

I am writing in response to your letter of April 15, 1998, regarding Kansas' complaints that Colorado improperly administered water rights in Colorado during the John Martin Reservoir spill that occurred after November 1, 1997.

As I explained in my letter to you of January 14, 1998, I do not agree that storage in Colorado upstream from John Martin Reservoir under post-Compact water rights is not permitted when water is being spilled from accounts in John Martin Reservoir. I did not respond to your April 15 letter because I did not feel there was anything further to add to my letter of January 14. However, because the administration and accounting during the John Martin Reservoir spill may come up at the annual meeting of the Arkansas River Compact Administration, I wanted to provide you and the other members of the Compact Administration with information concerning the flows passing Garden City during the period of the spill and while Colorado was permitting storage in Pueblo Reservoir.

During the period November 1 through April 30, the flow of the Arkansas River at Garden City never fell below 200 cfs. See attached graphs of the flow of the Arkansas River at Garden City. Under those conditions, I do not interpret the 1980 Operating Plan or the Arkansas River Compact to preclude storage upstream from John Martin Reservoir under post-Compact water rights, so long as the upstream storage is properly accounted for and does not affect the amount of the spill from the accounts.

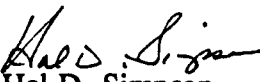
Mr. David L. Pope  
December 1, 1998

Page 2

The accounting attached to your April 15 letter seems to suggest that the spill from the accounts, including the Kansas Section II Account, should have been limited to the actual reservoir outflow. Colorado's accounting is based on actual inflow, adjusted for the amount of water stored upstream in Pueblo Reservoir. In my opinion, it is necessary to adjust the rate of inflow for the amount being stored upstream in Pueblo Reservoir because of Article IV D of the Compact, which says that the Compact is not intended to impede or prevent future beneficial development, "Provided, that the waters of the Arkansas River . . . shall not be materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under this Compact by such future development or construction." Unless the rate of inflow to conservation storage is adjusted to account for upstream storage in Pueblo Reservoir, it would deplete the water available to conservation storage in John Martin Reservoir. In this case, Kansas had considerable water in storage in its Section II Account and may have preferred to reduce the rate of spill from its Section II account; however, that will not always be the case during spills, and water users in Kansas would be injured if the rate of spill from the accounts is not adjusted for the upstream storage.

Because these issues have not been resolved by Steve Witte and Mark Rude, I propose that Steve Witte prepare the Operation Secretary's report based on Colorado's administration and accounting. If necessary, appropriate footnotes can be placed in the report to indicate that Kansas does not agree with the administration and accounting, as was done in the Operation Secretary's 1996 annual report.

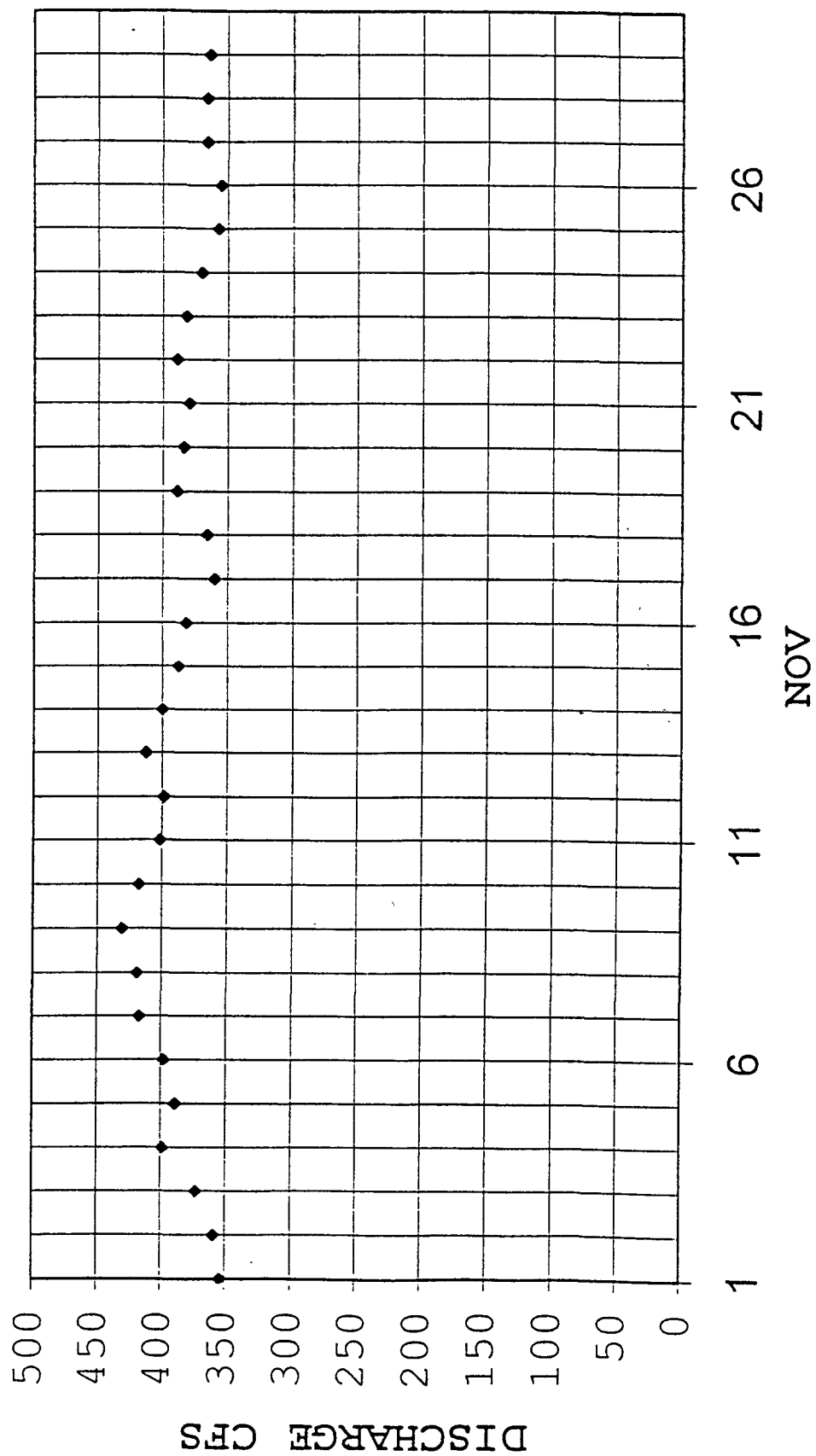
Very truly yours,

  
Hal D. Simpson  
State Engineer

Enclosures

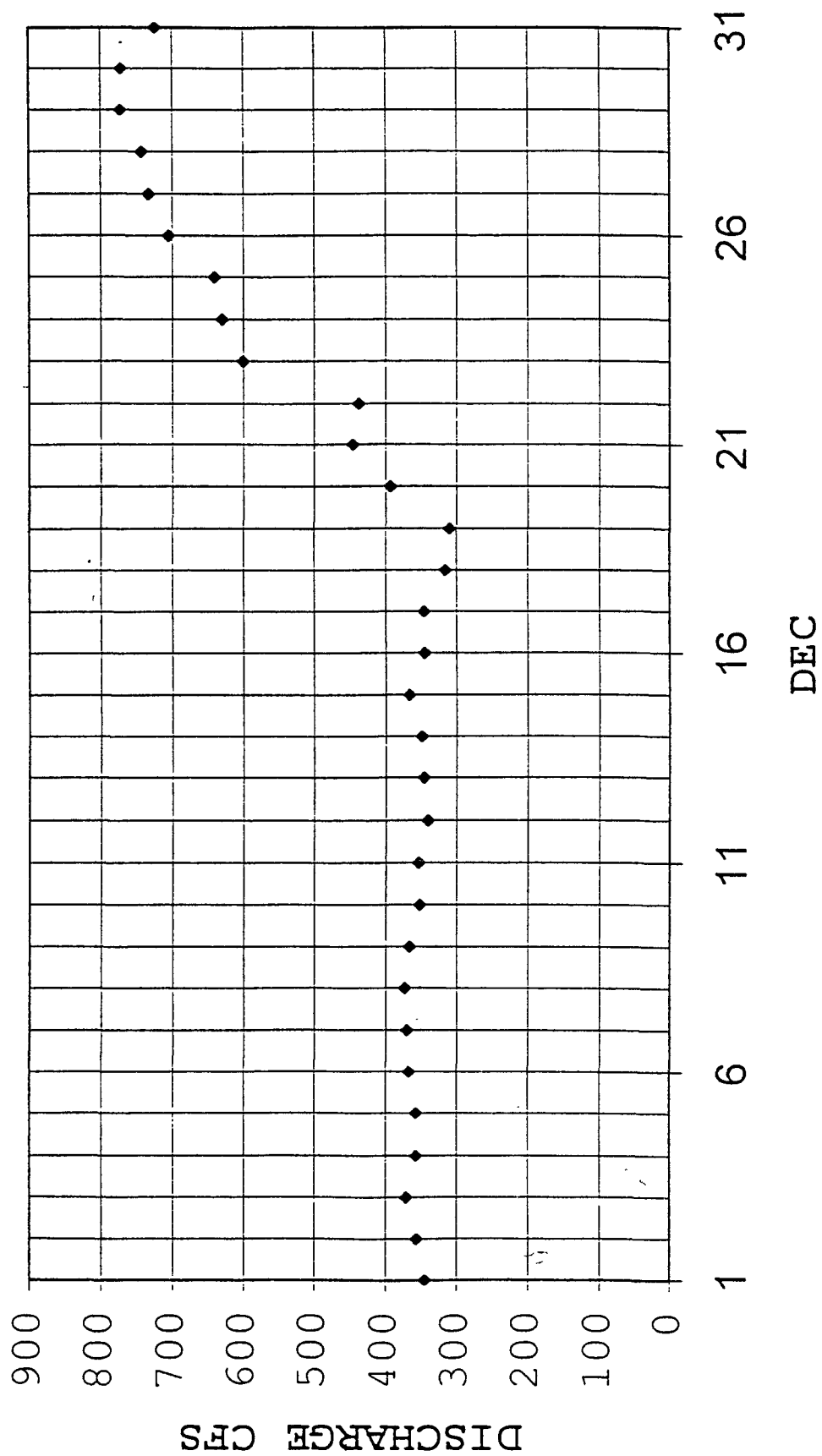
cc: Larry Trujillo, Chairman, ARCA  
Peter Evans, Acting Director, CWCB  
Jim Rogers  
Tom Pointon  
Steve Witte, Division Engineer, Water Division 2  
Mark Rude, Kansas Water Commissioner, Garden City  
David W. Robbins/Dennis M. Montgomery  
John B. Draper  
Wendy C. Weiss

# ARKANSAS RIVER at GARDEN CITY

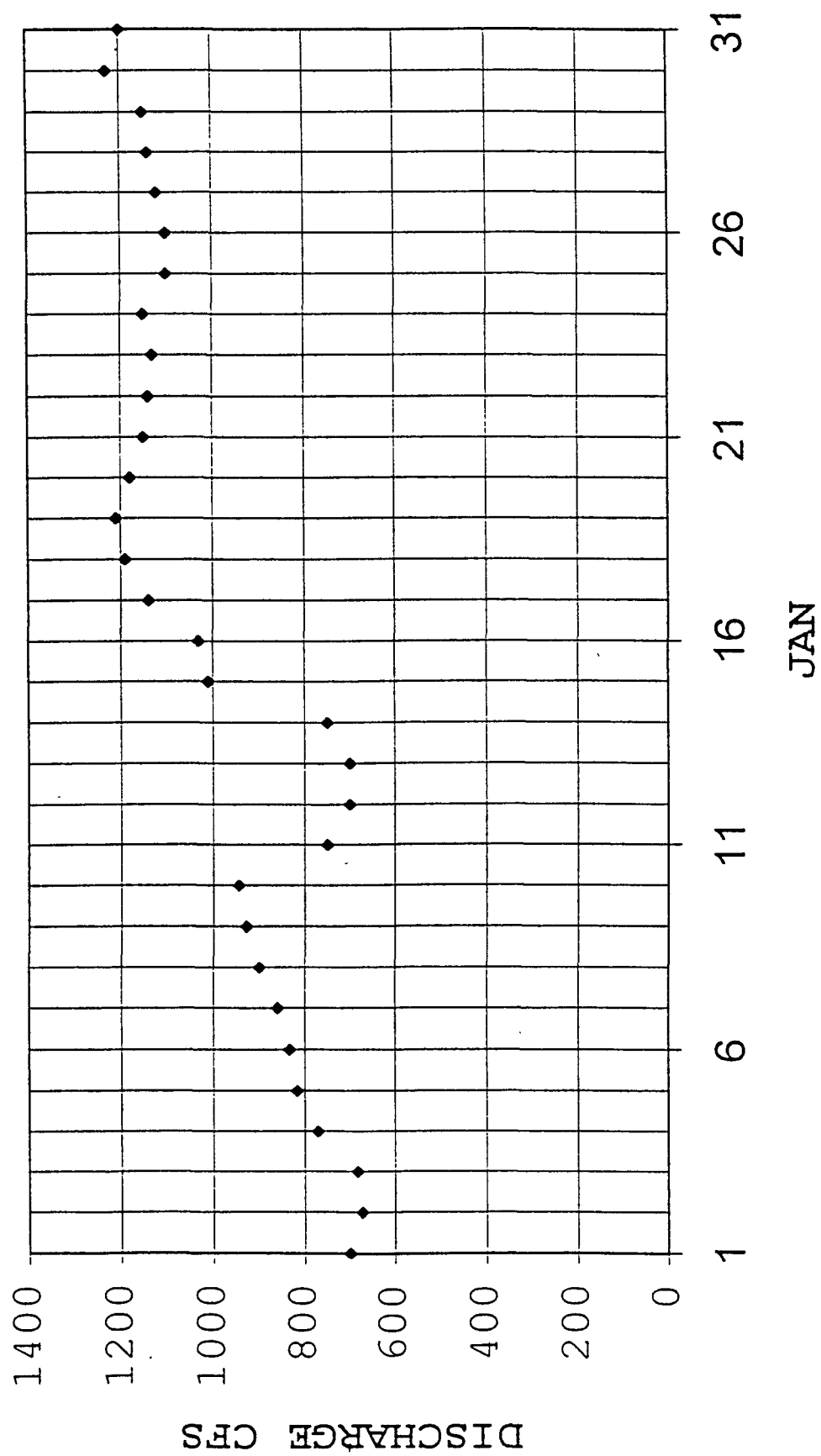




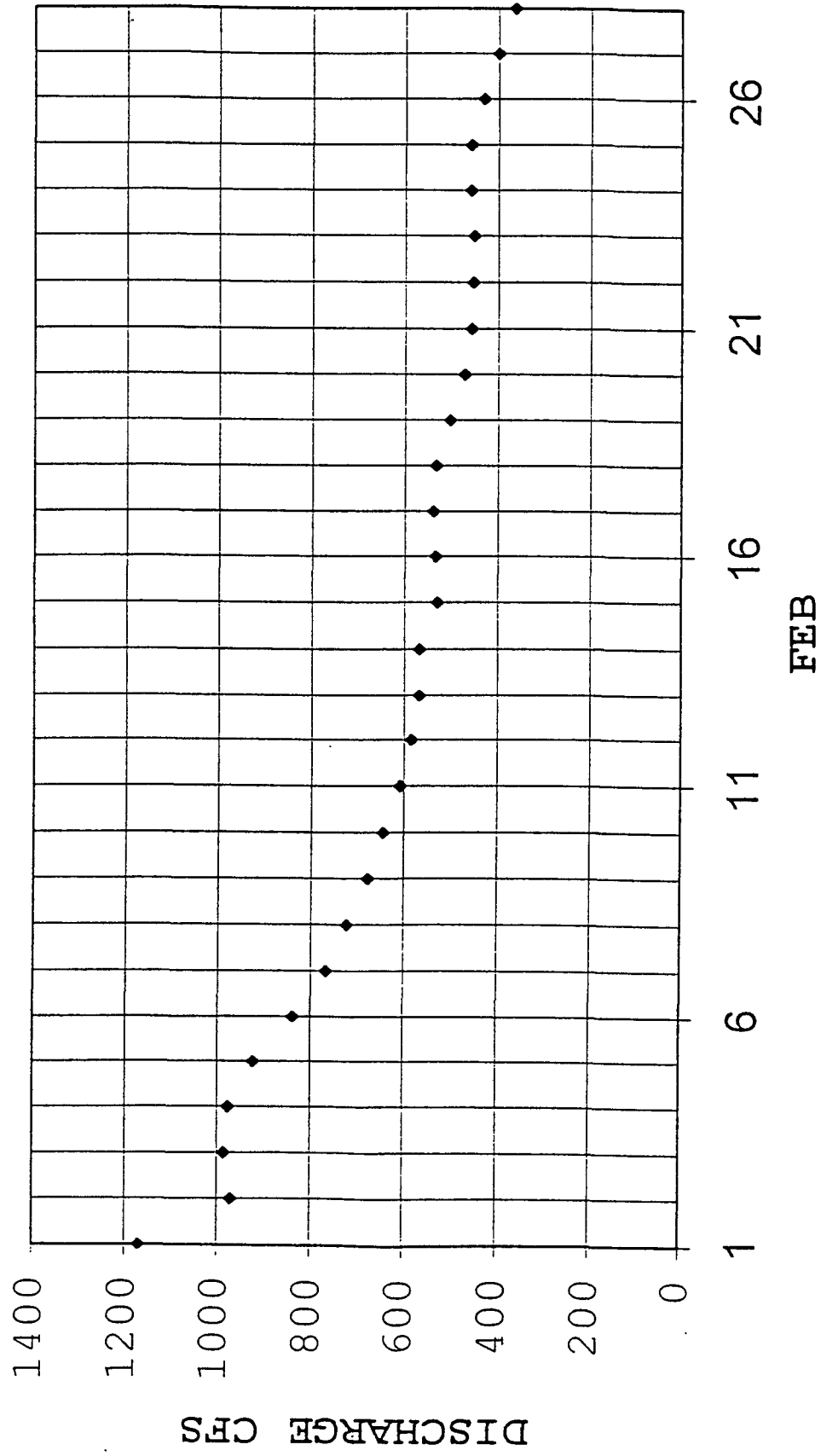
# ARKANSAS RIVER at GARDEN CITY



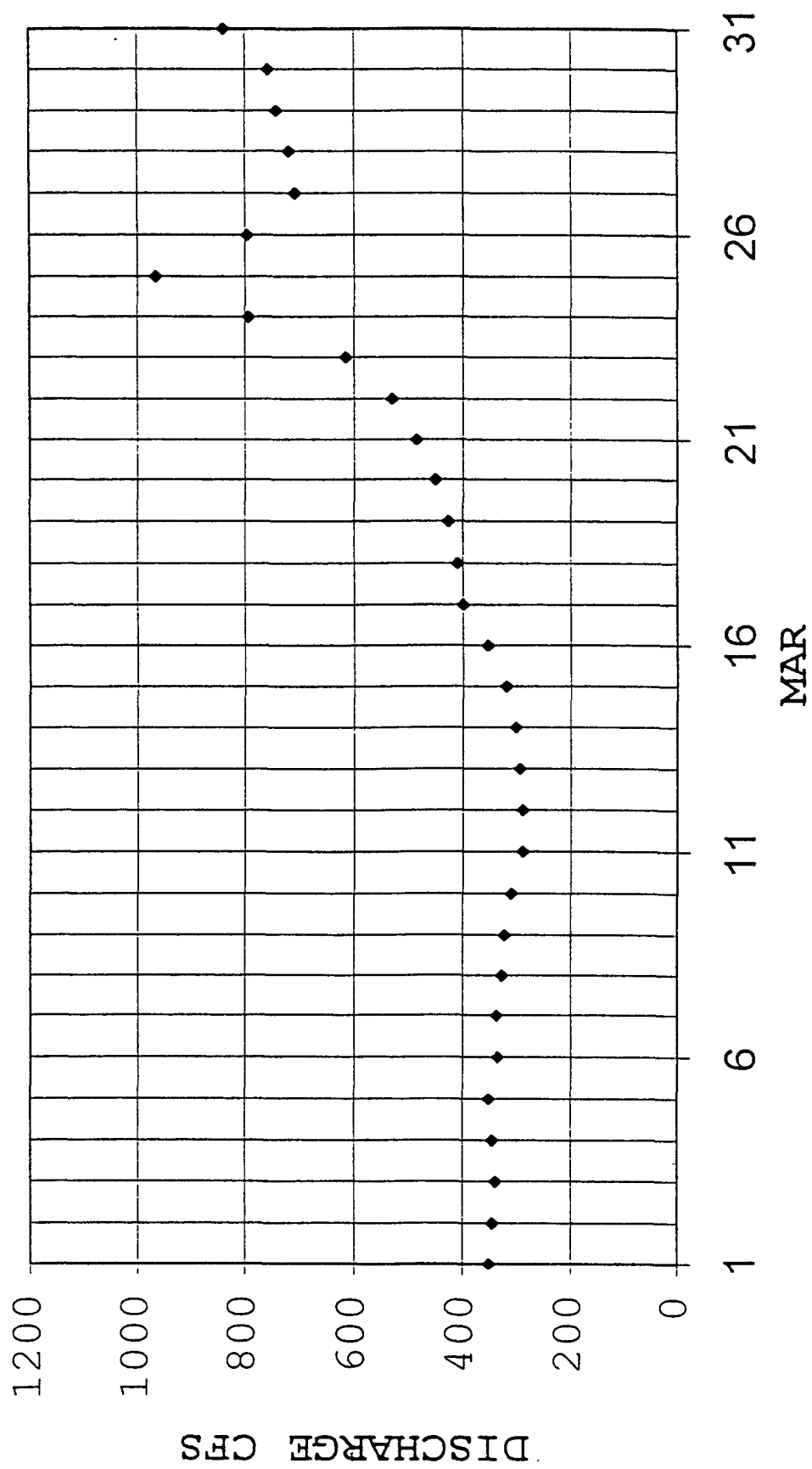
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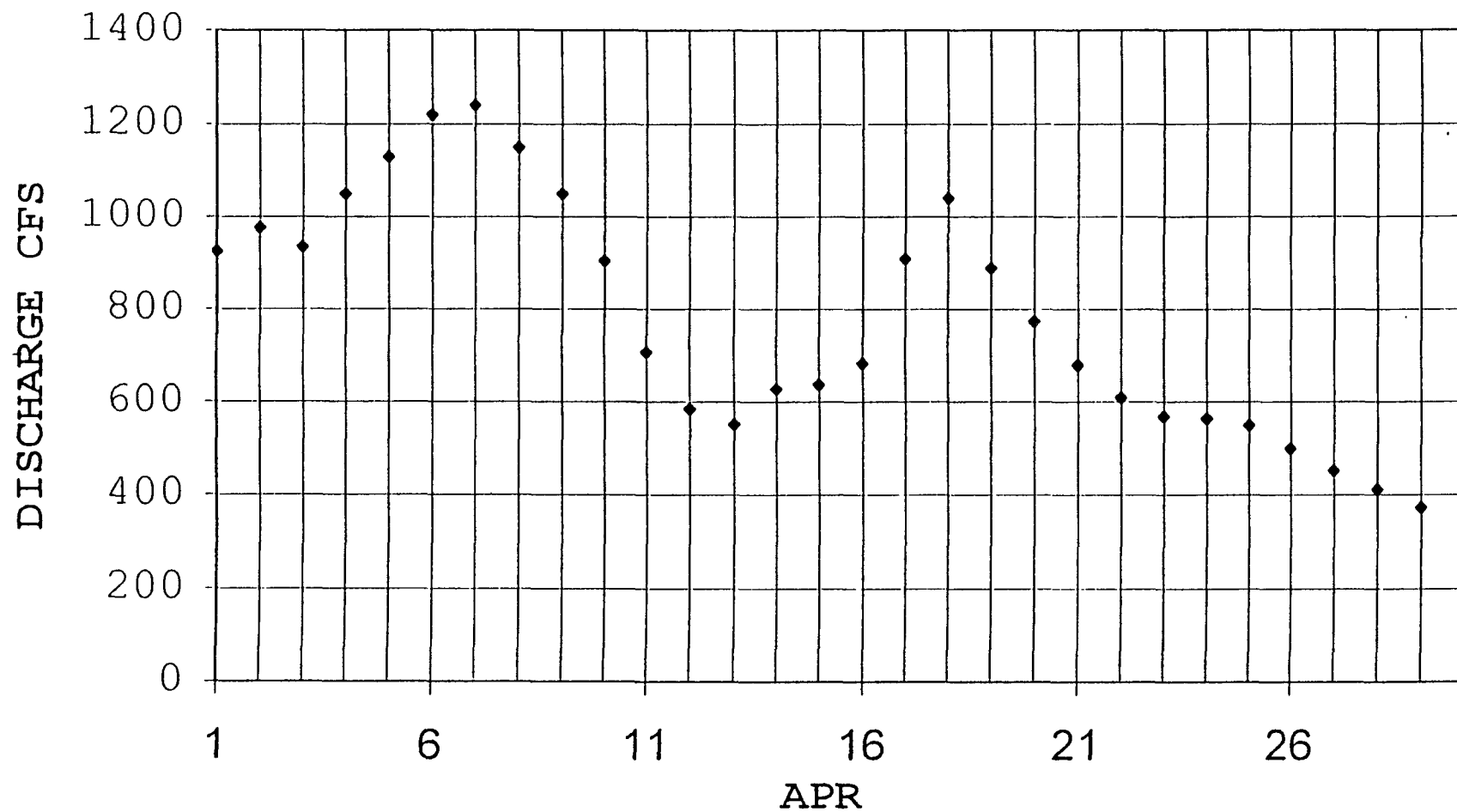
# ARKANSAS RIVER at GARDEN CITY



# ARKANSAS RIVER at GARDEN CITY



# ARKANSAS RIVER at GARDEN CITY

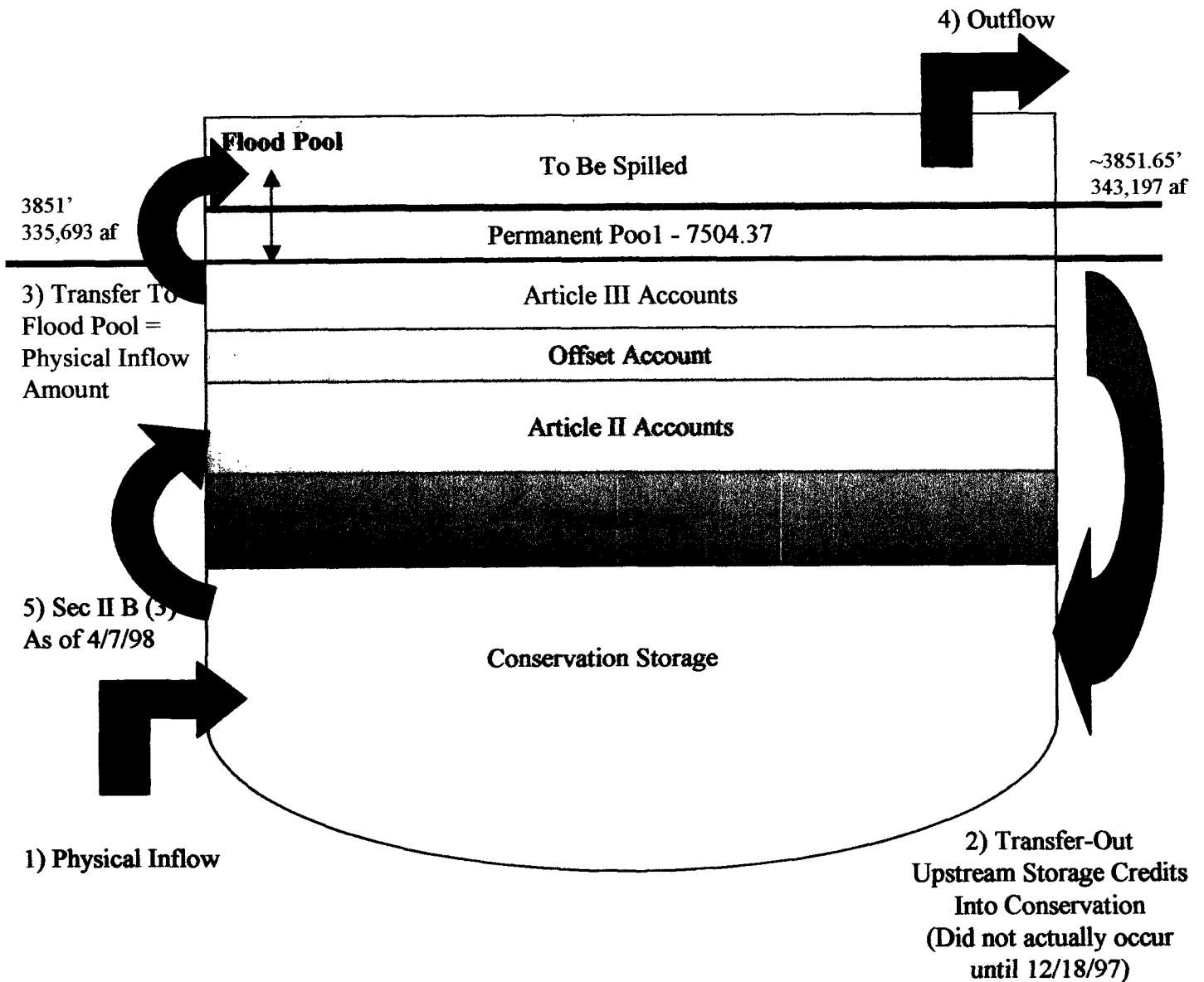




# OS Spill Accounting Methodology

12/14/97 to 4/26/98

With inflow adjustment and Sec. IIB (3) transfer



# OS Spill Accounting Methodology

12/14/97 to 4/26/98

With inflow adjustment

