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In The

### Supreme Court of the United States

October Term, 1985

STATE OF KANSAS,

Plaintiff,

v.

STATE OF COLORADO,

Defendant,

UNITED STATES OF AMERICA,

Defendant-Intervenor.

#### COLORADO'S REPLY BRIEF

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#### COLORADO'S REPLY BRIEF

The State of Colorado submits this reply to Kansas' Exceptions to the 1994 Report of the Special Master and Brief in Support of Exceptions (Kansas' Brief).

#### I. INTRODUCTION

Special Master Arthur L. Littleworth, Esq., presided over 141 days of trial, over a period of more than two years, much of it involving highly technical expert testimony. Report at 28-31. He has prepared a 459-page report which addresses the claims of the parties and sets forth his conclusions and recommendations on those claims. While Colorado does not agree with every ruling of law and finding of fact made by the Master, he is to be

commended for a thorough and carefully considered report. He has stated the reasons for his decisions and identified the evidence on which he relied in reaching his decisions. We note this at the outset because Kansas does not fairly or accurately describe the Special Master's decisions to which it takes exception.

#### II. THE MASTER CORRECTLY GRANTED COLO-RADO'S MOTION TO DISMISS KANSAS' TRINI-DAD RESERVOIR CLAIM

Kansas first takes exception to the Master's decision granting Colorado's motion to dismiss Kansas' Trinidad Reservoir claim at the conclusion of Kansas' evidence. Kansas' Brief at 12-26. Kansas contends that "violation of the Compact Administration's duly adopted Trinidad Reservoir Operating Principles constituted a violation of the [Arkansas River] Compact." *Id.* at 12. Kansas further contends that the Compact Administration "adopted" the Operating Principles to implement and prescribe procedures for the operation of Trinidad Reservoir under Article VIII-B of the Compact. *Id.* at 15. Kansas argues that the Operating Principles are therefore mandatory and enforceable without proof of a violation of Article IV-D of the Compact. *Id.* at 15-24.

The Master articulated the issue in his decision:

The fundamental issue on which the Colorado motion turns is whether Kansas is required to show a material depletion in stateline flows

<sup>&</sup>lt;sup>1</sup> The provisions of the Compact are set forth in Exhibit 1 of the Appendix to the July 1994 Report of the Special Master. Report-App. 1-17.

caused by the operation of Trinidad Reservoir, or is required to prove only that the Operating Principles for the Project were violated, and that such violation caused less water to flow into John Martin Reservoir than would have occurred under strict compliance with the Operating Principles. Kansas did not attempt to establish that the flows of the Arkansas River at the state line were less than they would have been if the Trinidad Project had not been constructed or operated at all.

Report at 379.<sup>2</sup> The Master concluded that the Operating Principles had not been "adopted" by the Compact Administration to prescribe procedures for the operation of Trinidad Reservoir under Article VIII-B of the Compact and that Kansas' evidence did not establish a Compact violation. *Id.* at 407-28.

The Master's decision so well describes the evidence, Kansas' arguments, and the basis for his decision that we will merely summarize the essential points of his decision.

#### A. Background to the Master's Decision

The Master describes the Trinidad Dam and Reservoir Project, the development of Operating Principles for the Project, and Kansas' complaints about the operation

<sup>&</sup>lt;sup>2</sup> Decision of Special Master on Colorado's Motion to Dismiss Kansas' Trinidad Reservoir Claim (Jun. 9, 1992), printed in the July 1994 Report of Arthur L. Littleworth, Special Master, Part III, Vol. III at 373-433. Because the Report is paginated consecutively from beginning to end, we will simply cite to the page numbers of the Report.

of the Project in his decision. Report at 380-99. Very briefly, Congress authorized the Trinidad Project in 1958 to meet flood control and irrigation needs on the Purgatoire River near the City of Trinidad, Colorado. Id. at 382-87; Flood Control Act of 1958, Pub. L. No. 85-500, 72 Stat. 297, 309 (It. Exh. 35).3 After the Trinidad Project was authorized, the U.S. Bureau of Reclamation ("Bureau") conducted operation studies on the irrigation function of the Project. Report at 388. The initial study was completed in 1961. Id. The concept of equal sharing of the Project water supply among the various irrigation ditches assumed in the 1961 operation study was unacceptable to the Purgatoire River Water Conservancy District<sup>4</sup> and a revised operation study was completed in 1964, which included Operating Principles for the Project. Id. at 388-89. The Operating Principles were submitted for review and were approved by the U.S. Army Corps of Engineers, the Colorado Water Conservation Board, and the Purgatoire River Water Conservancy District. Id. at 391. In addition, the Operating Principles were submitted to the Kansas Water Resources Board and the Compact Administration. Id.

In December 1966, the Governor of Kansas asked the Bureau to agree to five conditions to the Operating Principles, to which the Bureau and the Purgatoire River

<sup>&</sup>lt;sup>3</sup> The page numbers in the reporter's transcript at which exhibits were admitted are indicated in the Table of Exhibits.

<sup>&</sup>lt;sup>4</sup> The Purgatoire River Water Conservancy District was formed in December 1960 for the purpose of contracting with the United States for repayment and management of the Project water supply and to represent the irrigation systems to be included in the Project in conducting the irrigation studies for the Project. Jt. Exh. 24a at vi, 7.

Water Conservancy District agreed, and the Operating Principles, as so amended, were approved by the Compact Administration in 1967. Report at 391-95.

In February, 1967, the United States entered into a repayment contract with the Purgatoire River Water Conservancy District for construction, operation, and maintenance of Trinidad Reservoir in accordance with the Operating Principles. Report at 393-94; Jt. Exh. 39.

The Corps of Engineers then constructed Trinidad Dam and Reservoir and substantial storage of water began in 1979. Report at 395-96.<sup>5</sup> In 1980, Kansas complained about the way Trinidad Reservoir was being operated. *Id.* at 397.<sup>6</sup> Kansas requested an investigation by the Compact Administration, which made findings of fact, but could not agree that the operations were in violation of Article IV-D of the Compact. Report-App. at 56.

## B. The Bureau of Reclamation's Review of the Trinidad Project Operating Principles

The Master noted that Kansas' legal theory is based upon an alleged violation of Operating Principles for the

<sup>&</sup>lt;sup>5</sup> Trinidad Reservoir was completed and declared ready to store water on January 1, 1977, but litigation in Colorado delayed any substantial storage until March 1979. Report at 395-96; *Purgatoire River Water Conservancy District v. Kuiper*, 197 Colo. 200, 593 P.2d 333 (1979) (reversing trial court order enjoining storage in the reservoir).

<sup>&</sup>lt;sup>6</sup> Kansas' prompt complaint about the operation of Trinidad Reservoir stands in stark contrast to its lengthy delay in complaining about post-compact well pumping in Colorado.

Trinidad Project. Report at 378. The Master assumed for the purpose of his ruling that the Trinidad Project had been operated in violation of the Operating Principles, id., but concluded that merely showing that operation of the Project had not been in accordance with the Operating Principles did not prove a violation of Article IV-D of the Compact. Id. at 424-28. He noted that the operating studies on which the Operating Principles had been based had predicted an increase in inflow to John Martin Reservoir of 400 acre-feet per year. Id. at 390. During a review of the Operating Principles which was completed in December 1988, the Bureau developed a computer model to reconstruct its earlier operation studies. Id. at 399. The model showed that under the conditions of the 1964 study the inflow to John Martin would have actually increased by an average of 1,000 acre-feet per year compared to a "without project" condition. Id. Using the model, the Bureau then assumed operation with two practices about which Kansas had complained in this case. Id. at 400. The estimated inflow to John Martin Reservoir predicted by the model was less, but still showed an average increase of 300 acre-feet annually. Id.

The Bureau concluded on the basis of these and other studies that the two practices about which Kansas had complained would not cause the future usable inflow to John Martin Reservoir to be less with the Trinidad Project than it would have been without the Project. Report at 401.

The Bureau also did additional studies to compare actual operation of the Trinidad Project during the years 1979 through 1984 with operation of the Project in strict compliance with the Operating Principles. Report at 402. The Bureau did three "case studies." It concluded that

Case 1, which showed a net increase in flows into John Martin Reservoir of 3,500 acre-feet over the study period, was the most reasonable for the purpose of evaluating injury to downstream rights. *Id.* at 403. However, the Bureau cautioned that none of the 1979-84 studies was a sound basis for evaluating future impacts of the Project and did not compare the actual operation of the Project to operation without the Project. *Id.* at 404.<sup>7</sup>

Based on its review, the Bureau concluded that the two practices about which Kansas had complained were departures from the intent of the Operating Principles and recommended that the practices be discontinued until the Operating Principles had been amended to permit the practices. Report at 404-05. The Colorado State Engineer then informed the Purgatoire River Water Conservancy District that he would administer the Project water rights consistent with the Bureau's interpretation of the Operating Principles until they had been amended or until a court of competent jurisdiction had determined that the practices were not a violation of the Operating Principles. *Id.*; Jt. Exh. 52.

#### C. Kansas' Evidence

At trial, Kansas' expert, Brent E. Spronk, using the Bureau's Case 1 and Case 3 studies, calculated depletions

<sup>&</sup>lt;sup>7</sup> The Bureau stated that it had investigated making a "without project" comparison but concluded that there was not sufficient information available to make meaningful comparisons. Report at 404. The Bureau did not say that a "no-project" comparison was "impossible." Kansas' Brief at 9. Nor did Kansas' expert, Brent E. Spronk, claim that such a study was impossible. See Report at 412.

to the inflow to John Martin Reservoir based on the differences between actual inflows during the 1979-84 period and inflows that would have occurred under strict compliance with the Operating Principles. Report at 410. In making this analysis, Mr. Spronk looked only at the months in which depletions had occurred to the inflow to John Martin compared to operation in strict compliance with the Operating Principles, then totalled the depletions. Id. As the Master states: "He deliberately chose not to offset those depletions by the many months during which the Trinidad Project increased inflows to John Martin." Id. On that basis, Mr. Spronk concluded that the additional inflow into John Martin Reservoir during the 1979-84 period, under strict compliance with the Operating Principles, would have been between 24,500 acre-feet and 27.500 acre-feet, of which he assumed Kansas would have been entitled to 40 percent. Id.

This analysis reflected Kansas' legal theory that any depletion to the inflow to John Martin Reservoir in any month resulting from failure to operate the Project in strict compliance with the Operating Principles was a Compact violation *per se*. Report at 407-09.8 It also reflected Kansas' legal theory that the Operating Principles had to be complied with each month, without consideration of averages. *Id.* at 410. As the Master pointed out:

<sup>&</sup>lt;sup>8</sup> As the Master points out, the legal theory advanced at trial was not apparent from the face of the complaint. Report at 407. Moreover, at a conference with the Master in 1988, counsel for Kansas had agreed that Kansas had to prove a material depletion of Stateline flow caused by the Trinidad Project. Transcript of Proceedings (Sep. 28, 1988) at 39-40 (Colo. Appendix at 1a).

Under the evidence in this case, such a measure of damages would afford Kansas significant benefits from the project, as opposed to merely protecting Kansas and other downstream users against material depletions.

Id. at 409.

## D. Summary of the Master's Decision and Reasons for Rejecting Kansas' Claim

The Master concluded that the evidence presented by Kansas did not establish a violation of Article IV-D of the Compact because it was not based on an analysis of what the inflows to John Martin would have been if the Project had not been operated during the years 1979-84. Report at 411-12, 423-26. Mr. Spronk testified that such a study was not necessary to determine the depletions that had occurred as a result of departures from the Operating Principles and would be difficult to do because of uncertainty in estimating diversions in the absence of the Project. *Id.* at 412.9

The Master also rejected Kansas' argument that the Compact Administration had "adopted" the Operating Principles to implement and prescribe procedures for operation of Trinidad Reservoir under Article VIII-B of the Compact:

I have carefully examined the record presented here of the Compact Administration's

<sup>&</sup>lt;sup>9</sup> However, that was exactly what Kansas attempted to do when it developed the H-I Model to estimate changes in Stateline flow assuming the Winter Water Storage Program had not been operated. Report at 231-32.

consideration of the Trinidad Project. I find nothing to indicate that the Compact representatives of either State thought they were exercising binding authority under Article VIII-B. And the consequences of such authority, as argued by Kansas, makes it less rather than more appropriate that such action should be implied.

Report at 415. One consequence of such authority would be that no change in the operation of the Project could be made without a unanimous vote of both states. Arkansas River Compact, Art. VIII-D.

The Master pointed out the problem with Kansas' argument by turning the facts around. Report at 415. "Assume," he said, "that the Operating Principles were strictly observed, but nonetheless the actual Trinidad operations still caused a material depletion in the usable flows to Kansas users." *Id.* He stated: "Under the Kansas legal theory, the State of Kansas would have no recourse so long as the Operating Principles had been adopted by the Compact Administration pursuant to Article VIII-B." *Id.* He stated: "Colorado disagrees with this Kansas view, and so do I." *Id.* at 416 (footnote omitted). The Master concluded:

Under the assumed facts, Kansas would permit the Compact Administration to write out of the Compact the critical Article IV-D requirement that no new development in Colorado may cause a material depletion in usable flows to Kansas users. Such action would not implement, but rather would amend the Compact. Of course, the Compact Administration was not delegated power to change the Compact. No matter what operational criteria are followed,

that is, whether the project is operated in compliance with the Operating Principles, or not, or under appropriately modified Principles, the requirements of Article IV-D must still be met.

Id. at 416.

The Master went on to note that other provisions of the Compact also cast doubt on Kansas' theory that the Compact Administration had authority to prescribe procedures under the Compact to bind Colorado, the Purgatoire River Water Conservancy District, or the United States on the operation of the Trinidad Project. Report at 417-18.

The Master recognized that Kansas argued that the Operating Principles were enforceable as binding action by the Compact Administration apart from any violation of Article IV-D of the Compact because it wants to use the unanimous consent requirement of the Compact to veto amendments to the Operating Principles in order to preserve significant benefits from the Project. Report at 409, 419. The Master not only rejected Kansas' argument, but admonished Kansas that it could not unreasonably withhold approval of amendments to the Operating Principles simply to preserve benefits from the Project at the expense of water users who had contracted with the

<sup>&</sup>lt;sup>10</sup> Earlier the Master had ruled that the historical record did not support Kansas' argument that the Compact negotiators had intended to give the Compact Administration power to control future federal operations on the Arkansas River. Report of Special Master Re Winter Storage Motions (Sep. 15, 1989), printed in Report at 350. Kansas did not take exception to this ruling.

Purgatoire River Water Conservancy District to administer their water rights in return for repayment of the Project's costs. *Id.* at 423-24, 425, 432.

Kansas argues, however, that unless the Operating Principles are binding on Colorado, the Compact Administration's approval of the Operating Principles was "a useless act." Kansas' Brief at 22. This argument misunderstands the role of the states in the review of federal irrigation projects and the powers of the Compact Administration under the Compact.

Section 1(c) of the Flood Control Act of 1944, 33 U.S.C. §701-1(c)(1988) (Colo. Appendix at 3b-4b), requires the Secretary of the Interior to submit plans, proposals, and reports for irrigation and purposes related thereto to the Secretary of the Army and "affected States" 11 for their "views and recommendations." Report at 348. In the event a submission of views and recommendations made by an affected state sets forth objections to the plans or proposals covered by the report of the Secretary of the Interior, the proposed works shall not be deemed authorized except upon approval by an act of Congress, 33 U.S.C. §701-1(c), although in practice the Secretary of the Interior generally does not proceed with reclamation projects without congressional authorization. A. Golze, Reclamation in the United States 125 (1961) (Colo. Appendix at 1c). Thus, affected states have an opportunity to submit "views and recommendations" on federal plans, but not the right to approve or disapprove such plans. Report at 348.

<sup>&</sup>lt;sup>11</sup> The term "affected State or States" is defined in Section 1(a) of the Flood Control Act of 1944. 33 U.S.C. §701-1(a) (Colo. Appendix at 2b).

The submission of the Operating Principles to the Kansas Water Resources Board and the Compact Administration was consistent with the policy expressed in Section 1 of the Flood Control Act of 1944, although it was not required since the Trinidad Project had already been authorized by an act of Congress.

The Compact Administration's review and approval of the Operating Principles was also consistent with its powers under the Compact. The Compact Administration has authority to investigate violation of the Compact or other actions prejudicial thereto. Arkansas River Compact, Art. VIII-H. As a result of an investigation, the Compact Administration can make findings and recommendations to the state official who is charged with the administration of water rights for appropriate action. Id. However, the findings of fact made by the Compact Administration are not conclusive in any court or before any agency or tribunal, id., Art. VIII-I, and recommendations by the Compact Administration are not and were not intended to be binding on state officials in the event they disagreed with the Administration's recommendations. At the seventeenth and final meeting of the Commission which negotiated the Compact, the Commissioners clarified the powers of the Compact Administration in response to proposals by J.W. Dixon of the Bureau of Reclamation to modify Article V-H of the Compact:

Chairman Kramer asked Commissioner Ireland to make a statement for the Record. . . . Commissioner Ireland stated that it had been brought out that the effect of the proposals as expressed by Mr. Dixon would be to grant quasi-judicial functions to the Administration,

something that might not be possible from a constitutional standpoint, even though all the parties desired it; that it had been suggested that if Mr. Dixon's wording constituted the setting up of a condition precedent which would prevent any attempt to go into court, or any attempt to transfer or exchange water regardless of the merits of the situation, until there was a confirmation, and required that such a confirmation have the unanimous concurrence by both Colorado and Kansas as represented on the Administration, then the context should be modified; that it should be consistent with other language in the Compact, as to the extent to which findings of fact by the Administration would be applicable; that the findings would constitute nothing more than prima-facie evidence if they were question [sic]; that they would not be final and conclusive; that it had been emphasized, that whether or not the Compact would in the future be violated by one state or another was up to the respective state officials who would make such determination; that if the officials of one or the other state thought there had been a violation, the only recognized remedy would be for it to go into Court; that this would ultimately mean the United States Supreme Court; . . .

Record of Seventeenth Meeting of the Colorado-Kansas Arkansas River Compact Commission at 17-83 to 17-84 (Jt. Exh. 3).<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> Commissioner Ireland's statement is consistent with earlier statements during the Compact negotiations. Record of Twelfth Meeting of the Colorado-Kansas Arkansas River Compact Commission at 12-48 (Statement by General Kramer) (Jt.

The Compact Administration's review and approval of the Operating Principles is consistent with the limited powers conferred upon the Administration to conduct investigations and make findings of fact and recommendations. See Report at 341-50. Thus, as the Master notes, the mere fact that the Administration reviewed and approved the Operating Principles does not suggest that the representatives from either state thought they were exercising binding authority to prescribe procedures for the operation of a federal reservoir under Article VIII-B of the Compact. Id. at 415.

Moreover, the Compact Administration's approval of the Operating Principles does not mean that a departure from the Operating Principles would necessarily result in a material depletion in violation of Article IV-D of the Compact. Report at 422. As the Master points out, even if one were to construe the Compact Administration's approval of the Operating Principles as a finding of fact that a departure from the Operating Principles would result in a Compact violation, 13 that finding would be merely "prima facie evidence of the facts found." *Id.* at 421; Arkansas River Compact, Art. VIII-I. As the Master notes, there is "ample evidence" in the record on which a trier of fact could determine that the departures from the Operating Principles of which Kansas had complained

Exh. 3) (Colo. Appendix at 1d); *id.* at 12-52 to 12-53 (Statement read by Attorney General Hinckley of Colorado) (Colo. Appendix at 1d-2d).

<sup>&</sup>lt;sup>13</sup> A more reasonable interpretation of any such finding would be that compliance with the Operating Principles would not result in a Compact violation. Report at 422. The converse is not necessarily true, since a departure from the Operating Principles could actually benefit Kansas.

had not materially depleted the inflow to John Martin under the Compact. Report at 421.

Kansas argues that the Master's ruling allowed Colorado to disregard the Trinidad Project Operating Principles "with impunity." Kansas' Brief at 9. Colorado has never suggested that the Purgatoire River Water Conservancy District or Colorado could disregard the Operating Principles "with impunity." However, Colorado insisted that if Kansas wanted to assert a claim based on failure to comply with the Operating Principles, the Purgatoire River Water Conservancy District should be joined as a party in the action, see Fed.R.Civ.P. 19, and that this Court was not the only forum for such an action and not necessarily the appropriate forum for such a lawsuit. RT Vol. 1 at 39-44; United States v. Nevada, 412 U.S. 534 (1973) (per curiam) (denying motion for leave to file suit against Nevada where local water right owners would not have an opportunity to participate and federal district court had concurrent jurisdiction). Kansas did not allege a claim for failure to comply with the Operating Principles and did not seek to join the Purgatoire River Water Conservancy District; instead, it asserted a Compact violation against Colorado. Having chosen not to pursue a claim for failure to comply with the Operating Principles, Kansas is in no position to claim that the Master's ruling allows the Operating Principles to be violated with impunity.

The Master addressed the arguments Kansas made in response to Colorado's motion to dismiss Kansas' Trinidad Reservoir claim at some length. Report at 380-412. Colorado has little to add to the Master's discussion except to note that Kansas had made a similar argument concerning the Winter Water Storage Program. Kansas

contended, based on a resolution adopted by the Compact Administration in 1951, that the Program could not be operated unless an operating plan had been approved by the Compact Administration. In granting Colorado's motion for partial summary judgment on this issue, the Master reviewed the limited powers granted to the Compact Administration in the Compact. *Id.* at 346-50. He stated:

In its brief, Kansas slips back and forth between two differing statements of its position. At times, Kansas states that the Compact Administration was intended to have the authority to require "submission" of plans for Federal projects; that the Administration wanted "an official say" concerning future plans for the reregulation of native waters, "even if that say was channeled through the governors of Kansas and Colorado." [Citation omitted.] In other places, Kansas states that a right of "approval" was intended. . . .

Clearly there is a difference between merely requiring Federal plans to be submitted to the Administration, and giving that Administration a veto power over the construction or operation of such projects. At best, the historical record suggests that some Compact negotiators wanted, and perhaps expected, that plans for future Federal development would be submitted not only to the affected States, but also to the Compact Administration. However, the historical record does not support Kansas' claim that the Compact negotiators intended to give the Compact Administration power to control future Federal operations on the Arkansas River.

*Id.* at 349-50 (footnote omitted) (emphasis added). Kansas did not take exception to this ruling, and the Master's ruling should be read in conjunction with his decision dismissing Kansas' Trinidad Reservoir claim.

# E. Stability and Peaceful Resolution of Controversies Without Litigation Are Enhanced by the Master's Careful Decision on the Limited Powers of the Compact Administration

There is one new argument in Kansas' Brief which calls for a response. Kansas states: "The question involved here is one of principle that will determine for the indefinite future whether Kansas can rely on resolutions of the Arkansas River Compact Administration relating to details of compliance with the Arkansas River Compact." Kansas' Brief at 24. Kansas further states: "The direction that Kansas receives from the Court will also serve as a guide to other states and other interstate compact commissions and administrations." *Id*.

Colorado believes there is a principle at stake in this case, but a different and more important one than stated by Kansas. This Court has frequently urged states to resolve their differences by agreement rather than by invocation of the Court's adjudicatory power. E.g., Colorado v. Kansas, 320 U.S. 383, 392 (1943). In the twentieth century, interstate compacts have been widely used as a method to apportion interstate rivers. J. Muys, Interstate Water Compacts: The Interstate Compact and Federal-Interstate Compact 8 (National Water Commission Legal Study No. 14) (1971) (Since the Colorado River Compact of 1922, "eighteen additional compacts have been entered into

apportioning the waters of interstate streams."). However, for the most part, states have been cautious about delegating power to interstate agencies created by such compacts. The Arkansas River Compact Administration is typical of a number of interstate agencies which have carefully limited powers and require unanimous consent for action. Id. at 14-15, 17 ("Beyond the power to make findings, however, few commissions possess any broader authority."). On occasion, Special Masters appointed by this Court, frustrated by the limited powers of such agencies, have recommended that the Court appoint a tiebreaker to break impasses when the states did not agree, Texas v. New Mexico, 462 U.S. 554, 563 (1983), or establish jurisdictional prerequisites and procedural guidelines for application in future interstate compact litigation. Oklahoma and Texas v. New Mexico, 501 U.S. 221, 228-29 (1991).

This Court has not followed such recommendations for reasons which are rooted in our federal system. In Texas v. New Mexico, the Court said that "unless the compact to which Congress has consented is somehow unconstitutional, no court may order relief inconsistent with its express terms." 462 U.S. at 564. In Oklahoma and Texas v. New Mexico, the Court declined to remand an issue to the Canadian River Commission or to establish jurisdictional prerequisites and guidelines because "the Court 'does have a serious responsibility to adjudicate cases where there are actual, existing controversies' between States over the waters of an interstate stream." 501 U.S. at 241, quoting Arizona v. California, 373 U.S. 546, 564 (1963).

Considering the number of interstate compacts apportioning interstate rivers, there have been remarkably few cases involving claims for breach of such compacts. However, it would encourage litigation and make states less likely to negotiate such compacts in the future if the Court were to order relief inconsistent with the express terms of a compact or give effect to actions by a compact administration or commission which go beyond the limited powers delegated to such agencies. Many compacts have unanimous consent provisions which would make it difficult to change actions of such agencies.

Stability and peaceful resolution of controversies without litigation are enhanced by decisions, such as the Master's decision granting Colorado's motion to dismiss Kansas' Trinidad Reservoir claim, which give effect to the express terms of the Compact and the limited powers delegated to the Compact Administration.

#### III. THE SPECIAL MASTER CORRECTLY CON-CLUDED THAT KANSAS HAD FAILED TO PROVE ITS WINTER WATER STORAGE PRO-GRAM CLAIM

Kansas next takes exception to the Master's finding that Kansas failed to prove that operation of the Winter Water Storage Program ("WWSP" or "Program") has violated Article IV-D of the Compact. Kansas' Brief at 26. Kansas argues that the Master erred by placing the risk of uncertainty resulting from the lack of data on Kansas and that he relied on a basis as to which the record was incomplete. *Id.* at 28-34. These arguments are without

merit. The Master's finding was not based on uncertainty resulting from the lack of data and the record was not incomplete with respect to the Master's ruling on the Winter Water Storage Program.

#### A. Background to the Master's Decision

The Master describes Pueblo Reservoir and the Winter Water Storage Program. Report at 43-44, 306-13. As the Master notes, irrigation during the winter months was a practice which developed in the Arkansas River Valley because of water shortages. *Id.* at 308. Farmers irrigated their lands during the winter to build up moisture in the soil for the growing season. *Id.*; RT Vol. 82 at 153-56 (Helton). Storage of winter flows was first proposed during the planning stages of the Gunnison-Arkansas Project in the late 1940s when the Bureau proposed to add Pueblo Reservoir as a feature of the project. Report at 306.<sup>14</sup>

An interim report describing the Bureau's plans for the Gunnison-Arkansas Project, which included storage of winter flows in Pueblo Reservoir, was provided to the Commissioners who negotiated the Compact. Report at 306; Record of Sixteenth Meeting of the Colorado-Kansas Arkansas River Compact Commission at 16-78 to 16-79 (Jt. Exh. 3) (Colo. Appendix at 1e); Colo. Exh. 643 at 12,

<sup>&</sup>lt;sup>14</sup> As the Master notes, winter irrigation below John Martin Reservoir generally ended with the construction of that reservoir and adoption of the Compact. Report at 309. Thus, the Bureau's plans related to storage of winter flows in Pueblo Reservoir for ditches in Colorado between Pueblo Reservoir and John Martin Reservoir.

¶ 51 (June 1948 interim report on the Gunnison-Arkansas Project) (Colo. Appendix at 1f); RT Vol. 11 at 125, 128-36. While the Commissioners did not determine whether the Bureau's plans could be implemented without materially depleting the waters of the Arkansas River, they did not intend to impede or prevent those plans if they could be fit within the framework of the Compact. As Commissioner Gail L. Ireland stated in his testimony to Congress:

We have also been very careful in this compact to so prepare the same that it would not in any manner prevent proper future development, whatever may be able to be accomplished in the future, on the river. We know that the Bureau of Reclamation has plans, and this compact, in my opinion, does not stand in the way of any of those plans.

Arkansas River Compact: Hearing on S. 1448 Before the Senate Comm. on Interior and Insular Affairs, 81st Cong., 1st Sess. 15 (1949) [hereinafter cited as Senate Hearing] (Jt. Exh. 15). See also H. Kramer, Report to the Congress of the United States on the Proposed Arkansas River Compact Between Colorado and Kansas (1949), reprinted in Senate Hearing at 36 (Jt. Exh. 15) ("The above language [of Article IV-D] was evolved from extensive consultation with the affected Federal agencies. It is intended to leave the door open – as it should be – for beneficial development of the Arkansas River Basin in Colorado and Kansas by any and all proper ways and means.").

In 1962, Congress authorized the initial development of the Gunnison-Arkansas Project, which had been renamed the Fryingpan-Arkansas Project to avoid confusion with the larger Gunnison-Arkansas Project. Report at 306-07; Act of Aug. 16, 1962, Pub.L. No. 87-590, 76 Stat.

389 (1962) (Jt. Exh. 168); Fryingpan-Arkansas Project, Colorado, H.R. Doc. No. 187, 83d Cong., 1st Sess. 10 (1953) (letter from the Commissioner of Reclamation noting the reason for the name change) [hereinafter cited as "H.R. Doc. No. 187"] (Jt. Exh. 166). Project purposes included the reregulation of "winter flows of the Arkansas River that are presently diverted for direct-flow use but which, by agreement, could be converted to more beneficial summer use through storage in the Pueblo Reservoir." Report at 307 quoting H.R. Doc. No. 187 at 32, ¶ 65 (Jt. Exh. 166).

In 1964, the Bureau advised the Southeastern Colorado Water Conservancy District that it should begin to develop a program for storage of winter flows of the Arkansas River in Pueblo Reservoir. Report at 307. In 1965, the Southeastern Colorado Water Conservancy District signed a repayment contract with the United States for the Fryingpan-Arkansas Project which provided for winter storage in project reservoirs and included penalties in the form of increased payments for project water if a winter water storage program was not implemented. *Id.* n. 132.

In 1969 the Southeastern Colorado Water Conservancy District formed a Winter Storage Committee, which included representatives of all entities eligible to participate in the Program. Report at 311. Charles L. ("Tommy") Thomson, general manager of the Southeastern Colorado Water Conservancy District, served as chairman of this committee. *Id.* The initial operating plan for the Winter Water Storage Program was developed by the Southeastern Colorado Water Conservancy District and the participating water users, with assistance from the Bureau, the U.S. Geological Survey ("USGS"), and Colorado water officials. *Id.* at 355. Pueblo Reservoir was

substantially completed in 1975, *id.* at 44, and the first Program began in December of that year. *Id.* at 309, 354.<sup>15</sup> The Program has been operated every year since that time, with the exception of the winter of 1977-78. *Id.* at 309, 354-55.

## B. The USGS Did a Study Prior to Implementation of the WWSP, and Studies in 1981 Did Not Indicate Any Adverse Impact on Kansas

Kansas states that Colorado "unilaterally initiated" the Winter Water Storage Program "without the benefit of prior sufficient studies and data collection now found necessary by the Master." Kansas' Brief at 27. This distorts the facts.

The USGS assisted with the planning for the Program and did a study prior to implementation of the Program which concluded that Stateline flows would increase. Report at 313, 355. Mr. Thomson appeared at several Arkansas River Compact Administration meetings from 1970 to 1975 to discuss planning for the Program. *Id.* at 311, 356. At the December 1975 meeting of the Compact Administration, Mr. Thomson informed the Compact Administration that the Program had begun on a three-month experimental basis. *Id.* at 311. The Compact Administration was complimentary and adopted a resolution directing its Special Engineering Committee to review

<sup>&</sup>lt;sup>15</sup> The Master states that the Program commenced in 1976. Report at 309. The Program actually began in December 1975; however, witnesses frequently used the term "Compact Year," which begins on November 1 of the preceding year. Thus, the Master's statement is correct if it is understood to mean that the Program began in Compact Year 1976.

operations of the Fryingpan-Arkansas Project and to report to the Compact Administration each year on the relationship between the Project and the Compact. *Id.* at 312, 356. Mr. Thomson was also requested to appear at the next meeting of the Compact Administration to report on the results of the Program, which he did in May 1976. *Id.* at 356.

In December 1980, Kansas expressed a concern over potential reduction of inflow into John Martin Reservoir resulting from the Program. Report at 312. The Kansas representatives to the Compact Administration suggested that a study be made, which was done by the USGS and completed in February 1981. Id. at 312-13; Colo. Exh. 538. The USGS performed an analysis of streamflow records and concluded that the data did not indicate that inflow to John Martin Reservoir had been reduced as the result of the Program. Report at 313; Colo. Exh. 538 at 3. The Kansas Division of Water Resources also did a comparison of streamflow records and concluded that the comparison indicated that there had not been a reduced flow since operation of Pueblo Reservoir began. Report at 313; Colo. Exh. 539. "Thus," as the Master states, "the early and preliminary reviews of winter storage did not indicate any adverse impact upon Kansas, . . . " Report at 313.

In 1981, however, Howard C. Corrigan, the Kansas Water Commissioner, discovered a resolution which had been passed by the Compact Administration in 1951. Colo. Exh. 21 at 149 (deposition of Howard C. Corrigan); Colo. Exh. 17 at 98 (deposition of Carl Bentrup). Based on the resolution, Kansas began to insist that the Program had to be approved by the Compact Administration. In 1985, Kansas requested an investigation of the Program

by the Compact Administration, but its insistence that the Program had to be approved by the Compact Administration impeded the investigation. Report at 364 ("It is evident that any earlier action by the Compact Administration concerning the winter storage program was at least impeded, and perhaps blocked, by the legal disagreement between the States over the 1951 Resolution."). Colorado moved to stay Kansas' WWSP claim to allow the Compact Administration an opportunity to investigate the claim, but Kansas opposed the motion and the Master denied Colorado's motion to stay. *Id.* 364-67.

Thus, the Program was not initiated without prior studies, and preliminary studies by the USGS and the Kansas Division of Water Resources did not show any adverse impact on Kansas from the Program. Moreover, Kansas had known about the Program since 1970, was kept well-informed about the Program thereafter, and did not raise any objection to the initiation of the Program in 1975. Report at 311-12. Nor did Kansas complain about lack of data or ask the Compact Administration to make an investigation to collect any missing data or make any findings of fact relating to the Program.

Furthermore, the Master gave Kansas every opportunity to present evidence to support its claim, granting Kansas' motion for a seven-month continuance to replace Mr. Durbin<sup>16</sup> after cross-examination had brought out a

<sup>&</sup>lt;sup>16</sup> Timothy J. Durbin, a former District Chief for the California District of the USGS, was the chief technical expert witness for Kansas. Report at 228. He developed the basic structure of the H-I Model and the usable flow method which Kansas originally relied upon to quantify its claims. *Id.* at 230, 235, 293-94.

serious coding error in the original H-I Model concerning the Program. Report at 28, 236-37, 315. The Master also allowed the Kansas replacement experts, over objection by Colorado, to make changes in the way the Program was represented in the model, not to correct errors in the model, but to better represent the Program. RT Vol. 88 at 29, 31-32; RT Vol. 91 at 44-50 (Book) (describing changes).17 Having failed to prove its claim, Kansas now argues that the burden of uncertainty from the lack of data should fall on Colorado. Kansas' Brief at 29-32. In making this argument, Kansas implies that the Master's decision was based on the uncertainty in the Kansas' modeling analysis due to the lack of adequate data. Kansas' Brief at 29 ("Much of the source of the uncertainty in the WWSP analysis is the lack of adequate data."). The Master did discuss the lack of data on winter evaporation rates, but that was not the basis for his decision.

## C. Summary of the Master's Decision and Reasons for Concluding that Kansas Had Not Proved the WWSP Had Caused Material Depletions to Usable Flows

In his Report, the Master reviewed the evidence presented by the parties concerning the Winter Water Storage Program and concluded that, even applying the preponderance of the evidence standard, Kansas had not proved that the Program had caused material depletions in violation of the Compact. Report at 335. The Master states:

<sup>&</sup>lt;sup>17</sup> The Kansas replacement experts also made many other changes to the H-I Model. Report at 245.

Kansas' case has not been helped by its own contradictions in quantifying impacts to usable flow – ranging during this trial from 255,000 acre-feet initially, to 44,000, to 40,000; nor by the fact that depletions are essentially eliminated if accretions are taken into account. This is not to say that the WWSP has not adversely impacted Stateline flows, but rather that Kansas has failed to prove that it has.

Id. at 335; see also id. at 236 ("The major changes in Kansas' position and evidence cannot be ignored."), 315 ("In evaluating the overall persuasiveness of the Kansas case, this original evidence cannot be forgotten or ignored."). The Master then recommends "that the Court find that Kansas has failed to prove that operation of the program has violated the compact." Id. at 336.

Kansas takes exception to the Master's recommendation, contending that he recommended that its claim be denied because "(1) it is too uncertain; and (2) accretions might offset depletions." Kansas' Brief at 26. Kansas argues that its experts "determined there was a violation in the amount of 40,000 acre-feet of depletions to usable flow during the operation of the program (1976-85)." *Id.* Kansas states: "No other evidence of depletions or lack thereof was submitted for the 1976-85 period of operation," *id.*, and that "[t]he Master rejected the evidence of depletions, however, holding that the results are too uncertain, placing the onus of uncertainty on Kansas. . . . " *Id.* at 27. Kansas again misstates the facts and the basis of the Master's recommendation.

First, as the Master noted, Kansas was not helped by its experts' calculations of progressively less and less

depletions to usable Stateline flows for the 1976-85 period as errors in the H-I Model were discovered and corrected. Report at 335. Kansas' experts first asserted that the Program had depleted usable Stateline flows in the amount of 255,000 acre-feet. Report at 315; Kan. Exh. 112\* (12-6-90) (Comparison H). However, this estimate was based, at least in part, on a serious coding error in which several lines of code had been left out in one of the "runs" of the model. Report at 238; RT Vol. 87 at 54-55, 67 (Schroeder). This error was brought out during cross-examination of Mr. Durbin. Report at 28; RT Vol. 51 at 114-40. Dewayne R. Schroeder, Colorado's modeling expert, then identified sixteen coding errors and poor assumptions in the model during his testimony. Report at 238; RT Vol. 87 at 53-68.

After correcting errors and poor assumptions in the original H-I Model pointed out by Mr. Schroeder, Kansas' replacement experts presented a new estimate of depletions of 44,000 acre-feet. Report at 238, 245, 315. Even that estimate was based on an error in the revised model. *Id.* at 315. When that error was identified and corrected, the final estimate of depletions to usable Stateline flows dropped to 40,000 acre-feet. *Id.* at 315-16. However, this estimate was based on a new usable flow method developed by the Kansas replacement experts which the Master concluded was not appropriate for use with the H-I Model. *Id.* at 322. Using the usable flow method developed by Mr. Durbin, which the Master found was the best

<sup>&</sup>lt;sup>18</sup> When that error was corrected, the original H-I Model predicted that usable Stateline flows would increase by 18,800 acre-feet. RT Vol. 87 at 54, 78, 81 (Schroeder).

of the methods presented, depletions were reduced to 27,200 acre-feet. *Id.* And when accretions (increases in flows) predicted by the model from the Program were taken into account, these depletions were eliminated. *Id.* Thus, the 40,000 acre-foot figure was not the only evidence of depletions to usable Stateline flows or lack thereof submitted for the 1976-85 period of operation. It was simply the final estimate presented by Kansas to quantify its claim.

Second, the Master did not reject Kansas' claim because lack of data made the results too uncertain. Rather, he concluded that the depletions predicted by the H-I Model were not reliable and could not be considered apart from the accretions predicted by the model. Report at 327-29.

As the Master notes, both the United States and Colorado argued that accretions must be considered when evaluating the impacts of the Program. Report at 327. When accretions were taken into account using the Durbin usable flow method, "the revised H-I Model reduces depletions to 2,200 acre-feet for the whole nine-year program, or calculates an actual increase in Stateline flows, depending on how the institutional switches are set for the 1980 Operating Plan." *Id.* at 327-28, *citing* Colo. Exh. 975, Comparisons 3, 7.19 Kansas objected to considering the accretions to usable Stateline flows because

<sup>&</sup>lt;sup>19</sup> The increase in usable Stateline flows predicted by the revised H-I Model was 2,800 acre-feet. Colo. Exh. 975, Comparison 3. This was the comparison the Kansas replacement experts relied upon to determine impacts from the Winter Water Storage Program with the revised H-I Model, Report at 316, but the Master questioned the comparison because it involved two

31,000 acre-feet of the 37,000 acre-feet of accretions to usable Stateline flows predicted by the model during the 1976-85 period had occurred in two months in 1985, right at the end of the period. Report at 328. However, as the Master notes, the timing of accretions and depletions predicted by the model was a product of the assumptions and parameters used in the modeling effort, and it seemed likely that a reservoir storage program could well provide some usable accretions that would mitigate depletions. *Id.* 

The Master then noted that the evidence showed that, without regard to other criticisms about the model by the United States and Colorado, "in seven of the nine years during which the WWSP operated, the H-I model put more water into storage in John Martin Reservoir than actually occurred." Report at 328. "As a result of this artificial buildup," he stated, "the model calculated that John Martin Reservoir filled in 1985, finally producing a model spill of 255,000 acre-feet." *Id.* He noted that a spill did occur in 1985, but it was only 87,000 acre-feet. *Id.* The United States and Colorado argued that, when it simulated the operation of the Program, the H-I Model thus held water in storage that in reality flowed downstream to add to Stateline flows (and thereby would have eliminated the depletions predicted by the model); however, in

hypothetical model runs, neither of which actually happened. *Id.* at 259-60. When the "switches" for the 1980 Plan were left on in both model runs, it changed the results from a slight accretion to a slight depletion of 2,200 acre-feet over the nine-year period; but, as the Master concluded, these depletions are well within the range of error of the model. *Id.* at 334-35.

terms of model results, the water showed up as accretions when the stored water was spilled in two months in 1985. *Id.* The Master noted that Kansas disregarded such accretions as not being usable or timely. *Id.* The Master concluded:

There is not sufficient evidence to determine what the impact on Stateline flows would have been if the H-I Model had more closely corresponded to actual storage in John Martin and to actual releases. However, there seems to be merit in Colorado's argument, with respect to the WWSP and accretions, that the H-I Model has created "false depletions." [Citation omitted.]

Id. at 328-29.

The Master then discussed the disagreement over the proper method to calculate winter evaporation rates, but concluded:

In the final analysis, modeling winter evaporation depends not only upon the equation used but also on the amounts and frequency of the irrigation applications, and weather conditions at those times. However, that determination need not be made in order to decide the present WWSP claim. I have concluded that the depletions shown by the Kansas model are well within the model's range of error. One cannot be sure whether impact or error is being shown.

Report at 334-35 (emphasis added). Thus, the Master's conclusion was not based on the uncertainty due to lack of data on winter evaporation rates; it was based on a finding that Kansas had not proved material depletions to usable Stateline flows because the depletions predicted

by the model were not a reliable basis to determine the impact of the Program.

Third, the record was not incomplete on this issue. See Kansas' Brief at 33-34. The Master did state, with respect to accretions predicted by the revised H-I Model in the comparison used to evaluate the impact of post-compact well pumping, that the issue needed to be examined. Report at 263. However, he specifically stated:

This conclusion relates only to postcompact pumping in Colorado, and not to the Winter Water Storage Program. The impact, if any, of that program is discussed in Section XXII hereof.

*Id.* (emphasis added). In the case of Kansas' WWSP claim, there was considerable evidence presented about the accretions predicted by the revised H-I Model. *Id.* at 327-29. The fact that the Master concluded that further evidence was necessary about accretions predicted by the revised H-I Model in a different comparison does not mean that his conclusion on the Winter Water Storage Program needed to await such evidence.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Furthermore, there were many other criticisms of the two model runs used to evaluate the Program with the revised H-I Model which the Master did not bother to address. Report at 326-27 & n. 144. For example, the model overpredicted the amount of water actually put into storage by about 141,500 acrefeet. *Id.* at 327. Colorado's expert, Duane D. Helton, testified that the overprediction of diversions to off-channel storage had biased the results of the model. RT Vol. 134 at 52-59.

## D. Colorado's Evidence Did Not Show Depletions to Usable Flows

Kansas states that Colorado analyzed the Winter Water Storage Program using a different period and "[y]et even with several favorable assumptions, Colorado also found depletions of total flow, in excess of 9,000 acrefeet." Kansas' Brief at 26-27. Kansas misrepresents the results of Colorado's analysis.

The Colorado analysis was done by superimposing the current operating plan for the Program on the period 1950-75 and 1978, the years when the Program did not operate. Report at 317; RT Vol. 83 at 96-98 (Helton).<sup>21</sup>

The Colorado analysis predicted that conservation storage in John Martin Reservoir would *increase* by an average of 244 acre-feet per year. RT Vol. 83 at 145-46 (Helton); Colo. Exh. 134\*, p. 8.1, col. (13). The Colorado analysis also predicted that Stateline flow during the summer, April through October, would not change, *id.*, col. (15), and during the winter, November through March, would decrease by an average of 354 acre-feet per year. *Id.*, col. (14). However, this was a depletion to *total*, not *usable* Stateline flow, and does not include the increases in Stateline flow that would have occurred as a result of the increase in conservation storage.

<sup>&</sup>lt;sup>21</sup> Colorado's expert, Mr. Helton, did not believe it was possible to predict reliably what the diversions would have been if the Program had not been operated because diversions during the period when winter irrigation had been practiced varied due to climatic conditions and the need to do maintenance on canals. RT Vol. 83 at 98-104, 107-08.

Mr. Helton concluded that the Kansas irrigators did not rely on wintertime flows because of poor water quality and icing problems. RT Vol. 83 at 63, 146. Therefore, he concluded that the small depletions predicted during the period November through March would not deplete usable Stateline flows. *Id.* at 63. The average depletion of 354 acre-feet per year can be put into perspective by comparing it to the average of 48,000 acre-feet *per year* of unused flow passing Garden City which the Bureau had estimated was available for development after the Compact became effective. *See* Colorado's Brief in Support of Exceptions at 6 n. 6; Colo. Exh. 112 at 3-4, 6.

Mr. Helton assumed that Kansas would receive 40 percent of the increase in conservation storage. Thus, he concluded that the *potential* impact of the Program on Kansas would be to increase Stateline flow by an average of 97 acre-feet per year. Colo. Exh. 134\*, p. 8.1, col. (17); RT Vol. 83 at 146. Mr. Helton then went on to do a monthly analysis of the impacts of the predicted changes from the Program on usable Stateline flow, which showed that *usable* Stateline flows would have *increased* by an average of 196 acre-feet per year if the Program had been in effect during the period 1950-69. Colo. Exh. 134\*, p. 9.3, col. (11); RT Vol. 86 at 80, 85-88 (Helton). Thus, Mr. Helton concluded that there was no discernable impact on either conservation storage or usable Stateline flows from the Program. RT Vol. 83 at 105-06; Vol. 86 at 87-88.

Kansas argued strenuously that the Colorado analysis was not relevant to address its claim because it was for the wrong period. Report at 317. The Master stated that he could not say that it was "legally wrong" to analyze the impact of the Program in this manner, but

concluded that it was "more appropriate" to evaluate the operations of the Program during the period it actually operated. *Id.* at 317-18. Thus, he did not rely on the Colorado analysis as the basis for his finding that Kansas had failed to prove its claim. *Id.* at 318. The Master did mention in passing that the Colorado analysis does show some limited depletions, "in excess of 9,000 acre-feet for the 27 year period studied, or about 354 acre-feet per year on average." *Id.* However, as noted above, these depletions were not depletions to usable Stateline flows and did not include the increases in conservation storage or usable Stateline flows predicted by the Colorado analysis.<sup>22</sup>

Kansas claims that the Colorado analysis was based on several favorable assumptions, Kansas' Brief at 30, but never demonstrated that changing assumptions in the Colorado analysis would change the results. Instead, Kansas relied on the results of the revised H-I Model because it insisted that Colorado analyzed the wrong period. *Id.* 

E. The Master's Decision Was Not Based on a Finding That the 53,000 Acre-Feet of Depletions Predicted by the Revised H-I Model Were Negligible

Kansas contends that with regard to its WWSP claim, the Master concluded the 53,000 acre-feet of depletions

<sup>&</sup>lt;sup>22</sup> The Master stated that he found no specific testimony on this point. Report at 318. Mr. Helton's testimony on the impact of the Program on usable flows occurred several days after he described his analysis of the Program but is in the record. RT Vol. 86 at 80-88.

shown by the Kansas H-I Model are well within the model's range of error. Kansas' Brief at 28. Kansas then proceeds to argue that depletions of that magnitude are not negligible, *id.*, and that Colorado should have "the burden of coming forward with evidence to reduce assumed uncertainty in the Kansas evidence of depletions." *Id.* at 32.

This argument is predicated on a misconception of the Master's ruling. The Master concluded that, when accretions were taken into account, the revised H-I Model calculated depletions to usable Stateline flows of just 2,200 acre-feet for the period 1976-85 or calculated an increase in usable Stateline flows depending on how the institutional "switches" were set for the 1980 Operating Plan. Report at 327-28. He further concluded that the model did not accurately represent storage in and releases from John Martin Reservoir and, therefore, that the depletions predicted by the model were not a reliable basis to determine the impact of the Program without taking into account the accretions predicted by the model. Id. at 334-35. It was in that context that the Master concluded that the depletions shown by the revised H-I Model are well within the model's range of error.

Kansas also states that "the attempts by the Colorado expert to alter the Kansas model to eliminate calculated depletions did not succeed." Kansas' Brief at 32. This misrepresents Mr. Schroeder's testimony. Mr. Schroeder was highly critical of the way in which the Kansas replacement experts had calibrated the revised H-I Model. Report at 247; RT Vol. 138 at 83-88, 98. Mr. Schroeder restored the canal capacities and removed the diversion reduction factors and made other changes to the H-I

Model in order to demonstrate that the model could be calibrated without resort to such steps. Report at 288; RT Vol. 138 at 100, 105, 137. However, he believed that there were deep-rooted problems with the model, RT Vol. 112 at 43-44; Vol. 138 at 138-40, and did not offer the results as an appropriate quantification of Kansas' claims. Report at 247, 288-89. Specifically, with regard to the Winter Water Storage Program, he testified that he had not revised the parameters used in the model to predict diversions under the Program and did not believe the results of his version of the H-I Model were appropriate to evaluate the Program. RT Vol. 139 at 34.<sup>23</sup>

# F. The Master Decision Was Not Based on Uncertainty Due to the Lack of Data

Kansas asserts: "None of the experts deny that there is uncertainty with respect to the modeling results of either state," and that "[m]uch of the source of the uncertainty in the WWSP analysis is the lack of adequate data." Kansas' Brief at 29. From this premise, Kansas then argues that "[t]he risk of the lack of adequate data should be borne by the state that initiates and benefits from post-Compact development without collecting the data within its jurisdiction or doing the studies needed to support a good faith belief that the development will comply with the Compact." *Id.* Further, Kansas asserts that "Colorado, as a practical matter, has had control over (1) existing

<sup>&</sup>lt;sup>23</sup> Diversions under the Program are predicted based on calibrated parameters. RT Vol. 128 at 96 (Larson). Mr. Schroeder did not attempt to recalibrate those parameters when he made his changes to the model. RT Vol. 139 at 34.

data in Colorado and (2) the determination whether to collect additional data that may be needed." *Id.* Kansas then argues that "because of Colorado's lack of data collection during the study period, Kansas has been blocked by the Master on the basis that there is too much uncertainty in its evidence." *Id.* at 29-30. Kansas therefore argues that the burden of proof or, at least, "the burden of production of data" should have been on Colorado. *Id.* at 30.

First of all, Kansas has failed to identify any additional data which Colorado failed to collect and which would have reduced the uncertainty in the Kansas modeling analysis. There was disagreement about the proper methodology to calculate winter evaporation rates, but the results of the revised H-I Model were based on the methodology adopted by the Kansas experts. Report at 330-31.

Second, Kansas' argument is inconsistent with the Arkansas River Compact. The Compact provides that the Compact Administration shall promptly investigate violation of any of the provisions of the Compact. Arkansas River Compact, Art. VIII-H. The Compact further provides that the Administration shall cooperate in the procurement, interchange, compilation, and publication of all factual data bearing upon the administration of the Compact and that state officials "shall furnish pertinent factual data to the Administration upon request." *Id.*, Art. VIII-G(1). Thus, the fact that Colorado may have had control over existing data in Colorado is not an impediment to obtaining such data under the Compact. Likewise, the fact that the Compact Administration requires

unanimous action was not shown to be a problem in obtaining data in this case.

Third, the Master's decision was not based on a finding that the uncertainty in the Kansas analysis of the Program was due to the lack of adequate data. It was based on the fact that the model did not accurately represent storage in and releases from John Martin Reservoir. Report at 328-29.

Finally, the cases cited by Kansas do not support shifting the burden of proof to Colorado or placing the burden of production of data on Colorado. The cases cited by Kansas involve the doctrine of res ipsa loquitur, e.g., Ybarra v. Spangard, 25 Cal.2d 486, 154 P.2d 687, 689 (1944),24 or other unique situations where a loss has occurred and the facts are peculiarly within the knowledge of the defendant. E.g., Commercial Molasses Corp. v. New York Tank Barge Corp., 314 U.S. 104, 111 (1941) (bailment). These cases do not support the proposition that the burden of proof or the burden of coming forward with evidence shifts to the defendant anytime the defendant has control over access to certain facts. 2 McCormick on Evidence § 337 at 429 (4th ed. J.W. Strong 1992). Otherwise, the burden of proof and the burden of coming forward with evidence would shift to the defendant in virtually every case. Discovery is the usual method by which a plaintiff obtains facts within the possession of a

<sup>&</sup>lt;sup>24</sup> Ybarra v. Spangard applied the doctrine of res ipsa loquitur in a case where a patient entered a hospital for an appendectomy and, after the operation, developed atrophy of the muscles around the shoulder. These are not, as Kansas asserts, "comparable circumstances." Kansas' Brief at 31.

defendant. Moreover, in this case, the Compact provided a method to obtain data and conduct investigations in the State of Colorado prior to the initiation of this litigation. Arkansas River Compact, Art. VIII-G(1), -H; see Colo. Exh. 61 (Report on stock ponds in Colorado prepared by the Engineering Committee of the Compact Administration).

#### G. Other Arguments by Kansas Are Without Merit

Kansas states: "Common sense leads to the conclusion that putting water on the fields in the heat of summer results in more evaporation and other losses than irrigating fields without crops in the cold of winter." Kansas' Brief at 27. If that were true, one would question why Kansas allowed the Program to begin without objection and why Kansas' experts spent five years to develop the H-I Model to support its claim. The Master noted that the issue is not as simple as Kansas suggests, but is an issue on which testimony by experts is necessary:

Kansas maintains that storing the winter river flows in reservoirs, and then applying that water to irrigated crops in the summer, uses more water than simply irrigating bare fields in the winter. On first impression, this would seem to be true. . . . However, the issue is much more complex than first appears, and a great deal of highly technical evidence was introduced on the subject. The issue turns largely on the amount of evaporation from bare soil that is assumed during the period when winter irrigation was practiced.

Report at 329.

Kansas also argues that the Master, attempting to apply the preponderance test, in effect "said that it was more likely than not that there were no material depletions of usable flow as a result of the WWSP," Kansas' Brief at 28, a result which Kansas says is "inherently implausible." *Id.* The Master did not conclude that it was more likely than not that there were no material depletions of usable flow; rather, he concluded that, even applying the mere preponderance of the evidence test, Kansas had not proved that the Program had caused material depletions of usable flows in violation of the Compact. Report at 335.

# IV. THE MASTER CORRECTLY CONCLUDED THAT THE SPRONK USABLE FLOW METHOD WAS NOT APPROPRIATE TO USE WITH THE H-I MODEL

Finally, Kansas takes exception to the Master's conclusion that the Durbin approach was the best method presented for determining depletions to usable flow. Kansas' Brief at 35-44. Kansas states: "The Master's usable flow method would reduce Kansas' claim by 124,000 acrefeet (25%)." *Id.* at 9. Kansas asserts that the method it proposed, the Spronk method, is the only method consistent with the Compact. *Id.* at 35, 40.

Reading Kansas' Brief, one would never know that the method which the Master concluded was the most appropriate for use with the H-I Model was in fact developed by its own expert, Mr. Durbin, and originally presented by Kansas to quantify its claim. Report at 235; RT Vol. 45 at 124-25. The Kansas replacement experts developed a new usable flow method, but Colorado's experts testified that the new method was not appropriate for use with the H-I Model, and the Master agreed. Report at 303. Thus, the "Master's usable flow method" is nothing more than the usable flow method developed by Mr. Durbin for use with the H-I Model.

During the continuance which the Master granted to allow Kansas to replace Mr. Durbin with other experts due to his hospitalization, Report at 241, the Kansas replacement experts not only modified the coefficients used in the Durbin usable flow method, *id.* at 294-95, but also developed a new usable flow method based on a daily analysis of flows used in Kansas (the "Spronk method"). *Id.* at 300.25 Colorado's experts objected to the

<sup>&</sup>lt;sup>25</sup> Colorado objected vehemently to allowing the replacement experts to use the continuance to redo Kansas' case in this fashion, which was contrary to the order granting the continuance. RT Vol. 88 at 35-38, 40-47; see Order Re Kansas Motion for Continuance (Mar. 27, 1991), printed in Report-App. at 92 ("This continuance is not granted to allow Kansas, as Colorado fears, 'to redo its case'. . . . Rather, it is intended only to allow Kansas to complete its case, and in particular, to remedy the errors in the model and other exhibits that were identified during crossexamination."). The Master acknowledged that "there was some merit in Colorado's reaction, but in the last analysis I concluded that it was more important to have the best evidence available in the record." Report at 241; RT Vol. 88 at 32. He therefore denied Colorado's motion to exclude the Spronk method and other changes made by the replacement experts to improve Kansas' case. Report at 241. He sought to remedy any prejudice to Colorado by giving Colorado time to prepare cross-examination and to respond to the new evidence as part of its surrebuttal case. Id. Because of the lengthy continuance and rulings such as this which were made throughout the trial, giving Kansas the right to present new evidence and new exhibits, Colorado

accuracy of the reconstructed records of flow at Garden City for the 1970-85 period used in the Spronk analysis, *id.*, and to the failure to factor out increased depletions to the flow at Garden City due to post-compact well pumping in Kansas in the 1970s. *Id.* at 304. The Master concluded that the reconstructed records of flow at Garden City were "probably sufficient" for the purpose for which they were used, but agreed that the analysis had not factored out the increased losses in the Arkansas River in Kansas due to increased well development in Kansas. *Id.* at 227, 301, 304-05.<sup>26</sup>

believes the "clear and convincing" standard should apply to Kansas' claims even if the Court concludes the preponderance standard would otherwise apply to a case for breach of a compact. It is simply not fair to a defendant state, or consistent with the equality of right among states, to allow a plaintiff state to take advantage of the liberal rules allowing full development of the facts in cases between states and then apply a mere preponderance standard. See Brief in Support of Colorado's Exceptions at 98 n. 64.

<sup>&</sup>lt;sup>26</sup> Kansas tries to deflect the Master's finding on this issue by saying that Colorado never established that this concern actually caused the method to give unreasonable results. Kansas' Brief at 43. Kansas states: "It is simply a possibility." *Id.* This is not correct. Mr. Helton demonstrated that the Spronk method over-estimated depletions to usable flows after 1970 because of the increased losses in Kansas. RT Vol. 114 at 186-94; Vol. 115 at 20-22. Kansas also states that "Colorado's counterclaim based on the same allegation of increased pumping, was dismissed by the Master for the reason that Colorado had not proved its case." Kansas' Brief at 43. The Master granted Kansas' motion to dismiss Colorado's counterclaim because Colorado had not shown a "tie-in" between the increased losses in Kansas and any injury to Colorado, not because Colorado had failed to prove the increased losses in Kansas. Report at 454-57.

Colorado's experts also testified that the Spronk method was not appropriate for use with the results of the revised H-I Model because the model was not accurate except on a long-term basis. Report at 303. The Master agreed. *Id.* 

Kansas argues, however, that the Durbin method underestimates depletions to usable flow during the period 1975-82. Kansas' Brief at 35. This conclusion does not necessarily follow. The Durbin method calculates depletions to usable flows which are less than the Spronk method during that period, but one cannot conclude from that fact alone that the Durbin method underestimates depletions. One could just as easily conclude that the Spronk method overestimates depletions to usable Stateline flow during that period. Since the monthly percentages used in the Spronk method vary from 0 to 100% depending on a daily analysis of whether the flow crossing the Stateline was being fully used in Kansas, Report at 301-02, it is only appropriate to use that method if the model can predict changes in Stateline flows accurately on a monthly basis. Id. at 303. Because the results of the H-I Model are not accurate on that time scale, it is simply not appropriate or reasonable to use that method with the results of the H-I Model. Id. at 303-05.

Kansas argues, however, that the Durbin method underpredicts depletions during the 1975-82 period when most flows would have been usable. Kansas' Brief at 40-41. The Master, who heard extensive testimony about the H-I Model and the inaccuracy of the model on a monthly and an annual basis, Report at 303, rejected this argument:

Kansas argues that applying long-term averages, as Durbin did, underestimates the depletions of usable flow during the late 1970s and early 1980s. That was a period of drought, and according to Kansas most of the low flows were usable. The Spronk analysis was said to correct this inequity. Kansas states that the Spronk methodology gives substantially the same results as the Durbin analysis, except from approximately 1975 to 1982 when the Spronk analysis more properly represents actual hydrologic conditions. . . . However, as Colorado points out, virtually the entire H-I Model is based on average data. . .

Colorado acknowledges that in theory, at least, there is some validity to the daily approach used by Spronk. . . . However, the Colorado experts testified that the Spronk usable flow method was not appropriate for use with the revised H-I Model. The Spronk analysis assumes that the H-I Model can accurately predict changes of Stateline flow on a monthly basis. RT Vol. 110 at 126-27; RT Vol. 111 at 32, 38-39, 128-29; RT Vol. 115 at 23-24. I believe the objection is sound.

#### Id. at 302-03 (footnote omitted).

Kansas argued then, as it does now, that the period 1975-82 was a dry period when most of the flow was usable; however, as the Master points out, this argument presumes that the model can accurately predict changes in Stateline flows during this period:

As the United States notes, the fact that virtually all flows during a dry period may be usable does not "carry this argument." RT Vol. 142 at 48. The more fundamental question is

what the Stateline flows and depletions were before usability criteria were applied.

Report at 302 n. 129.27

The Kansas replacement experts corrected errors and poor assumptions in the original H-I Model, but did not change the basic logic or structure of the model. As the Master states:

Although the H-I Model was improved by Kansas' replacement experts, the fundamental structure of the model was not changed. Durbin's testimony shows that the model was originally designed to predict changes in Stateline flows. In his opinion, the model was a "good predictor" when "looking at long periods of time." RT Vol. 51 at 72. Using "a long-term average," he testified that the model predicted actual Stateline flows with a "fair degree of accuracy." *Id.* at 84. If multi-year periods were averaged, Durbin said "there would begin to be more and more correspondence between the model and what was actually observed." RT Vol. 44 at 86.

Report at 303 n. 130. Mr. Schroeder, Colorado's modeling expert, testified at length as to why the revised H-I Model could not accurately predict changes in Stateline flow on a monthly or an annual basis, one reason being that

<sup>&</sup>lt;sup>27</sup> The Master describes some of the extensive testimony and evidence on the inaccuracy of the revised H-I Model. Report at 303-04. If the Court has any question about the Master's findings on this issue, we urge the Court to examine the exhibits and the testimony cited by the Master. For a comparison of the actual, observed Stateline flows and the Stateline flows predicted by the revised H-I Model, see Colo. Exh. 908.

Kansas' demands for releases from John Martin Reservoir are predicted on the basis of calibrated numbers that do not vary from year to year and do not take into account weather or crop conditions in Kansas. Report at 263 n. 102; RT Vol. 111 at 23-39.

Kansas' argument that the "plain meaning" of Article IV-D "excludes the notion of averaging over multi-year periods," Kansas' Brief at 38, if correct, is fatal to its entire case. The H-I Model was not designed to be accurate on a daily or monthly basis and relied on averages. Report at 303 n. 130. Kansas states that "this court and the compacting states have recognized the need to assess the usability of flows on a daily basis to the maximum extent possible." Kansas' Brief at 39. If that is correct, then it follows that depletions to usable flows should have been assessed on a daily basis to the maximum extent possible. As Colorado demonstrated, and as the Master found, the H-I Model was based on averages and could not accurately predict changes of Stateline flow on a monthly or annual basis. Report at 302-03. The structure of the model, and the data used in the model, were such that it was only a good predictor looking at long periods of time. Id. at 303 n. 130. Therefore, if Article IV-D excludes the notion of averaging, Kansas' claims should be dismissed on that basis.

Finally, the very premise of Kansas' argument ignores the fact that John Martin Reservoir regulates the water supply for ditches in Kansas. Thus, the importance of daily usability expressed in *Colorado v. Kansas*, 320 U.S. at 396-98, has been significantly lessened for water users in Kansas because John Martin captures flood flows and regulates the water supply for ditches in Kansas when

there is water in the conservation pool. In addition, virtually all of the farmers under ditches in Kansas who use surface water also use wells to supplement surface supplies. Jt. Exh. 105 at 112, 130. If Stateline flows are reduced, water users in Kansas simply pump additional water. If Stateline flows are then increased, they pump less water. Thus, the concern about daily usability expressed in *Colorado v. Kansas*, 320 U.S. at 396-98, has been significantly reduced for water users in Kansas with construction of John Martin Reservoir and the use of wells to supplement surface supplies.

#### V. CONCLUSION

Kansas' exceptions to the Special Master's Report should be denied:

- 1. The Master correctly concluded that Kansas' evidence did not prove that the operation of the Trinidad Project had violated the Compact.
- 2. The Master correctly concluded that Kansas had failed to prove that the operation of the Winter Water Storage Program had violated the Compact.

3. The Master correctly concluded that the Spronk usable flow method was not appropriate for use with the results of the H-I Model.

Respectfully submitted,

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	No. 105, Original 	
	In The	
Supreme	Court of the Unit	ted States
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	STATE OF KANSAS,	
	v.	Plaintiff,
	STATE OF COLORADO,	
		Defendant,
UN	IITED STATES OF AMERI	CA,
	Defendan	t-Intervenor.
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APPENDIX TO COLORADO'S REPLY BRIEF

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## Appendix Item 1

Excerpt from Transcript of Proceedings Held Before Arthur L. Littleworth, Special Master, pages 39-40

September 28, 1988



MR. SIMMS:

WE BELIEVE THAT THAT ROLLOVER CONTRA-VENES BOTH THE OPERATING STUDIES, THE OPER-ATING PRINCIPLES, THE MODEL TRANSFER DECREE, CONDITION THREE OF THE KANSAS AMENDMENTS TO THE OPERATING PRINCIPLES AS WELL AS THE ARKANSAS RIVER COMPACT.

SPECIAL MASTER: NOW, LET ME JUST STOP YOU THERE FOR A SECOND.

IT CAN VIOLATE ALL OF THOSE THINGS THAT YOU HAVE SAID BUT YOUR COMPLAINT IN THIS CASE IS THAT THIS IS ONE OF THE THINGS THAT ULTIMATELY RESULTED IN A MATERIAL DEPLETION OF THE STATE LINE. SO THAT IS – WHEN YOU FINALLY GET DOWN TO WHAT YOU HAVE GOT TO SHOW, WHETHER OR NOT IT IS IN ACCORD WITH THESE VARIOUS THINGS IS NOT REALLY WITHIN YOUR COMPLAINT, IS IT? ARE WE STILL LOOKING AT WHETHER OR NOT THERE HAS BEEN A MATERIAL DEPLETION CAUSED BY THOSE OPERATIONS?

MR. SIMMS: THAT IS THE ULTIMATE PROBLEM. I THINK WHETHER OR NOT IT VIOLATES ALL OF THE OTHER ITEMS THAT I MENTIONED HAS A BEARING ON THE LEGAL RESOLUTION OF THAT PROBLEM. BUT AS A MATTER OF FACT –

SPECIAL MASTER: YOU HAVEN'T PLEAD A CASE WHICH HAS ASKED ME TO DETERMINE WHETHER OR NOT IT HAS VIOLATED A WHOLE LOT OF OTHER EARLIER DECREES; IS THAT RIGHT?

MR. SIMMS: THAT IS CORRECT.



## Appendix Item 2

Section 1(a)-(c) of the Flood Control Act of 1944 33 U.S.C. §701-1 (1988)

#### § 701-1. Declaration of policy of 1944 Act

In connection with the exercise of jurisdiction over the rivers of the Nation through the construction of works of improvement, for navigation or flood control, as herein authorized, it is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control, as herein authorized to preserve and protect to the fullest possible extent established and potential uses, for all purposes, of the waters of the Nation's rivers; to facilitate the consideration of projects on a basis of comprehensive and coordinated development; and to limit the authorization and construction of navigation works to those in which a substantial benefit to navigation will be realized therefrom and which can be operated consistently with appropriate and economic use of the waters of such rivers by other users.

#### In conformity with this policy:

(a) Plans, proposals, or reports of the Chief of Engineers, Department of the Army, for any works of improvement for navigation or flood control not heretofore or herein authorized, shall be submitted to the Congress only upon compliance with the provisions of this paragraph (a). Investigations which form the basis for any such plans, proposals, or reports shall be conducted in such a manner as to give to the affected State or States, during the course of the investigations, information developed by the investigations and also opportunity for consultation regarding plans and proposals, and, to

the extent deemed practicable by the Chief of Engineers, opportunity to cooperate in the investigations. If such investigations in whole or part are concerned with the use or control of waters arising west of the ninety-seventh meridian, the Chief of Engineers shall give to the Secretary of the Interior, during the course of the investigations, information developed by the investigations and also opportunity for consultation regarding plans and proposals, and to the extent deemed practicable by the Chief of Engineers, opportunity to cooperate in the investigations. The relations of the Chief of Engineers with any State under this paragraph (a) shall be with the Governor of the State or such official or agency of the State as the Governor may designate. The term "affected State or States" shall include those in which the works or any part thereof are proposed to be located; those which in whole or part are both within the drainage basin involved and situated in a State lying wholly or in part west of the ninety-eighth meridian; and such of those which are east of the ninety-eighth meridian as, in the judgment of the Chief of Engineers, will be substantially affected. Such plans, proposals, or reports and related investigations shall be made to the end, among other things, of facilitating the coordination of plans for the construction and operation of the proposed works with other plans involving the waters which would be used or controlled by such proposed works. Each report submitting any such plans or proposals to the Congress shall set out therein, among other things, the relationship between the plans for construction and operation of the proposed works and the plans, if any, submitted by the

affected States and by the Secretary of the Interior. The Chief of Engineers shall transmit a copy of his proposed report to each affected State, and, in the case the plans or proposals covered by the report are concerned with the use or control of waters which rise in whole or in part west of the ninety-seventh meridian, to the Secretary of the Interior. Within ninety days from the date of receipt of said proposed report, the written views and recommendations of each affected State and of the Secretary of the Interior may be submitted to the Chief of Engineers. The Secretary of the Army shall transmit to the Congress, with such comments and recommendations as he deems appropriate, the proposed report together with the submitted views and recommendations of affected States and of the Secretary of the Interior. The Secretary of the Army may prepare and make said transmittal any time following said ninety-day period. The letter of transmittal and its attachments shall be printed as a House or Senate document.

- (b) The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the ninety-eighth meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the ninety-eighth meridian, of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes.
- (c) The Secretary of the Interior, in making investigations of and reports on works for irrigation and purposes incidental thereto shall, in

relation to an affected State or States (as defined in paragraph (a) of this section), and to the Secretary of the Army, be subject to the same provisions regarding investigations, plans, proposals, and reports as prescribed in paragraph (a) of this section for the Chief of Engineers and the Secretary of the Army. In the event a submission of views and recommendations, made by an affected State or by the Secretary of the Army pursuant to said provisions, sets forth objections to the plans or proposals covered by the report of the Secretary of the Interior, the proposed works shall not be deemed authorized except upon approval by an Act of Congress; and section 485h(a) of title 43 [subsection 9(a) of the Reclamation Project Act of 1939 (64 Stat. 1187)] and section 590z-1(a) of title 16 [section 3(a) of the Act of August 11, 1939 (53 Stat. 1418), as amended] are amended accordingly.

(Act of Dec. 22, 1944, ch. 665, §1, 58 Stat. 887.)

Excerpt from A. Golze, Reclamation in the United States (1961)

Again, in 1939, Congress recognized the difficulty of financing the large and expensive multiple-purpose projects under the rigid terms of the earlier Acts. It modified the rules of feasibility for multiple-purpose projects by recognizing benefits that were national in character, such as flood control and navigation, to be nonreimbursable. It further met the problem of anticipated higher cost of irrigation projects beyond the ability of the water users to pay, by providing for a credit of power revenues to irrigation when such revenues were excess to the cost of repaying the investment in power facilities. Under the 1939 Act the Secretary of the Interior was given back the power to make a finding of feasibility, which had rested with the President since 1910.

The 1939 Act is the law under which reports for authorization (or findings of feasibility) are prepared. While the Secretary of the Interior has authority to find a project feasible and therefore authorized, if it meets the requirements of the Act, most projects have actually been authorized by special Acts of Congress, based on reports submitted by the Secretary. . . .

A. Golze, Reclamation in the United States 125 (1961).



Excerpts from Jt. Exh. 3

Record of Twelfth Meeting Colorado-Kansas Arkansas River Compact Commission February 3, 4, 5, and 6, 1948

Chairman Kramer stated that the Administration should not be vested with anything in the nature of police powers or powers to take any physical action such as requiring the shutting of gates or the padlocking of gates or any type of action that the water commissioner or State Engineer might be authorized to take; that he did not envision the Administration as a quasi-judicial or police body; that the corollary to that is, where something came to the attention of the Administration that required corrective action, the same should properly be referred to the officials or agencies of the state which were empowered to act on such complaint.

#### Record at 12-48.

Attorney General Hinkley [of Colorado] offered the following quotation for the consideration of the Commission.

"Consideration should be given to the conclusion of the National Reclamation Association's Committee on the integrity of state water law that the granting of judicial functions to a compact administrative commission is questioned. It is doubtful that a compact could create a judicial body to disburse on an interstate stream within the political and legal concepts of the federal and state constitutions. The primary obligation to abide by the terms of a compact rests upon the constituted authorities of the signatory states. This involves a determination by the officials of each state of the interpretation of its terms. Controversies among the states on the issue of alleged failure to comply with the terms of a compact or on a question of their interpretation must be resolved by appropriate action in the Supreme Court of the United States. Therefore, a compact Commission's powers must be limited to those of an administrative character, and such powers for the purpose of enforcement cannot supersede, expressly or by implication, those of the constituted state authorities, whose action in this respect, of course, is subject to review by the United States Supreme Court. Failure of State officials to accept the findings of a compact Commission and to comport with the rules set up by such a body for the purpose of the administrative functions may constitute an issue of compact violation."

Mr. Hinkley stated that he had such a matter in mind in connection with work that was being done on the Colorado River and that the quoted proposal was tentatively suggested; that findings of fact by the Commission should not be conclusive in any court or tribunal which might be called upon to interpret or enforce the Compact.

Id. at 12-52 to 12-53.

Excerpt from Jt. Exh. 3

Record of Sixteenth Meeting Colorado-Kansas Arkansas River Compact Commission November 8, 9, and 10, 1948

Chairman Kramer directed the attention of the Commission to a passage in the June 1948 report of the Bureau of Reclamation on the Gunnison-Arkansas Project. He noted that such was a preliminary draft of the proposed report; that it contained a chapter on water compacts; that one pertinent paragraph relating to functions in the proposed Compact read: "The waters passing the eastern boundary of Colorado are also subject to compact. No agreement has been reached, however, between the States of Colorado and Kansas upon the allocation of Arkansas River water to each of the two states. It is felt that the Colorado-Kansas Compact will not be inimical to the Gunnison-Arkansas Project; "that this matter was being cited and placed on the record so that there would be no question but that this Commission had cognizance of the development of the Gunnison-Arkansas project; that is [sic] relationship to the Arkansas River Compact which was being negotiated, had been recognized; that the report was dated June 1948, at which time the crystallization of the present Compact had not taken place. He inquired if there was any doubt in any Commissioner's mind that this Compact as of this date would be in any way inimical to the Gunnison-Arkansas Project. Commissioners Vidal and Ireland replied they knew of none. Commissioner Knapp stated that he did not want to answer yes or no because he had not read the report.

Record at 16-78 to 16-79.



Excerpt from Colo. Exh. 643

Interim Report Gunnison-Arkansas Project, Colorado, Project Planning Report No. 7-8a.49-0 (June 1948)



#### Water supply

51. Based upon hydrologic studies, an average of 60,000 acre-feet each year could have been diverted from the Fryingpan River to the Eastern Slope during the 34-year period 1911-1944. Facilities provided by the Initial Development would enable the storage of an additional 30,000 acre-feet of water annually from the existing Independence Pass (Twin Lakes) Diversion, and an additional 2,000 acrefeet from the Wurtz Ditch Diversion. Excess flood flows of the Arkansas River amounting to about 5,000 acre-feet each year could also be stored. Winter flows of the Arkansas River, averaging 97,000 acre-feet before deduction of losses, are now used for winter irrigation. Providing the water users are agreeable, which seems likely, the storage of that water would enable a more beneficial use during the ensuing irrigation season. Thus, upward of 194,000 acrefeet less losses of streamflow each year could be conserved or converted to more beneficial use by the Initial Development. That annual flow, combined with holdover storage and return flows, would provide much of the water supply needed to alleviate the 1911-1944 average shortage of 36 percent of the estimated ideal headgate diversion requirements encountered by lands between Pueblo and the Colorado-Kansas boundary.

Report of the Regional Director at 12.





