CONTROVERSY BETWEEN KANSAS AND COLORADO
OVER WATER RIGHTS TO THE ARKANSAS RIVER

A Thesis
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Master of Science

by
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Approved for the Major Department

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Approved for the Graduate Council
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CHAPTER I

INTRODUCTION

Problem of the thesis. This thesis concerns the controversy between Kansas and Colorado over the use of the Arkansas River waters. Such a study has never been made in a thorough way. Arguments of one kind or another began over the use of the river's water not long after settlement of the High Plains took place, and after the western Kansas and eastern Colorado farmers found that by irrigating they could make something of the "Great American Desert." Arguments ranged from Denver to Topeka, and a great many people have been involved, from the small farmer to governors, congressmen, and Supreme Court justices. Towns have been irate with each other and accusations have been thrown back and forth between the two states since the 1890's. Although litigation was not constant over the years, it dragged on and on. Robert Richmond, state archivist, said,

Historians, scientists and geographers have continued to refer to the controversy but no one has systematically outlined just what has gone on. It is time that someone does study the story in a scholarly way. Certainly the Kansas State Historical Society is interested in such a presentation for the use of future researchers.¹

¹Statement by Robert Richmond, personal interview.
The purpose is to compile a number of materials on this subject into one source.

Method of procedure. Because of the complexity of the subject, only the Kansas version has been explored, and even this portion has been condensed considerably. Therefore, the focal point is on the suit brought by Kansas against Colorado during the years 1901 to 1907, and the Arkansas River compact, which brought an end to the altercation in 1949. Except where necessary to give topical information, this is a chronological presentation.

Background of the controversy. The headwaters of the Arkansas River are in the southern Rocky Mountains in central Colorado at an elevation of over 11,000 feet. The river flows south from its source and bends to the east a few miles west of Salida, Colorado. The river continues through eastern Colorado to near Ford, Kansas, where it turns to the southeast to Wichita and flows south out of the state, then through the states of Oklahoma and Arkansas where it empties into the Mississippi River at a point on the Arkansas-Mississippi state line.²

Settlement of the Arkansas Valley began in 1868. A railroad was built through the entire length of the valley by 1873, and as a result the bottom lands were extensively cultivated, several towns and cities were incorporated, and the population increased rapidly. By 1875 all the bottom

²See Chapter II for further description of the river.
lands in the east or lower half of the valley were settled and those in the west or upper half by 1882. Thus, 1883 saw all the bottom lands along the Arkansas River in a state of successful and prosperous cultivation.

The waters of the nearby river furnished the foundation for this prosperity. There was an ample supply for domestic purposes, watering of stock, operation of mills and factories, and saturating and subirrigating the bottom lands all the way to the uplands on either side of the river.

Several years after the lands in the Arkansas Valley had been settled and extensively irrigated and cultivated, and after parts of the river's flow had been diverted for manufacturing and milling purposes, the State of Colorado and several irrigation companies began appropriating and diverting the Arkansas River between Canon City, Colorado, and the Kansas state line. All the natural and normal waters and a large portion of the flood waters were diverted by 1891, thus destroying down river the power for manufacturing purposes, lowering the underflow of the bottom lands about five feet, and cutting off entirely the water for irrigation ditches in the western part of Kansas. As a result, the cheap water power was replaced by costly steam power, productivity and value of bottom lands reduced, the irrigation ditches left dry with lands uncultivated, and the revenues of the State of Kansas and its municipalities decreased considerably.  

3Kansas City Journal, January 14, 1906.
A suit was instituted in 1901 by the order of the Kansas Legislature. Colorado and all the irrigation companies doing business along the Arkansas River were named as defendants. The Kansas attorney general was nominally in charge of the case; however, Judge S. S. Ashbaugh of Wichita did most of the actual work and was recognized as chief counsel in the case for Kansas. He was counseled by the attorney general, N. H. Loomis, and by Fred D. Smith, a lawyer who actively assisted in the case.4

The main question was whether or not the waters of the Arkansas River had been diverted causing damage to the citizens of Kansas. Kansas charged that great damage had been done to its residents through whose lands the river flowed. Kansas contended that the enormous diversion in Colorado of water from the Arkansas River had lessened the productiveness, wealth, and prosperity of the valley throughout its entire 350 miles in length and the 2,500 miles of bottom land.5

The taking of testimony began on August 15, 1904, and was completed on June 16, 1905. The evidence gathered consisted of 8,559 typewritten pages. Complainant's evidence in chief and on rebuttal was 3,617 pages long; the defendant's evidence was 3,284 pages, and the intervenor's evidence covered 1,646 pages. There were 347 witnesses sworn in to

4Ibid.

5Kansas City Journal, May 13, 1907.
testify, of which 143 testified for the complainant, 156 declared for the defendant, and 48 witnessed for the intervenor. Exhibits introduced and filed number 122. Sixty-eight of the exhibits were presented by the State of Kansas; thirty-two were introduced by the State of Colorado, one by the Graham Ditch Company, three by the Arkansas Valley Sugar Beet and Irrigated Land Company, and eighteen by the intervenor.

Colorado's defense was that the waters fell either as rain or snow within the boundaries of the state, and that Colorado, "by reason of her sovereignty, her constitution, her laws, her customs, and her needs," was the owner of all the waters as long as they remained within the state's boundaries. Colorado admitted that the waters of the river were extensively diverted for the purposes of irrigation, but denied that the waters were taken out of the drainage area of the Arkansas River. Colorado's attorneys further denied that the diversion had decreased the flow of the river within Kansas. The defendant alleged that "by necessity, common consent and uniform practice" it had diverted water from the Arkansas and had the right to do so. Colorado claimed the appropriation of water was prior to the uses made in Kansas. The State of Colorado further alleged

that under the laws of the United States and the state of Colorado they have the right to so appropriate and divert the waters of the Arkansas river, regardless of the rights and interests of the state of Kansas and its inhabitants.6

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6Kansas City Journal, January 14, 1906.
Later in the case the United States Government intervened and alleged that it owned thousands of acres of land in the Arkansas Valley and also within the drainage area of the Arkansas Valley. Therefore, the government was interested in the result of the suit. The government's lawyers disagreed on points with both states. It denied the Kansas contention that riparian rights extended to lands in arid regions where crops were raised by irrigation only. The government alleged that Colorado did not have the right by reason of its constitution, laws, or sovereignty to own, control, or divert the waters of an interstate stream, but that the flood waters of such streams should be conserved and impounded in arid regions in reservoirs constructed for that purpose.?

The following is a brief resume of the legal procedures taken by attorneys representing Kansas and Colorado:

1. Bill of equity filed by Kansas on May 20, 1901, naming Colorado as defendant;

2. Demurrer to the bill of complaint filed by Colorado on October 15, 1901, which was overruled after argument on April 7, 1902, without prejudice;

3. An answer to the bill of complaint filed by Colorado on November 3, 1902;

4. Amended bill of equity filed by complainant in September, 1903, naming several corporations as additional defendants;

5. Petition of intervention filed by the United States Government on March 21, 1904;

6. Granville A. Richardson of Roswell, New Mexico appointed commissioner to take evidence in May, 1904;

7Ibid.
7. Brief filed by Kansas in January, 1906;
8. Brief filed by Colorado and its fellow defendants in April, 1906;
9. Arguments heard before the United States Supreme Court in October, 1906;
10. Suit dismissed without prejudice by the United States Supreme Court on May 13, 1907.

The first court confrontation ended in 1907 with the United States Supreme Court deciding against Kansas without prejudice. In the intervening years, 1910 to 1930, other court cases were filed by individuals in the federal district court. The controversy was finally settled by the construction of the Caddoa Dam throughout the 1940's, renamed the John Martin Dam and Reservoir in 1940, and the signing and subsequent approval of the Arkansas River Compact between Kansas and Colorado in 1949.

The following is a short list of court actions which were taken following the 1907 Supreme Court decision:

1. Suit brought by the Finney County Water Users Association against Colorado ditch companies in the United States District Court of Colorado in 1910;
2. Suit instituted by a Kansas ditch company against Colorado ditch companies in 1923;
3. Suit begun in United States Supreme Court by Colorado against the State of Kansas in 1928;
4. Court admonished litigants to settle dispute by compact in December, 1943.

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*Kansas City Journal*, May 13, 1907.

Succeeding chapters will relate the details of the first court struggle, the decision, other court cases, the construction of the dam, and the Arkansas River Compact. However, it is necessary for one to have a knowledge of the geography and geology of the Arkansas Valley, as much evidence was introduced by both Kansas and Colorado which related directly to the area's physiography. Evidence was also presented by Kansas in an attempt to prove that much damage had been done to the area economically.
CHAPTER II

THE PHYSIOGRAPHY OF THE ARKANSAS RIVER BASIN

To understand something of the evidence presented by Kansas lawyers concerning the physiography of western Kansas, it is necessary to know a little about it. Kansas attempted to prove that there was once a river and suddenly there was no longer a river, and also that the underflow had been lowered as a result of the diverting of waters by Colorado irrigators. Colorado attempted to prove there never was a river as such, but that it appeared only at times of high water or floods, and also that the Arkansas River was not just one river, but in reality was two rivers.

Area of the river. The drainage area of the Arkansas extends back to the continental divide which marks the boundary of the Arkansas valley system from other river systems. In Colorado, the drainage area contains 26,000 square miles of territory, while in Kansas, it contains 20,000 square miles. The length of the river is 1,410 miles. Its length through Kansas is about 350 miles, and through Colorado it is approximately 357 miles.

Course of the Arkansas River. The Arkansas River headwaters are in the southern Rocky Mountains in central Colorado near Leadville at an elevation of 11,000 feet.
From its source it flows south and bends to the east a few miles west of Salida, Colorado, and flows through the Royal Gorge, where it emerges from the mountains. The river flows in an easterly direction toward Kansas. The Arkansas River rushes through the Colorado counties of Lake, Chaffee, Fremont, Pueblo, Otero, Bend, and Prowers, and enters the state of Kansas at the western line of Hamilton County at an elevation of 3,370 feet. The river glides along in a southeasterly direction through the counties of Hamilton, Kearny, Pinney, and Gray. In Ford County near the town of Ford, the river bends sharply to the northeast through Edwards, Pawnee, and Barton Counties where it turns to the southeast at Great Bend. From that point it continues through Rice, Reno, Sedgwick, Sumner, and Cowley Counties, leaving the state at an elevation of 1,050 feet, and enters the state of Oklahoma.¹

The course of the river through Kansas and Colorado can be seen in Figure 1.

Geology of the Arkansas basin. The bedrock in the headwaters portion of the Arkansas basin consists of granite, metamorphic, and other crystalline rocks. East of the Rockies, the Arkansas flows across alternate beds of sandstone, limestone, and shale that dip steeply to the east. In Kansas the north side of the valley is bordered by chalky limestone, shale, and sandstone as far east as Kearney County.

ARKANSAS RIVER COURSE THROUGH KANSAS AND COLORADO
Eastward from Kearney, the river flows through a region consisting mainly of sand, silt, gravel, and clay, which is mostly unconsolidated and nonresistant to erosion.\(^2\)

The grade of the river is relatively steep across Colorado, flattening rather abruptly in the western portion of Kansas. It carries immense quantities of quartz and granite sand and gravel out of the mountains, dropping the larger particles as the velocity decreases in the flatter slopes. As the silt and sand are deposited, sandy banks and bars are created, which often obstruct the flow of the river, thereby causing it to shift its stream bed. In periods of extreme low flow, the wind will blow the finer particles of sand into dunes, which support vegetation. The vegetation growing on the bars and along the banks catch more drift and silt, so that the final result is the building up of the river bed, banks, dunes, islands, and bars. This process has proceeded for so long that the river flows on a pronounced ridge and had shifted laterally over considerable territory, forming vast gravel and sand beds. These formed underground storage for water in great quantities, which was used for irrigation.\(^3\)

**Tributaries of the Arkansas River.** There is a noticeable lack of tributaries flowing into the Arkansas River

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in western Kansas. Many of the creeks which drain the uplands do not have channels leading into the Arkansas River, but discharge their flood waters onto the plains.4

Tributaries of the Arkansas River are either perennial or intermittent. The Pawnee, Little Arkansas, Minnesicah, and Walnut Rivers are all perennial. The intermittent streams are more numerous, but still of a limited number. The principal streams are Coon Creek, Walnut Creek, Rattlesnake Creek, Cow Creek, and Cowskin Creek. These tributaries and their courses in relation to the Arkansas River may be traced in Figure 2.

A prominent characteristic marking all of the streams rising or flowing through the Arkansas valley was that the course of all these streams is nearly parallel to the Arkansas River, as can be seen in Figure 2. These tributaries were partially supplied from the surface runoff, but most of the time, where there was little rain, the tributaries were supplied from the underflow of the main river. As a result of this unique feature, the river fed its tributaries which are lower than the bed of the river. Later, and lower down the valley these tributaries return this water to the main river.5 It may have been this feature which prompted the Colorado lawyers to maintain that the Arkansas was not just one river, but in reality was two rivers.


FIGURE 2

TRIBUTARIES OF THE ARKANSAS RIVER
The sources of the Pawnee River are within from one to four miles of the north bank of the Arkansas River. The springs which feed the small streams making up the southern branch of the Pawnee River are always on the side of the creeks nearest the Arkansas River. They are found on the south side when the creeks flow east and on the west side when the creeks flow south. The bed of the Pawnee through Hodgeman County is 200 feet lower than the bed of the Arkansas through Ford County. The bed of the Rattlesnake through portions of Stafford County is 97 feet lower than the Arkansas River bed at corresponding points in Pawnee County. The bed of the Little Arkansas River at Medora is 49 feet below the bed of the Arkansas at Hutchinson. At Thirteenth Street in Wichita, the bed of the Little Arkansas is eight and one-half feet below the bed of the main river at a corresponding point.6

During the wet season the streams in the Arkansas Valley carry off the snow and rain from adjoining lands and surrounding plains. During the dry season the flow of the waters of the tributaries is supplied from the underflow of the Arkansas River. In its suit Kansas lawyers presented evidence to refute the two rivers theory and to support its underflow theory. Testimony was presented to show that the water level in the Arkansas Valley rose and fell as the river water rose and fell. These examples were presented: a fish

6For more detailed information on the elevations of the Arkansas River and its tributaries, see the Appendices.
pond at Arkansas City belonging to a Mr. Keller; ponds and lakes near Hutchinson owned by a Mr. Collins; Silver Lake at Sterling; the underflow pools above Larned; the ice pond at Fort Dodge; the ice and swimming pond at Garden City, all responded to the river, and were full as long as the river was full, but were dry when the river was either low or dry.  

The Arkansas Valley. The Arkansas Valley is only in the state of Kansas and is a distinct, positive, and well-defined formation. It has no counterpart in Colorado. The valley extends back to the foothills on either side of the river and contains about 2,500 square miles of territory. It is from two to five miles wide in the western counties, five to ten miles wide in the middle counties, reaches twenty-five miles in width through Reno and Sedgwick counties, and then grows narrower from Wichita to the state line. The map in Figure 3 shows the extent of the valley in Kansas. These lands are known as the bottom lands and were originally covered with wild hay. The uplands beyond the valley were originally covered with buffalo grass. The land is a firm black soil with a loose sand beneath through which the underflow courses to a lower level.

In the upper parts of the valley the water level beneath the bottom lands is practically on a level with water in the Arkansas River. As some times and in some places, the water level is a little higher and in other places, it is a little lower. In the lower two-thirds of the valley the water-

7Ibid.
GENERALIZED ARKANSAS RIVER VALLEY IN KANSAS

FIGURE 3
level in the bottom lands is almost on a level with the water in the river, but back toward the valley tributaries, the water level beneath these bottom lands is lower than the level of river water. As has been previously noted, the river furnishes a continuous supply of water to its tributaries.8

Kansas contended in its case against Colorado that the bottom lands were directly affected by the rise and fall of the flow of the Arkansas River, whether the lands were adjacent to the river banks or lay farther back. The rise and fall of the water table varied in time according to the distance and continuance of the water in the Arkansas River. For example, a flood in the river lasting only a few hours would affect only those lands adjoining the river, but had little effect on the water level beneath the bottom lands. High water which lasted several days or weeks, however raised the water level beneath the lands extending back to the foothills. Every well, cellar, and excavation made within the Arkansas Valley, which was dug deep enough to strike the water level, responded to the level of the water in the river.

The fertility of the soil in this arid region is dependent upon the amount of water flowing in the Arkansas River. The numerous springs along its tributaries flow strong when the river has been up for a considerable period of time and flow weak when the river has been low.9

The underflow. The underflow is the most prominent feature of the Arkansas Valley. It is an underground stream, having a positive current with a known direction, flowing in a well-defined channel. It extends to the uplands on either side. The channel may be from five to twenty miles wide and is over 200 miles long. The depth is unknown and the current is always steady and always in one direction, between the hard clay banks of the northern and southern bluffs. It is a channel bound by the hard clay and rocks of the bluffs on either side and filled with sand and gravel. It is estimated that the stream flows from eight to ten feet every day.\footnote{Kansas City Journal, December 21, 1906.}

Precipitation in the arid region. The Arkansas River receives practically no run-off from its drainage area in western Kansas, because the rainfall is either lost by evaporation or by absorption.

Rainfall in western Kansas decreases at a fairly uniform rate from east to west. Average annual rainfall ranges from about thirty-three inches in Butler and Cowley Counties to approximately fifteen inches on the Kansas-Colorado border. The portion falling during the crop season from April to September varies from a maximum of 17.78 inches at Oberlin to a minimum of 11.95 inches at Tribune, averaging about seventy-nine per cent of the total mean annual rainfall of approximately eighteen inches. The seasonal distribution of rainfall is typical of the High Plains region and would be
very advantageous for crops were it not for the fact that evaporation during the summer is at a maximum.

Evaporation from a free water surface at the Garden City experiment station for four years prior to 1931 averaged 52.7 inches for the six months of April to September. The hot winds of the High Plains contribute to the rapid evaporation rate.

Table I shows a summary of the droughts at the stations where the longest rainfall records up to 1931 were available. The daily precipitation records were examined during the months April to September, and periods of thirty days or over in which there was a total rainfall of less than one inch were considered as droughts which would be injurious to crop production and in which irrigation would be of direct advantage.

TABLE I

PERIODS OF 30 DAYS OR OVER FROM APRIL TO SEPTEMBER DURING WHICH THERE WAS LESS THAN ONE INCH OF RAINFALL

<table>
<thead>
<tr>
<th>STATION</th>
<th>LENGTH OF RECORD OF DROUGHTS</th>
<th>NUMBER OF DROUGHTS</th>
<th>AVERAGE LENGTH-</th>
<th>LONGEST DROUGHTS</th>
</tr>
</thead>
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<tr>
<td></td>
<td>YEARS</td>
<td></td>
<td>DAYS</td>
<td>DAYS</td>
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<tr>
<td>Oberlin</td>
<td>19</td>
<td>17</td>
<td>39</td>
<td>60</td>
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<tr>
<td>Colby</td>
<td>19</td>
<td>23</td>
<td>46</td>
<td>62</td>
</tr>
<tr>
<td>Wallace</td>
<td>26</td>
<td>44</td>
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<td>82</td>
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<td>Gore</td>
<td>19</td>
<td>29</td>
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<td>Garden City</td>
<td>17</td>
<td>19</td>
<td>44</td>
<td>69</td>
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<tr>
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<tr>
<td>Ulysses</td>
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<tr>
<td>All Stations</td>
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<td>225</td>
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</tbody>
</table>

The Senate report, *Irrigation in Western Kansas and Oklahoma*, states that even though the mean annual rainfall during the crop season is a little over fourteen inches, in this region of intense midday heat and almost incessant wind, no method of tillage could prevent a reduction in the yield of nonirrigated crops which were subjected to prolonged droughts.¹²

Showers of one-third inch or one-half inch during the season of high winds and evaporation can hardly be considered of much benefit to the crops. Therefore the size of the storms in which the greater portion of rainfall occurs becomes important. Practically one-half of the total precipitation occurred in storms totaling an inch or more. During the months of April to September one of these storms, which are frequently of cloudburst intensity, occurred on an average of forty-five days. During the months of October to March there was an average of less than one storm per year. Because of the uncertainty of obtaining heavy rains during the winter months with which to fill the reservoirs for the next summer, storage would have to be obtained from the months of April to September in order to have irrigation water for the next irrigation season.¹³

Because the Arkansas River flows in such a broad, sandy valley in Kansas, there are no opportunities for storage in the river channel. Two factors prohibited the building of

¹²Ibid., p. 15.
¹³Ibid.
the required dam and the difficulty in securing a foundation.\textsuperscript{14}

In a United States Senate report, this problem is highlighted:

The valleys of the streams are in many cases of considerable breadth and of light slope in the direction of the stream, but owing to the uniform width of the valley erosion no economical dam site can be secured.\textsuperscript{15}

Thus, the problem for Kansas farmers: no water with which to farm. What water was received from precipitation either permeated the sedimentary layers of soil and rock or evaporated. Water which was trapped underground was directly dependent on the unpredictable Arkansas River. Because the Colorado irrigators diverted river water, the underflow began to dry up. As less water flowed in the river channel, less water would seep through to the underflow. As a result, the loss of water affected greatly the economic development of the area.

\textsuperscript{14}\textit{Ibid.}, p. 51.

\textsuperscript{15}\textit{Ibid.}
CHAPTER III

AN ECONOMY BASED ON IRRIGATION

Irrigation is a way of life for parts of western Kansas and eastern Colorado. Since irrigation was extensively practiced in eastern Colorado, little water was left in the river channel when the flow reached the Kansas-Colorado line. The lack of water from the Arkansas River was the governing factor that determined how many acres were irrigated in several Kansas counties. Large tracts of land were available for farming in these counties, but water was not available. To understand how this situation developed, it is necessary to go back to the beginning of irrigation in western Kansas and eastern Colorado.

Early Kansas irrigation. The lower part of the valley was settled between 1868 and 1875, and the upper part was settled from 1872 to 1882. During this time of settlement, ditches and canals were dug to supplement the sparse precipitation. Some of the ditches that were dug were the Garden City ditch which began operation on November 8, 1879; the Kansas ditch which went into operation on March 1, 1880; the Minnehaha ditch which had a priority date of July 20, 1880; the Great Eastern ditch which began operations on October 8, 1880. Other ditches with their priority dates
were the Western ditch, October 21, 1881; the Collier and Alamo ditch, 1882; the Eureka ditch, February 1, 1883; and the Amazon ditch, November 29, 1887. The priority dates were important in later litigation when lawyers attempted to establish who had prior rights to the river water.

Development of irrigation. In the early days of western settlement the supply of water in the Arkansas River was more frequent and flowed longer. New York and New England irrigation promoters thought they saw an opportunity for vast enterprises in southwest Kansas and nearly two hundred miles of ditches were dug to irrigate 200,000 acres of land. Their approximate cost and the extent of their benefit may be examined in Table II.

<table>
<thead>
<tr>
<th>NAME OF DITCH</th>
<th>ORIGINAL COST</th>
<th>NUMBER OF ACRES IRRIGATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Ditch</td>
<td>$ 50,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Eureka</td>
<td>700,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Garden City</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Kansas</td>
<td>35,000</td>
<td>20,000</td>
</tr>
<tr>
<td>South Side</td>
<td>200,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Great Eastern</td>
<td>60,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Amazon</td>
<td>325,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Alamo</td>
<td>35,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>$1,420,000</td>
<td>230,000</td>
</tr>
</tbody>
</table>

1 Kansas City Journal, January 14, 1906.

The theory on which the irrigation scheme was based seemed so plausible that investors readily bought the stocks and bonds offered by the speculators. Ditches costing $100,000 were stocked and bonded for $500,000; canals capable of irrigating 10,000 acres were used to irrigate less than 2,000 acres. Eventually the ditches filled with sand as the river was used by Colorado enterprises 100 miles farther west at a time when water was most needed. Farms under ditch failed, ditch companies failed to pay interest, and the stockholders grumbled.  

Many experiments were made to remedy the water shortage, but all were financial failures. Most of the ditches went through the hands of receivers and eastern interests obtained practically nothing. From the receivers, some ditches passed to cooperative companies of farmers. Water rights were given with a deed to the land, and the work of maintaining the ditches was divided among the farmers who received benefits from the water supply.

Colorado's diversion of the Arkansas River. Colorado began its diversions of the Arkansas River in the 1890's when settlers began constructing ditches. Large sugar beet factories were erected at LaJunta, Rocky Ford, and other towns. Irrigation ditches were extended over all the available territory near the factories, and depressions several miles from the river were transformed into lakes to be used as reservoirs. Water was taken from the river to fill the depressions and during the flood-tide period, the stream was

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3ibid.
nearly drained dry. Thus, Kansas ditches built by eastern interests failed for lack of water and eventually found their way into the hands of farmer cooperatives.

In its suit before the United States Supreme Court, Kansas contended that all the Kansas ditches were constructed before any of the Colorado ditches, and were entitled to the water by reason of prior rights. The appropriations made from the Arkansas River by Colorado irrigators were enough to take the full flow of the river many times over. In 1902 in the Colorado portion of the Arkansas basin, 311,115 acres were irrigated.

Irrigation methods sought. Once the river flow began to disappear, other methods of irrigation were sought. In April, 1905, a sugar beet company bought 33,000 acres of rich land at fifteen dollars an acre. The owners undertook a new system of irrigation by utilizing the underflow. Pumps were constructed to irrigate the sugar beets. Gasoline engines, running from four to six pumps, sent out a ten-inch stream of water. A natural reservoir on the uplands was constructed at a cost of $100,000. It was a mile wide and eight miles long, and in places, fifty-feet deep.

The federal government spent $250,000 developing irrigation from the underflow. It dug a row of wells across the valley which were all pumped from a central power house.

\[^{4}\text{Ibid., pp. 724-725.}\]

\[^{5}\text{Kansas City Journal, January 14, 1906.}\]
At that time it was the largest reclamation project in the southwest. The water supply was diverted to the ditches built in the 1880's and owned by the cooperative company of farmers. The farmers paid $30 an acre and then the power house machinery and wells were given to the cooperative company.6

Kansas farmers adjust. Farmers learned to adjust to the aridness of western Kansas. They learned that the roots of the alfalfa plant would reach down to the underflow and great fields of the crop would yield three or four cuttings a year. The farmers also began raising kaffir corn and durum wheat, both which were drought resistant.

As Kansas farmers adjusted to the drier conditions, Colorado continued to progress. Two more sugar factories were built and new areas were opened to farming. Unirrigated land that was worth $5 to $15 an acre went for $200 to $400 an acre when brought under the ditch.7

The underflow diminishes. Western Kansas farmers were not the only ones to notice the lack of water. South central Kansas farmers depended on the underflow and they were the first to notice that it was diminishing. Farms in Sedgwick, Sumner, and Cowley counties produced rich crops when fertilized by the underflow. However, the diminishing underflow was noticed when fruit trees and field crops failed to mature

6Charles Moreau Harger, "The Regeneration of a Western Valley," Leslie's Illustrated Weekly Newspaper, September 26, 1907.

mid-way through the growing season where formerly they had. This condition began to travel slowly up the Valley.8

Despite the diminishing underflow, it continued to be the main source of water for irrigation purposes. The largest irrigated areas were in Kearny, Hamilton, Finney, and Scott Counties, and were supplied with water from the Arkansas River with pumping used to supplement ditch flows. In Scott County the water supply was obtained by pumping ground water. Minor irrigation operations were carried out in Rush and Pawnee Counties, which utilized the surface flow of Pawnee River and Walnut Creek as well as pumping plants.

A storage reservoir of 30,000 acre feet capacity is located northeast of Lakin in Kearny County. Water was stored during the winter months and used during the growing season. Investigations in later years indicated that locations for additional reservoirs were not available because of the porosity of the soils.

In 1936 approximately 65,000 acres were irrigated from the Arkansas River, and the acreage could have been increased, as there were 200,000 acres in Kearny, Hamilton, and Finney Counties under abandoned ditches that could have been reopened. The additional water could have come if storage had been made available in eastern Colorado.9

8 Philip Eastman, "The Nile of the West," The Saturday Evening Post, CLXXVI (May 7, 1904), p. 5.
9 Kansas Planning Board, Drainage Basin Reports, Topeka, 1936, pp. 2, 11-12.
In some cases the cost of installing a fuel pumping plant was prohibitive. Therefore attention was turned to the use of a windmill with a small reservoir. Nearly every farm in western Kansas had a windmill which was used for stock and domestic purposes. By building a small earth or concrete reservoir, sufficient water could be stored to irrigate the garden and family orchard or small tracts of two to five acres.  

While Kansas farmers struggled with new irrigation devices, Kansas lawyers attempted to obtain water rights through the court. Colorado held to the theory of return seepage, saying that Kansas received all the water the state had ever received. The ditches in Colorado were so located, however, that each ditch appropriated whatever seepage may have returned from ditches above. Therefore, the only seepage water that could get into Kansas via the Arkansas River, so as to affect the flow of the stream through Kansas, was the ditch located at the extreme eastern point in Colorado.

When water was used for irrigation purposes under ordinary conditions, about two-thirds of the amount diverted was lost by evaporation and absorbed by plant life. Where water was diverted in Colorado, the land was an arid plain varying in altitude from 3,370 feet to more than 5,000 feet above sea level. The river water was to saturate a soil that was naturally dry many miles back from the river, in a region

where the rainfall was no more than ten to fourteen inches a year. The evaporation and absorption rate was great in addition to that which was absorbed by plants.

The average flow of the Arkansas River at Canon City from 1890 to 1906 had been about 750 cubic feet per second, while at the state line the average flow had been minute. The water in the river between Canon City and the state line had been appropriated seven times over for irrigation purposes.

Decrease in population and property valuation. As the flow of the river disappeared and the underflow diminished, the value of the land was reduced. A report by the Kansas Planning Board stated that "the population growth of the basin has been based upon the improvement of agricultural practices. . . ." The improvements made by the farmers, such as the use of drought resistant crops, has already been discussed. Nevertheless, before the agricultural improvements were in general practice, the depletion of the water supply seriously hampered the economic growth of western Kansas.

In 1889 most of the population in the Colorado counties of Prowers, Bent, and Otero lived in towns along the river. Those living on farms were on lands irrigated from ditches supplied with water from the river. The population figure in 1890 was about 95,000 and in 1906 the population jumped to 175,000. The irrigated lands sold from $60 an acre to $250 an acre and were on the Colorado tax rolls at an average

assessed valuation of $30 an acre. The total assessed valuation for the counties through which the Arkansas River flowed was a little over $31 million in 1889. Sixteen years later, in 1905, the assessed valuation was over $51 million.

The population of the five western Kansas counties through which the Arkansas flowed was 18,329 in 1889 and in 1905 the population was recorded at 15,364. Nearly the entire population of Hamilton, Ford, Kearny, Finney, and Gray Counties lived in the Arkansas Valley. The lands in the Arkansas Valley were worth from $2 to $30 an acre. These bottom lands were on the Kansas tax rolls at an average valuation of from $2 to $5 an acre. The uplands in the same counties were worth from $.50 to $2.50 an acre and were assessed at an average valuation of not to exceed $1 an acre. In 1889 the assessed valuation of those five counties was $7,845,636, and in 1905 it was $6,035,392. These figures show a loss in population of about 3,000 and in assessed valuation of $1,310,000 in sixteen years.¹²

Also in 1906 the underflow had fallen from three to five feet lower than in former years. As a result, overall production decline was in the range of one-third to one-half. In Edwards County the alfalfa acreage had fallen from 6,923 acres in 1898 to 1,777 acres in 1904. In Finney County the average assessed valuation in 1889 on fifteen quarters of land under irrigation was $507; in 1897, it was $258, and in 1903, it was $176.¹³

¹³Kansas City Journal, December 18, 1906.
Crops and farm sizes. Wheat was and still is the dominant crop in the upper Arkansas basin. In the extreme western portion of the area, the production of beef was important. Less important crops included corn, the sorghums, and along the creeks and rivers, alfalfa.

The Arkansas drainage basin included the largest share of irrigation farming in Kansas. It was considered feasible for a farm family to live on a five to ten acre irrigated tract in the bottom lands and operate a several hundred acre tract for cash wheat or other grain, at some place in the uplands. Farms varied in size from forty to sixty acres near the Arkansas River to ranches of 1000 or more acres in the uplands.

Irrigation insured yearly production of field crops, but more importantly it permitted the successful culture of highly remunerative crops which could not be grown otherwise. Chief among these crops was the sugar beet. 14

Importance of irrigation. Should the river water fail to flow as it did in earlier years, the crops would fail. If there was sufficient irrigation, all of the Kansas land could support crops. Where irrigation was not available, periods of deficient rainfall resulted in great injury to crops or total failure.

As a result, the chief concern of the basin was the utilization of water for irrigation. It was essential to the

14 Kansas Planning Board, Drainage Basin Reports, Topeka, 1936, pp. 6 and 11.
economic security of the population that irrigation be developed
to the highest possible degree, and that the development be
brought about so that it would be a permanent institution. In
the mid-1930's, there was full utilization of all available
surface waters during the growing season. Little development
could be expected from this source unless storage was provided
to impound flood flows on the Arkansas River.

In a 1931 Senate report, the Secretary of Agriculture
noted that opportunities for irrigation development by
storage in western Kansas were not promising and considered

in relation to the total agricultural area the total
acreage which can be supplied with water will never
be more than a very small percentage of the available
land. As in other semi-arid regions where it is
possible to maintain a home by an extensive system of
dry farming, water for irrigation must be obtainable
at a low cost, or its use will be long delayed, even
though the advantages of irrigation over dry farming
can be clearly demonstrated. When the water supply
for irrigation is also generally both difficult to
obtain and expensive, as in western Kansas . . . its

During the 1930's the irrigation development which
appeared most promising was the windmill or other pumping
plant with a storage reservoir or the small reservoir to
store sufficient storm run-off to supply garden products and
trees.\footnote{Ibid., p. 53.}

When it appeared a reservoir might be constructed on
the Arkansas River in Colorado, Kansas interests were hopeful
the Caddoa reservoir, referred to in Chapter I, would solve the problems of western Kansas farmers. The proposed capacity of 1,250,000 acre feet would fully conserve the erratic floods originating in the Colorado foothills and provide water for the restoration of abandoned irrigable lands in western Kansas. 17

Thus, the prosperity of western Kansas was almost totally dependent on irrigation of its farm lands. When the regular flow of the river disappeared in the 1890's and early 1900's, the prosperity of western Kansas was adversely affected. Even though new methods of agriculture and irrigation were developed, the area still was unable to develop its full potential without water from the river. As the years passed and government reports flourished, the possibility of a reservoir became the hope of western families. The beginning of a nearly fifty-year court litigation became a reality before the reservoir became even a possibility.

17 Kansas Planning Board, Drainage Basin Reports. Topeka, 1936, p. 16.
Agitation for action against Colorado began in the latter half of the 1890's. Water no longer flowed normally in the river bed and Kansans attributed the lack to the diversion of the river by irrigation interests in Colorado.

_Early ripples of concern._ In 1888, a Topeka paper, _The Daily Commonwealth_, printed a letter from Senator Preston B. Plumb concerning the effect upon the Arkansas River of irrigation in Colorado. Although he was concerned he felt that some of the depletion was due to a light snow fall during the winter of 1887-1888 in the Colorado mountains. He further stated that in his opinion

> the government has no authority because when the government sells a man a piece of land along the Arkansas river in Colorado it sells him a riparian right and that is construed in Colorado as meaning the right to "take out", as the term is, water for irrigation purposes. In addition, congress, by sections 2339 and 2340 of the revised statutes, has recognized such rights as existing and as entitled to be protected. The United States owns the stream to the extent that it has not sold it in connection with the sale of lands whose boundaries cross it, and it controls it for the purposes of navigation so far as it is actually navigable. Whether the United States would have authority to prevent the use of water taken for irrigation purposes out of the Arkansas river in Colorado, provided it could
be shown that such taking impaired the navigability of the stream below, is something I am not prepared to express an opinion upon.\textsuperscript{1}

The Senator stated that many thought that much water taken from the river in Colorado for irrigation purposes would evaporate and would return to the adjacent country as showers. The ditch owners in western Kansas complained about insufficient water to raise any crops. Senator Plumb suggested a possible remedy which is often heard today: he thought a congressional inquiry might be helpful.\textsuperscript{2}

In 1897 farmers and other interested people united to bring suit against one of the older Colorado water companies to prevent the diversion of the river's natural flow. Apparently nothing came of the suit as no further evidence was found concerning its disposition. Nevertheless, Kansans noted that Colorado's attitude seemed to be that it had the water, no one was going to do anything about it, and thus Colorado did not care whether anyone else had the use of the river or not.

The main question for Kansans became, "was it permissible for Colorado settlers and citizens to destroy the value of Kansas lands?" Further, many Kansans believed the United States Government should step in. The federal government as guardian of the national domain should not permit the water of one area to be so operated as to work to the detriment

\textsuperscript{1}The Daily Commonwealth, (Topeka, Kansas) August 15, 1888.

\textsuperscript{2}Ibid.
of the greater body of states which the federal government was organized to protect and maintain. Richard J. Hinton, the writer of the article, further maintained that ninety per cent of the natural waters of eighteen states, which were sub-humid, semi-arid, or arid in character, and required irrigation, had their sources in the uplands of Colorado, Wyoming, or Montana. If the Colorado position was correct, then the welfare of the arid parts of the United States was at the mercy of state and corporate greed, which could employ engineering talent and farming effort sufficient to consume all waters of a great region within the borders of a small region.³

Meetings are held. It was not until 1900 that constructive efforts were undertaken. Oddly enough, it was in the lower Arkansas basin where meetings were held in an effort to protect Arkansas Valley interests, not in western Kansas where one would imagine most concern would be located.

The Arkansas City Commercial Club took up the matter of the river and called for a convention to meet in Wichita on August 24, 1900. What came of this meeting, if it ever met, was never recorded. Kansas attorney general A. A. Goddard was informed of the proposed meeting, however, and wrote a letter to T. W. Eckert of the Arkansas City Commercial Club board of directors. In it he expressed a belief that Kansas had a case based on a recent New York v. Connecticut decision.

³Richard J. Hinton, "Issues in the West," Brooklyn Citizen, December, 1897.
As you are aware, I expected to commence suit to stop this diversion some time since. I have not yet done so because I have been advised that the conditions have been such during the past season as to interfere more or less with the securing of proper testimony regarding the real situation, but the plan has by no means been abandoned. Within the last few months, a suit brought by citizens of Connecticut against the city of New York, to restrain it from taking the waters of a river flowing from New York into Connecticut, under authority granted by the legislature of New York, has been decided by the United States circuit court for the Southern district of New York in favor of the plaintiff, with an opinion holding squarely that the legislature of a state has no power to grant rights of diversion to the injury or detriment of citizens of another state. I believe the doctrine is a good one and that neither the state of Colorado nor the United States can authorize the diversion of the waters of the Arkansas river from their natural channels, to the injury of the people of Kansas.4

The attorney general further asked their assistance if the convention was held.

... I hope the amount of damage which has been done, will be discussed, and a determination made as to the amount and kind of testimony which can be gathered to prove injury. Possibly it will be well to have some action taken towards an appropriation by the state to pay the expense of a suit or suits on behalf of individuals to restrain the taking of waters from this river.5

A letter dated December 20, 1900, from the Arkansas City Commercial Club to the attorney general again proposed a convention be held in Arkansas City, Wichita, or Hutchinson. The source of the club-members' anxiety was a bill introduced in Congress which provided for the location of large storage reservoirs in eastern and south central Colorado. The object

4M. M. Murdock, Editorial in the (Wichita) Daily Eagle, August 16, 1900.

5Ibid.
of the reservoirs was to divert the flow of the water of the Arkansas River to the proposed basins, from which it would be used for irrigation purposes. The question to be discussed by the convention was "how to protect the interests of Kansas from despoliation by those who favor the construction of these reservoirs beyond the limits of our state."  

The legislature acts. Early in 1901 the Kansas Legislature adopted Senate Concurrent Resolution No. 14, which related to the diversion of the Arkansas River. The resolution read as follows:

WHEREAS, It is a matter of common notoriety that the waters of the Arkansas river for some time past have been and are now being diverted from their natural channel by the state of Colorado and its citizens, to the great damage of the state of Kansas and its inhabitants; and
WHEREAS, It is threatened not only to continue, but also to increase said diversion; therefore, be it Resolved by the Senate, the House of Representatives concurring, therein, that the attorney-general be requested to institute such legal proceedings, and to render such assistance in other proceedings brought for the same purpose, as may be necessary to protect the rights and interests of the state of Kansas and the citizens and property owners thereof. (469.)

Once the resolution was passed, concern was registered by Probate Judge F. R. French on behalf of numerous western

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6 Letter from T. W. Eckert, F. M. Hartley, H. H. Hill to A. A. Godard, December 20, 1900, MSS, Attorney General A. A. Godard Papers, Kansas State Historical Society, Topeka, Kansas, (See the Appendix for text of letter.)

7 Kansas v. Colorado and The United States of America. "Brief of Complainant on Final Hearing," No. 7, 1-2 (October Term, 1905). The number in parenthesis refers to the page number on which the information was found in the original United States Supreme Court transcript, of which only one copy is ever printed.
Kansas citizens. He questioned whether the injunction issued against Colorado irrigators might not also apply to Kansas irrigators.

Will you please inform me what effect is probable in the suit the anti-irrigationists of Wichita and Arkansas City will have on the interests of this section -- Hamilton, Kearny, Finney and Geary, because of the diverting of the water of the Arkansas?

Will that little instrument called an injunction stop Colorado from using or diverting the water until the case is disposed of? If Colorado is estopped, will not this section of the State be under similar restraint?

It appeared that the State of Kansas filed its suit against the State of Colorado more in behalf of the citizens of the Lower Arkansas basin than those who were more directly affected, the farmers of western Kansas.

A. Kansas Sues Colorado: 1901

Kansas sought relief "entirely by the rules of the common law, irrespective of any customs, regulations or laws of the state of Colorado." Kansas lawyers claimed that Colorado had never derived from the federal government or any other source a right to the exclusive use of Arkansas River waters for any purpose as against Kansas citizens as riparian proprietors.

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8Letter from F. R. French, Probate Judge of Kearny County, to A. A. Godard, Esq., Attorney General, February 8, 1901, MSS, Godard Papers, Kansas State Historical Society, Topeka, Kansas. (See Appendix for text of letter.)

Common law argued. Lawyers for the complainant pointed out that under common law, the right of the riparian proprietor to the waters of a stream was annexed to the soil and passed with it, not as an easement, but as part and parcel of it. Where conditions were such that a riparian owner could make use of the stream for irrigation purposes, all diversion must be a reasonable use of the stream and that the surplus of the water used must be returned into its natural channel.

It was conceded that under common law Colorado and its citizens were authorised to use the waters of the Arkansas River, but such use was subject to conditions that were reasonable and not prejudicial to the rights of lower riparian owners, and

if . . . it is the purpose of acts now contemplated by the state of Colorado, or it is the present effect of acts already done under license and authority granted by that state, to appropriate all or an unreasonable portion of the waters of the Arkansas river, or of its tributaries in Colorado, to the detriment and in violation of the rights of the state of Kansas or of its citizens as lower riparian owners upon said stream, it is clear that the complainant may invoke the protection of the common law against such palpable invasion of its rights.10

Kansas files bill in equity. On May 20, 1901, the State of Kansas filed its bill in equity in the United States Supreme Court, naming the State of Colorado as defendant. In its bill of equity, Kansas charged that Colorado had granted authority to persons, companies, and corporations to construct ditches and canals for irrigation and other purposes. As a

10 Ibid., pp. 2-4.
result the Arkansas River had been diverted, appropriated, and consumed by Colorado citizens. The waters were never permitted to return to the river channel, but were used to irrigate arid non-riparian lands. Therefore the citizens of Kansas living in the Arkansas Valley, were deprived of their rights to the flow of the river and to the underflow, and were greatly and irreparably damaged.

Kansas claimed that Colorado had constructed and was in the process of constructing large ditches, canals, and reservoirs for the purpose of diverting and storing the normal and flood flow of the Arkansas River. In effect, none of the water so diverted, stored, and used would return to the river channel, or to the use and benefit of Kansas citizens owning and occupying lands in the Arkansas River valley.

Lawyers for the complainant maintained that Colorado threatened to divert and appropriate all the waters of the Arkansas River unless it was restrained from doing so. The complainant asserted that if Colorado was permitted to divert and appropriate the river water, the lands along the river in Kansas would be greatly impaired in value and usefulness, and would be rendered unfit for the production of crops, grasses, fruits, and other vegetation to which the land had been devoted.

Kansas claimed that the common law relative to riparian rights was and had been in full force in the two states long before their admission into the Union. Therefore the diversion and appropriation of the river waters in the state of Colorado was in utter disregard and violation of the rights and interests of the citizens of Kansas.
Results of diversion. Because of the diversion and appropriation of the water, the irrigators of Colorado had caused the river "to cease flowing in its natural channel, normal volume and under the surface of said lands within the state of Kansas." As a result, the owners and occupants of lands were deprived of water necessary for domestic use and for watering livestock. Also, the atmosphere in the vicinity of the river was deprived of the moisture necessary for the health and well-being of its inhabitants.

Unless Kansas was permitted to file its bill and to obtain in the United States Supreme Court, a decree enjoining Colorado from doing the things complained of, complainant is remediless, and defendant can and will destroy the value of complainant's property to the extent of many thousands of dollars, and the property of citizens of Kansas to the extent of many millions of dollars, and the revenues of said state will be greatly impaired, all in violation of complainant's rights and the rights of said citizens, and in the absence of any right or authority for so doing.¹¹

Colorado files demurrer. Due service of process was made and on October 15, 1901, the State of Colorado filed its demurrer to the bill of complaint.¹² Among other items, the Colorado lawyers contended that, as a sovereign state, it was justified, if the geographical situation and material welfare demanded it in the judgment of the state, in consuming for


beneficial purposes all waters within the state’s boundaries. In the popular interpretation, Colorado also believed it occupied toward Kansas the same position that foreign states occupied toward each other.\(^\text{13}\)

Sometime between October 15, 1901, and February 24, 1902, Kansas filed its brief for hearing on the demurrer.

B. Hearing on the Demurrer: 1902

**Colorado argues against suit.** In its demurrer to the bill filed on October 15, 1901, and in arguments before the United States Supreme Court heard on February 24th and 25th, 1902, Colorado asserted that the Supreme Court had no jurisdiction. Problems set forth in the bill of complaint did not constitute, within the meaning of the Constitution, any controversy between the two states. Colorado lawyers claimed that the issues presented were between the State of Kansas and private corporations and certain persons within Colorado, and therefore the State of Colorado was not concerned as a corporate body or State. Lawyers for the defendant maintained that Kansas was in reality loaning its name to private citizens and was only a nominal party in the suit. Furthermore, Kansas in her right of sovereignty was seeking to maintain the suit for the redress of supposed wrongs of its citizens, but according to the United States Constitution a state did not possess such

\(^{13}\text{St. Louis Post-Dispatch, April 27, 1902.}\)
sovereignty as empowered it to bring an original suit in United States Supreme Court for such purposes.

Colorado argued that Kansas had no property rights that were in any way affected, and therefore the Supreme Court did not have original jurisdiction. The acts complained of by Kansas were not done by the State of Colorado, but rather by private corporations and individuals who were not named as parties in the suit. Because the bill of complaint was in many respects uncertain, informal, and insufficient, according to the demurrer, the State of Kansas was not entitled to the equitable relief for which it prayed. 14

**Justices question Colorado attorneys.** In questioning Colorado attorney L. M. Goddard, Justice Edward D. White compared running water and air, and asked Goddard if there was not a fallacy in his argument that running water was as much the subject of private appropriation as any other thing. If air was the subject of such appropriation, then it could be taken by one set of people so as to destroy others' lives. Goddard protested the example and insisted that Colorado spoke of a property in running water.

Justice Joseph McKenna asked about the extent of taking of the water, so that none could run into Kansas. Goddard stated that was an absolute impossibility. "However, if the appropriation covers all the water of the stream, if

it is for beneficial use . . . and if the entire amount of it is actually applied to that use, the party has a right to all the water."\textsuperscript{15}

Justice McKenna asked what redress Kansas would have if Colorado could authorize the diversion of all the water. Goddard answered that a valid appropriation for beneficial use and an actual user gave the appropriator a right to use all the water.

The justice then asked if Kansas had the same rights that Colorado had in these waters. Attorney Goddard replied that each state had absolute control over the running waters within its borders whatever the result was to another state. Justice McKenna interpreted the statement to mean that Kansas would have no remedy at all and Goddard replied that the interpretation was correct.

During Colorado attorney Platt Rogers' argument, Justice Brewer asked him if his proposition did not amount to the fact that in order to transform Colorado's arid lands into fine farms, the farms of Kansas might turn into arid lands. Rogers replied that this might be the case, and, if so, they contended for exactly that principle.

Justice White asked Rogers the following question:

"What if a man takes up some public land under an act of congress? The land has a running stream throughout it. Then after he has done that, under the Colorado law, another man comes along and appropriates all the water in the stream that naturally would flow through the first man's land. What becomes of the first man and his rights?"

\textsuperscript{15}\textit{Kansas City} (Missouri) \textit{Journal}, October 8, 1903.
Mr. Rogers: "He does not get any more water. He
is in exactly the same situation as the Kansas
man."
Mr. Justice (John M.) Harlan: "How does he live
then?"
Mr. Rogers: "He leaves the place."
Mr. Justice Brewer: "Did I understand you to say
that the Kansas man goes dry?"
Mr. Rogers: "He goes dry, which is not unusual in
Kansas."16

Kansas replies. In reply to some of the charges made
by Colorado, Kansas lawyers stated in its Brief of Complainant
for Hearing on the Demurrer of Defendant that suits by single
riparian owners in Kansas against persons diverting water in
Colorado would involve a vast number of suits. All of the
acts complained of by Kansas were authorized by Colorado and
that state itself was doing some of the most injurious things,
and its legislature had provided for many more such acts.
"Hence, the state of Colorado is . . . the chief offender
against the rights of property owners in Kansas."17

The complainant answered Colorado charges saying that
it was a large property owner in the Arkansas River valley.
The state further answered that

Others injured cannot reach the chief offender, which is the source of all the injuries. Hence
it is in the highest degree fit that the state
of Kansas should first assert its own property
and sovereign rights before this, the only tri-

bunal having jurisdiction of the proper form of
action, and the only tribunal having authority
to determine conflicting claims of sovereignty
. . . existing in two states. . . 18

16Ibid.
17Kansas v. Colorado, "Brief of Complainant for Hearing
18Ibid.
Kansas attempted to assure Colorado of its intentions. The complainant asserted that it did not have the slightest desire to injure or harass Colorado or its citizens. It had no objection to Colorado irrigators taking water as long as it did not injure citizens in Kansas. Furthermore, Kansas did not expect the destruction of ditches already constructed and being used.

It would be a great injury to the state of Colorado if its irrigation interests were now destroyed. It would be an equal or greater injury to Kansas and its people if none of the waters of the Arkansas were permitted to flow into the state. We have, therefore, come into this court, believing it to be the proper tribunal for the novel and important questions involved therein.

The water of the Arkansas river should serve the needs of the two states, and not of one. Impartial justice requires that the state of Colorado and its people be restrained from taking it all, likewise the state of Kansas should not and will not ask for all.19

**Supreme Court issues opinion.** Following oral arguments, the Supreme Court took the case under consideration and issued its opinion on April 7, 1902. Chief Justice Melville W. Fuller, speaking for the Court, disputed Colorado’s claim that the Supreme Court did not have jurisdiction. In the opening statement he said, "The original jurisdiction of this court over 'controversies between two or more States' was declared by the judiciary act of 1789 to be exclusive. ..."20

The Supreme Court did not agree with the Colorado complaint that Kansas had no real claim in the suit and was

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20 *Kansas vs. Colorado*, 185 U.S. 125, 139 (1901)
simply loaning its name. The Court noted,

... if the health and comfort of the inhabitants of a State are threatened, the State is the proper party to represent and defend them.

... the mere fact that a State had no pecuniary interest in the controversy, would not defeat the original jurisdiction of this court, which might be invoked by the State as parens patriae, trustee, guardian, or representative of all or a considerable portion of its citizens.

The action complained of is state action and not the action of state officers in abuse or excess of their powers. 21

The justices believed that the question as to whether one state could totally deprive a neighboring state of water from a river flowing through both states merited the court’s attention. In the final statements of the opinion, Mr. Chief Justice Fuller mentioned several items Kansas would need to prove and then issued its ruling.

We think proof should be made as to whether Colorado is herself actually threatening to wholly exhaust the flow of the Arkansas River in Kansas; whether what is described in the bill as the 'underflow' is a subterranean stream flowing in a known and defined channel, and not merely water percolating through the strata below; whether certain persons, firms, and corporations in Colorado must be made parties hereto; what lands in Kansas are actually situated on the banks of the river, and what, either in Colorado or Kansas, are absolutely dependent on water therefrom; the extent of the watershed or the drainage area of the Arkansas River; the possibilities of the maintenance of a sustained flow through the control of flood waters; in short, the circumstances, a variation in which might induce the court to either grant, modify, or deny the relief sought or any part thereof.

The result is that in view of the intricate questions arising on the record, we are constrained to forbear proceeding until all the facts are before us on the evidence.

21 Kansas vs. Colorado, 185 U.S. 125, 142 (1901).
Demurrer overruled, without prejudice to any question, and leave to answer.\textsuperscript{22}

Kansans hopes for the future. Following the ruling Kansas attorney general, A. A. Godard claimed that the effect of the opinion was to prevent Colorado from passing laws which would authorize or compel the diversion of waters from interstate streams when the diversion deprived other states or its citizens of their property rights. Kansans hoped the effect of the demurrer would be to stop the construction on a ditch at Canon City and to discourage the construction of other ditches by private individuals or corporations, as the projects would probably be stopped by injunctions brought by Kansas residents. It was doubted that Coloradans could be compelled to cease taking water, but it would limit the taking of water to the present amount.\textsuperscript{23}

Once the Supreme Court ruling was announced the court room antagonists began the task of gathering evidence to support their cases. On the third day of November, 1902, Colorado filed its answer to the bill of complaint.\textsuperscript{24}

C. Kansas Files Amended Bill in Equity: 1903

Nearly a year after the Supreme Court issued its opinion on the demurrer, attorney A. A. Godard wrote to

\textsuperscript{22}Kansas vs. Colorado, 185 U.S. 125, 147 (1901).

\textsuperscript{23}Topeka Capital, April 9, 1902.

\textsuperscript{24}Kansas vs. Colorado and The United States of America, "Brief of Complainant on Final Hearing," No. 7, (October Term, 1905).
Governor W. J. Bailey stating the procedure which should be followed by Kansas. He suggested that all the principal ditch owners in Colorado be made defendants to the action. The case would be tried between the people of Kansas and the appropriators of Colorado, including the state of Colorado.

The evidence Kansas would present included facts regarding settlement in the Kansas portion of the Arkansas Valley, the flow of the river since that time, the character of the underflow and the changes and damages done through irrigation in Colorado, the appropriations of water in Colorado with the date when the appropriation began, the amount taken and where it was used. Kansas would show if any of the appropriated water returned to the river channel and if it did, how much returned. Also entered as evidence would be statistics indicating the season of the year when water was used or the length of the irrigation periods with some evidence of the possibility of storing water.\(^{25}\)

**Colorado states position.** In the meantime, N. C. Miller, attorney general for Colorado, expounded his state's position through the newspaper. He claimed that the entire territory within the drainage basin of the Arkansas River and its tributaries was acquired either under the Louisiana Purchase or from Old Mexico. Historically it was true that irrigation was always recognized within the territory, and

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\(^{25}\)Letter from A. A. Godard to the Honorable W. J. Bailey, Governor of Kansas, March 14, 1903, MSS, Governor W. J. Bailey Papers, Kansas State Historical Society, Topeka, Kansas.
the law which recognized irrigation was almost entirely Spanish in origin. This land was accepted by the people with these rights to the water at all times, and the common law doctrine of riparian rights, as expounded by Kansas, was never in operation within the territory.

In answer to the claim of Kansas that Colorado was authorizing and directing the diversion of water, Colorado asserted that its citizens had always claimed and maintained the right to water for beneficial purposes and that the state government had only attempted to regulate the use among its citizens. If Colorado were enjoined from legislating on the question, the people would still have the right to the enjoyment of the privileges of irrigation from the rivers. 26

Colorado contended that the legislation of the United States recognized the right at all times to divert water for beneficial uses, and the past Congressional acts which manifested the purpose of the federal government in relation to the rivers in the arid areas, were as follows:

1. The Act of July 26, 1866, confirming water rights existing under local customs, laws and decisions, and granting protection thereto.
2. The Act of July 9, 1870, provided that all patents to the United States land shall be issued subject to vested and acquired water rights.
3. The Act of March 3, 1877, known as the Desert Land Act, which was passed to encourage the reclamation of arid lands by the diversion of water from the streams.

5. The Act of August 18, 1894, providing for the conveyance to the several states in the arid region of such public lands as the states might reclaim by irrigation.
6. The Act of June 17, 1902, appropriating all moneys received from the sale of public lands in the arid regions for the purpose of constructing ditches and reservoirs in order to reclaim the arid lands. 27

Colorado maintained that if the natural flow of the Arkansas River was undisturbed by the existing irrigation system, the evaporation and seepage was so great that the present volume of water in the river through Kansas would not be augmented. Attorney General Miller stated that the flow above the surface in Colorado was all that was diverted and that was not enough in volume to affect the vast underflow which Kansas described. If the above surface water was left untouched to the Kansas western border, it would not materially affect the proposition as stated by Kansas. 28

Compromise offered. S. S. Ashbaugh of Wichita, one of the attorneys for Kansas, stated that there was plenty of water in the river for both states. The problem was that Colorado took water at the wrong time of the year. Kansas would compromise if Colorado would agree not to take water below the average flow of the river. Colorado would get all the flood water, which could irrigate ten times as much land as was irrigated. Kansas then would receive the average flow to saturate its lands.

27 Ibid.
28 Ibid.
Colorado ditch owners could fill the reservoirs and ditches each spring from flood waters. Colorado did not utilize that water; instead the irrigators waited until the river was low in summer and then took the water. Ashbaugh suggested that if owners would store the flood waters, they would be able to irrigate more land and irrigation plants would be more valuable and irrigation securities would increase in value.29


The brief dealt largely with the underflow, the diversions made by Colorado, and the damages caused in Kansas.

29Kansas City Journal, June 27, 1903.
The statements made by the complainants emphasized the land values when the underflow was undiminished. The water which flowed in the Arkansas River furnished almost the entire supply of water for the underflow. As a result, the underflow was of great and lasting benefit to the bottom lands, in that to the people owning and occupying such lands, the underflow furnished moisture sufficient to grow ordinary farm crops, and also furnished water, at a moderate depth below the surface, for domestic use and for the watering of livestock.

On the arid uplands herds of cattle grazed on the valuable grasslands but their watering places were in the river valley. The availability and use of the arid lands, and the prosperity of the cattle feeding business depended entirely upon the water, its convenience, depth, and supply. If the surface flow of the river water was cut off, then the underflow would gradually diminish, and the Arkansas River Valley would be as arid and uninhabitable as the uplands. 31

Nearly all of the bottom lands were fertile and productive, valuable for farming purposes, and well adapted to the growing of wheat, corn, alfalfa, rye, domestic and wild grasses, orchards, fruits, and vegetables. All of these lands were valuable also, as grazing areas, and were well adapted to support hogs, horses, sheep, and cattle.

The bottom lands were owned and occupied by people engaged in agricultural pursuits and over three-fourths of

31 Ibid., pp. 6-8.
the bottom lands and residing there with their families. More than two-fifths of the bottom lands were in actual cultivation and had been for many years. Those lands had an agricultural population of over 50,000 persons.

Situated on the banks of the Arkansas River were numerous cities and towns, of which Syracuse, Garden City, Cimarron, Dodge City, Kinsley, Larned, Great Bend, Sterling, Hutchinson, Wichita, and Arkansas City, were the more important. All but Arkansas City were county seats. These cities had an aggregate population of over 60,000 people.

The actual value of the bottom lands was from five to one hundred dollars per acre, and the average value of all the bottom lands was not less than twenty-five dollars per acre, provided the land received the benefits from the natural and normal flow of the river.\(^{32}\)

**The offenses of Colorado.** The State of Kansas charged that the Colorado legislature had passed numerous bills authorizing the diversion of water from the Arkansas River and its tributaries for uses other than domestic, particularly for the purpose of irrigating arid, non-riparian, non-saturated and waste lands for agricultural purposes in Colorado. The defendant had attempted to grant to its codefendants the right and authority to divert the rivers' flow from their natural channels and to cause the waters to flow into and through canals and ditches extending great distances away from the

\(^{32}\)Ibid., pp. 8-10.
natural channels. Colorado also granted to its fellow defendants the right to store waters and empty them on high arid lands, which were not riparian to the river and its tributaries. As a result all of the waters were lost to the natural channels and were thus prevented from flowing into and through the state of Kansas.

The aggregate appropriations made from the Arkansas River amounted to 4200 cubic feet per second, and from the affluents and tributaries the appropriations totalled 4300 cubic feet per second. The average flow of the Arkansas within Colorado did not at any point exceed 700 cubic feet per second, and the average flow of the affluents and tributaries did not exceed 700 cubic feet per second. As a result the total average flow of the river and its tributaries was used and absorbed as had been alleged. No portion of the ordinary flow of the river was permitted to flow into Kansas.\textsuperscript{33}

Kansas alleged that the diversion was carried to such an extent that no water flowed in the river bed from Colorado in Kansas during the growing season. The underflow was diminished and continued to diminish as the diversion of water increased. If the diversion continued unabated, the bottom lands of the valley would be injured to a great extent, with portions of the area ruined and deserted, and they would become part of an arid desert.

\textsuperscript{33} Ibid., pp. 18-20.
Kansas lawyers asserted that Colorado, in addition to granting the right to take and use the water, also claimed the right to regulate and control the distribution of the water by canal and ditch owners to the owners of land which was irrigated.

The complainant further charged that Colorado contemplated the construction of other ditches and canals for the diversion of water to irrigate arid non-riparian lands. The defendant also planned the extension of branches and laterals to the ditches and canals already constructed. Colorado and its fellow defendants claimed the right and power to do as they pleased with all the water of the Arkansas River within its borders, regardless of any rights which the state of Kansas or its citizens might have.34

Kansas complained that Colorado had since 1890, at and near Canon City, constructed a canal for the purpose of diverting water from the channel and used the water for irrigation purposes on arid non-riparian lands, so that the water would not return to the river channel. The defendant state had directed and permitted its agents to divert water from the river to the amount of seven hundred and fifty-six and 28/100 cubic feet per second, which was approximately the natural flow of the river at its point of diversion. The waters diverted by Colorado would otherwise flow into Kansas, through the valley, and vastly benefit the area.

34 Ibid., pp. 21-22.
Colorado had made large appropriations of money for the construction of reservoirs for the storage of water from the tributaries of the Arkansas. Boards of control were provided to take charge of construction, maintenance and operation of the reservoirs. Kansas believed that since 1891 Colorado had constructed and was using at least four reservoirs, one each in the counties of Custer, El Paso, Chaffee, and Las Animos. Those reservoirs stored vast quantities of water which otherwise would flow into Kansas. Kansas lawyers contended that it was the intention of the defendant to store and withhold and divert all of the water from the river channel.35

When Kansas territory was organized in 1854, it extended west to the summits of the Rocky Mountains, and all of the drainage area of the Arkansas River was in the territory of Kansas. During all of that period until 1861, the common law and riparian rights extended over the entire area. By reason of prior settlement, occupation, and title, the citizens of Kansas and the state of Kansas acquired and had a right to the uninterrupted flow of all the river waters. The rights claimed by Kansas accrued prior to any of the diversions made by Colorado citizens.36

In taking excessive water from the river, Colorado and its fellow defendants had greatly damaged the state of Kansas.

and its citizens. The fertility of all the lands in the Arkansas Valley was greatly diminished. During the spring and early summer, which was the growing season, the diversion of water caused the crops, trees, and other vegetation to wither and perish. Wells which furnished water for domestic and livestock uses were dry. The damages, beyond computation, suffered by the inhabitants were the direct result of the diversion of river water. Such damages had increased for ten years in proportion as the diversion of water increased.

The property of the State of Kansas situated on the banks near Dodge City, used as a soldiers' home, had been damaged in the diversion of water. The fertility had been reduced, the water supply lessened, its solubrity and utility impaired, and unless the normal flow of the river was restored the property would become unfit for use. The same was true of property near Hutchinson, which was used as the state industrial reformatory.

During the summer season, which was often dry, the bed of the river above Wichita was oftentimes completely dry. The river through the central portion of Kansas was without high banks. The adjacent bottom lands were a loose, sandy loam, and were unprotected on either side by physical features or vegetation. The bed of the stream was almost totally of sand. In addition, the territory was subject to high constant winds. The winds changed and filled the stream bed with drifting sand, dirt, and debris, until it was nearly level with adjacent lands. At times of sudden and excessive
rainfall, the flood waters could not flow down the natural channel, but rather spread out on the surrounding land, doing enormous damage to livestock, crops, and improvements, and injuring and decreasing the value of the land.\textsuperscript{37}

In their closing statements, Kansas attorneys asked that the court issue a decree prohibiting Colorado from granting charters which would authorize the diverting of waters from the Arkansas River and its tributaries, except for domestic use. Kansas further requested that Colorado and the other defendants be restrained from constructing, owning, and operating any canal or ditch in which the ordinary flow of the river waters would be diverted, and also from constructing, owning, and operating reservoirs for the storage of the normal flow of the river. Finally the complainant's counsel prayed that the court would define the respective rights of Kansas and the defendants and decree such protection of the rights as was necessary.\textsuperscript{38}

\textbf{Little water returns.} Senator Frank Dumont Smith, an attorney for Kansas, attempted to correct a statement made by Colorado. The defendant claimed that water taken from the Arkansas River returned to the river. Smith claimed that in 1903 it took four acre-feet of water to mature crops in Colorado; this was a volume of water sufficient, if put on all at once, to stand four feet deep on every acre. One foot of water was consumed by the growing plant; one foot evaporated in the

\textsuperscript{37}Ibid., pp. 27-29.

\textsuperscript{38}Ibid., pp. 29-30.
river ditches and laterals before it reached the land. Of the remaining two feet, one-half of it evaporated in spreading over the land, so at the most, less than one-half of the water taken from the river seeped into the soil with any prospect of returning to the river's flow. Not more than one-third to one-fourth of the water taken out for Colorado irrigation ever returned to the stream. The rest was lost to Kansas.

Colorado stated that if its farmers did not use the water, it would evaporate. This statement Senator Smith also labeled absurd. He stated that the river flow disappeared and fed the underflow, from which the people in the western part of the state, got their water. He observed that the underflow was receding, and that crops were not as heavy as in past years. Senator Smith insisted that the "ordinary average" flow of the river which fed the underflow, must be restored. That was the purpose of the suit bought by Kansas against Colorado.39

Kansas appropriated $5,000 for the expenses of the suit, and Colorado appropriated $35,000. The big ditch corporations also contributed large sums. Three attorneys assisted the Kansas attorney general, while seven attorneys presented the case for Colorado. The ditch companies were represented by an additional fifteen attorneys. In a motion to dismiss the case made by the ditch companies, their counsel fortified their motion with a twenty-five page brief. Kansas

39Kansas City Star, August 27, 1903.
answered in a six-page brief, and Colorado counsel countered with a twelve-page brief. The rhetoric of the defendants went for nought, as the motion was denied.40

Colorado answers amended bill of complaint. After studying Colorado's answer to the amended bill of complaint, Kansas Attorney General C. C. Coleman, who assumed office in 1903, stated that it was apparent that the Colorado attorneys were giving the case more thought than they had in the beginning.41

Colorado claimed that as a sovereign state, it had "the plenary and exclusive right and power" to regulate the use of non-navigable waters within its boundaries. The defendant had never surrendered that sovereign power, nor delegated such power to any other sovereignty.42

The answer maintained that water used by Colorado irrigationists was water that was lost through evaporation before it reached Kansas. The brief also asserted that the Arkansas river valley throughout Kansas was better off because of Colorado's using the water for irrigation, especially through the effect of return waters. By practicing irrigation

40 *Topeka Capital*, August 27, 1903.
41 *Kansas City Journal*, October 8, 1903.
42 *Kansas vs. Colorado*, "Separate Answer of the Defendant, the State of Colorado, to the Amended Bill of Complaint of the State of Kansas, Complainant," No. 7, Original Proceeding, 2 (October Term, 1903).
in the Arkansas valley in Colorado, the flow of the river, outside of flood stages, was actually increased instead of diminished. 43

Colorado explained the effect of return waters by saying that the saturation of the land by irrigation had the same effect as that produced by abundant rainfall. Water veins and channels were created, springs broke out and the water, seeking a lower level, exuded to the nearest dry channels, making them perennial streams discharging water into the river. Storm and flood waters were stored in large quantities, and during the irrigating season were added to the water diverted from the river and applied to the land. Therefore, as the irrigated area moved eastward, the return and seepage waters from the irrigated lands had significantly increased the flow of the river and water then flowed continuously in the Arkansas River at many points, where at low stages, it had not flowed prior to the development of irrigation in Colorado. 44

The defendant's lawyers stated that long before irrigation was practiced in Colorado, it had been observed that the volume constantly diminished as the river flowed eastward. The more marked disappearance of the river waters occurred as the river passed beyond the area of local storms

43Ibid., p. 8.
44Ibid., pp. 37-38.
caused by the mountains. During the summer season, except for flood waters, at a distance from 200 to 400 miles from the mountains, the river would show no surface water other than occasional pools in the sand, and none of the water coming into the river in Colorado would cross the land of the central or humid portions of Kansas. The ordinary flow of the river in Kansas, according to Colorado attorneys, has been still further diminished by the destruction of timber on the watershed of said river in the mountains and by the extension westward of the cultivated area of lands in Kansas and by the sinking in western Kansas of upwards of one thousand wells contiguous to said river, and the pumping and use of the waters thus obtained upon the adjoining land. 45

Colorado indicated the importance of the irrigation system to its economy, and contrary to what Kansas lawyers claimed, Colorado settlers were irrigating as early as 1865. In fact, prior to 1865, sixty-eight ditches and canals had been constructed, and were diverting 615 cubic feet of water per second. From 1865 to 1870, 127 additional ditches and canals were built, and 458 cubic feet of water per second was diverted. Two hundred and sixty-eight ditches and canals were added between the years 1870 and 1880, and 945 cubic feet of water per second was turned aside. Diverting 3,859 cubic feet of water per second were 250 additional ditches and canals constructed from 1880 to 1890.

The water was taken from the river and applied to the reclamation and irrigation of approximately 500,000 acres

45 Ibid., p. 36.
of land in the Arkansas River valley. Before irrigation, the area was arid and incapable of producing crops.

The Colorado brief stated that many millions of dollars were expended in constructing the canals, ditches, and reservoirs, in improving the lands that were irrigated, and in machinery used in the cultivation of the land. Colorado attorneys estimated twenty-five million dollars had been invested. Numerous towns and villages had grown up in the valley having an aggregate population of over 100,000 people. When one considered the houses, stores, churches, school houses, factories, and other public and private buildings in the valley, the investments made by people amounting to millions of dollars was not hard to imagine. 46

Colorado Attorney General N. C. Miller and his associates believed that the Supreme Court would not decide the case on law points, but rather on the evidence of damage to Kansas, if any, caused by the diversion of waters from the river. 47 What prompted Miller to believe this point was not clear. Sometime during 1903, Kansas assumed the prior appropriation theory as part of its testimony and apparently was able to prove its irrigation ditches existed before those of Colorado. This may have prompted Miller's statement.

A company answers. Another of the defendants, the Colorado Fuel and Iron Company, presented a brief. The

46 Ibid., pp. 30-31.

47 Topeka Capital, October 8, 1903.
company's attorneys claimed that it and its predecessors had been engaged in coal mining, coke making, and manufacturing of steel and iron products since 1877. It had twenty-seven coal mines, four iron mines, six washeries, 3,000 coke ovens, and extensive steel works in operation, the greater part of which were situated in the Arkansas River drainage basin. The company was completely dependant for operating purposes on water obtained from the river.

The company claimed it had $25,000,000 invested in the drainage basin and had expended $500,000 in the purchase of water rights and the construction of ditches and reservoirs. Over 50,000 people were directly or indirectly dependant on the operation of the company for their support.

If the company should lose the suit, and this bring deprivation of the right to use the waters of the Arkansas River, almost the entire drainage basin would become desert-like and of little value, just as it was prior to settlement and improvement. Such a decision would result in irreparable and incalculable injury and damage to the people concerned. 48

**Colorado attorneys worry.** A decision adverse to Colorado would affect irrigation along the Platte, the Grande, and the Rio Grande rivers, as well as the Arkansas. The Denver Post asserted, "An adverse decision wipes out the western portions of Kansas and Nebraska, almost all of the

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48 *Topska Journal*, November 17, 1903.
Dakotas, Montana, Idaho, Arizona, Utah, Wyoming, New Mexico, Nevada, and the fruit region of southern California. 49

The paper said that the Supreme Court Justices seemed to lean toward the doctrine of riparian rights and those favoring the Colorado cause feared an adverse decision unless the justices could be made to understand how far-reaching the result would be.

D. The United States Government Intervenes: 1904

It seems necessary to reiterate the positions of each state in the suit, even though each position has been previously established. The reason for this repetition is that each position becomes important in the next step of the overall suit.

Complainant's position. The Kansas position was that the State of Kansas was the riparian owner of lands within its boundaries and that Colorado was an offender against Kansas' rights. The waters of the Arkansas River should serve the needs of both states. The State of Kansas was only asking that sufficient water be permitted to flow in the river to fertilize the fields of Kansas farmers.

Defendant's position. The Colorado position was simply stated. The State of Colorado had the sovereign right to appropriate the waters of its natural streams and utilize

49Ibid.
them for the benefit of the state lands or the lands of Colorado citizens.

**Importance of suit.** In this suit thousands of farms, millions of acres of land, immense agricultural and livestock industries, huge sugar beet factories, and thousands of people were vitally concerned. A sugar beet industry had been developed on the Colorado side; also, the melon growers near Rocky Ford and other localities had made a market for their crop. Alfalfa was cultivated for the feeding of the increasingly important livestock industry. Thousands of people had settled along the Colorado portion of the river within the past ten years. All of this activity was due in part to the elaborate irrigation system developed by Colorado and private corporations.

The danger existed, however that if Colorado continued to build canals and reservoirs, the Arkansas River in western Kansas would be perpetually dry, and the winds would fill the river bed with sand as Kansas stated in its brief. Previously mentioned in Chapter Three was the fact that ditches were excavated in western Kansas to carry water from the Arkansas River to the valley's farms. Later the river water failed by reason of its being diverted in Colorado. The farmers turned to the vast underflow, dug wells, and raised the water with windmills. 50

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Colorado files for dismissal. On March 14, 1904, Colorado's attorneys filed a motion to dismiss the suit, "for want of proper parties," with the possible purpose of getting the case tried as an original suit in the lower courts, "subject to appeal on writ of error." If Colorado had succeeded, it might have been possible to delay the suit for several years before a decision was reached. As it so happened, Colorado lost this appeal several months later, and the litigants remained in court for many months, and eventually for many years.51

The federal government intervenes. A week after Colorado filed for a dismissal of the suit, the United States of America filed its petition of intervention. The date was March 21, 1904. The federal government's interest in the case came from the passage of the Reclamation Act of June 17, 1902. Two points in the suit threatened the validity of the new law. Kansas' claim of riparian rights was flatly rejected because of the tacit acceptance of the theory of prior appropriation in use in the arid lands. Acceptance of the theory of riparian rights would have meant several million acres of arid land would have no chance of being reclaimed, as lands miles away from a river could not be irrigated.

If, on the other hand, the Supreme Court accepted Colorado's claim to complete sovereignty over the waters within its boundaries, then the federal government's entire reclamation

51 Kansas City Journal, March 15, 1904.
program for arid lands was threatened. The federal government would not be able to construct dams and reservoirs and administer them.

In its brief the United States Government claimed that within the watershed of the Arkansas River, west of the ninety-ninth degree of longitude, there were approximately 1,000,000 acres of land belonging to the federal government, which were uninhabitable and unproductive. Only by means of irrigation could any of the lands be reclaimed from their arid condition.

Of the Kansas claim to riparian rights, the federal government's brief made the following comments:

... because of the insufficient rainfall in the arid region ... and for the reason that the lands ... can only be made to produce crops in such quantities by irrigation, the common law doctrine of riparian rights has, by usage and custom of the inhabitants ... and by statute law of some of the States and Territories in which the arid region is situated, been abrogated, and in lieu thereof there has grown up and been established the doctrine that the waters of natural streams, also the flood and other waters in said region, may be impounded, appropriated, diverted, and used for the purpose of reclaiming and irrigating the arid lands ... and that the prior appropriation of such waters ... gives a right in and to the waters appropriated superior to any right or rights asserted or claimed by the owner or owners of riparian lands bordering on the stream from which the appropriation is made ... and superior to any right or rights claimed or asserted under any and all subsequent appropriations of said waters.\(^52\)

According to the brief, through Congressional legislation, decisions of the Supreme Court, and executive acts, the

\(^{52}\) *Kansas vs. Colorado et al.*, "Petition of Intervention on Behalf of the United States," No. 7, 3-4 (October Term, 1903).
United States government had sanctioned and approved the abrogation of the common law doctrine of riparian rights and respected the doctrine of the appropriation and use of waters for irrigation. The government recognized that the theory of riparian rights was not applicable to public lands owned in the arid region. It had approved the doctrine of prior appropriation provided the appropriation did not tend to destroy or interfere with the navigability of the streams into which such waters flowed.

The object of the Reclamation Act was to promote the interests of the United States and to enhance the general welfare by providing the means whereby reservoirs and dams could be constructed and maintained by the federal government in the arid region to store the unappropriated waters of the streams. The waters could be used to reclaim arid lands which belonged to the United States, making them inhabitable, productive, and therefore, salable. 53

At the time the petition of intervention was filed federal officers had already expended about $1,000,000 in exploring for, selecting, and procuring sites for future dams and reservoirs. The officers had let contracts for the construction of reservoirs and dams which would cost over $2,000,000, and which would reclaim not less than 500,000 acres of arid land. Under the Reclamation Act, there were plans for the irrigation of 1,000,000 acres of arid public lands at a probable cost of over $20,000,000.

53 Ibid., p. 6.
Government repudiates sovereignty claim. After giving a few of the details planned by the federal government under the Reclamation Act, the brief turned to Colorado's contention of complete sovereignty over waters within its boundaries. If this contention were upheld, it would limit, by State lines, the doctrine of prior appropriation, as it applied to interstate streams. It would permit said State to assert an absolute dominion over and a sole ownership of the waters within said State flowing within the natural beds of the Arkansas River and other interstate streams; would allow it to appropriate and use all of said waters to the damage of prior appropriations in adjoining and other States through which said interstate streams extend, irrespective of whether such prior appropriators were individuals, States, or the United States...54

Because of the unique character of the case and the situation in which the United States found itself, it was important and necessary to determine the status of the federal government, the extent and character of its interests, its powers, its control, and its rights as to the disposal of the unappropriated water of the Arkansas River. The direction of the federal government in the arid regions depended on the outcome of this particular case.55

Kansas welcomes government's move. F. Dumont Smith, one of the Kansas attorneys, believed that Kansas had a much better chance in the suit since the federal government had

54 Ibid., p. 10.
55 Ibid., p. 11.
intervened. When he was in Washington, D.C., he made arrange-
ments with the Justice Department attorneys for the government
to present testimony concerning stream measurements made by
the irrigation department and the report of the geological
drift along the Arkansas River. Smith believed that even if
the government should win on its contention that the government
should have control of the waters and should distribute the
flow equally it would help the western irrigators greatly as
it would mean more water for them. 56

Movement to cede western Kansas claimed. In the fall
of 1904, the Topeka Capital picked up a strange story out of
Denver. The Topeka Capital on September 30, 1904, reported
an effort was underway to solve the Kansas-Colorado water
dispute out of court by ceding a 100-mile wide strip of western
Kansas to Colorado. Prominent politicians in both states, who
were unnamed, were reported to be exerting all efforts toward
passage of a bill through the state legislatures whereby the
western portion of Kansas could be taken into Colorado. This
plan would give Colorado the western twenty-four counties of
Kansas. The western 100 miles of Kansas were the arid region
of the state and irrigation was of the greatest importance to
those living in the area. East of Dodge City little water was
taken from the Arkansas River for irrigation purposes.

L. P. Worden of Syracuse, Kansas, and C. H. Kennison
of Garden City, Kansas, a candidate for representative from

56 Topeka Journal, May 3, 1904.
Finney County, went to Pueblo, Colorado, in the interest of the plan. While there they appeared before a government commission when it was in session. Just what commission was meeting was not mentioned. The men were reported to have stated that they were supported by nearly all residents of western Kansas. 57

Judge S. S. Ashbaugh commented that the statement from Pueblo was utterly ridiculous and that the state did not propose to settle the case in such a manner. Kansas was not fighting for western Kansas alone, although it needed irrigation the worst, but for other lands along the entire length of the Arkansas Valley in a similar condition.

Judge Ashbaugh was of the opinion that the report was a fake sent out from Pueblo. He stated that before such land could be ceded, not only would such a matter have to pass both legislatures, but the matter would probably have to be put to a vote of the people of Kansas. He was sure that the people living in the rest of Kansas would not readily give up prospects for their share of the water from the river when it was at its normal state. 58

The next day on October 1, the Topeka Journal noted few supported Mr. Worden and Mr. Kennison in western Kansas and it was not believed that many people favored such a plan. L. F. Worden of Syracuse was not known in that town and the

57 Topeka Capital, September 30, 1904.
58 Ibid.
other man's name was either wrong or his identity was confused. The Republican candidate for the legislature from Finney County was W. M. Kinnison, not C. H. Kennison. 59

Most state officials were attending the World's Fair in St. Louis, Missouri, in honor of Kansas week festivities when the story broke. When they heard the story, few took it seriously. Governor W. J. Bailey issued a statement denouncing the report. He stated,

No negotiations are under way or have been contemplated looking to a settlement of the dispute; the rights of Kansas must be conserved and not a foot of her soil will be ceded to Colorado or any other state under any circumstances. 60

Senator Smith suggested that the mere mention of such a scheme showed Colorado's desperation.

M. M. Murdock, through an editorial in the Wichita Daily Eagle indignantlly stated that for "thin hog wash" the dispatch from Pueblo, Colorado, proposing to transfer the western portion of Kansas to Colorado "as an indemnity to that people for having rendered such land valueless, is the worst ever." 61

The proposition that western Kansas representatives should formally propose rewarding Colorado for having stolen a river, once very valuable to the people who had paid the federal government for lands bordering the river, because of

59 Topeka Journal, October 1, 1904.
60 Topeka Capital, October 1, 1904.
61 Editorial in the (Wichita) Daily Eagle, October 1, 1904.
its value, was preposterous in Murdock's view. Western Kansas had become a great cattle pasture which made that arid area more and more valuable, while the area planted to crops had improved little if any and had proved disappointing. Only the irrigated crop land had proved to be of value. As pasture land, western Kansas was too valuable to think of throwing "as slop" to Colorado. 62

No more was ever mentioned of the Colorado proposal. The idea died just as suddenly as it had appeared.

Kansans optimistic. At times it seemed likely that Kansas would defeat Colorado in the suit, and that Colorado would have to curtail the use of water from the Arkansas River. One of the Kansas attorneys, F. Dumont Smith observed that "if we don't beat them on the doctrine of riparian rights, we are bound to beat them on the doctrine of prior appropriation. ..." 63 If the Supreme Court adopted the doctrine of prior appropriation, it was bound to say that Kansas ditches had priority over the Colorado ditch owners as the Kansas ditches were dug in 1881 and from that time to 1883. Colorado ditches were not dug until the late 1880's and 1890's, according to Smith. Such a decision would compel Colorado to release enough water to supply Kansas ditches. Smith was of the opinion that the Supreme Court would not allow a state line to make any difference in applying the doctrine of prior

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62 Ibid.

63 Topeka Journal, October 1, 1904.
appropriation. Under that definition the Colorado irrigationists could not diminish the flow of water to the point that it would interfere with ditches dug previously.

Some speculated that the reason why Colorado was anxious to annex western Kansas was because Kansas had irrigation ditches before Colorado. The Colorado lawyers had used the doctrine of prior appropriation as part of the defense, but Kansas attorneys had assumed it and proved that Kansas was entitled to the water on those grounds. At that point Colorado may have become overly concerned.

Senator Smith charged that the Colorado ditch companies wasted a vast amount of water. One man saw his buggy sink several inches in a bog along a ditch because the water had not been turned off when it was not needed. Instead of keeping excess water in the river, the ditch owners took out water and turned it on unused land, thereby not only wasting water, but also ruining land.

Kansas finished taking testimony in September, 1904, and Colorado began in October of the same year. Senator Smith thought a decision would be reached in the case in December, 1905. 64

Complainant protests reduced abstract. When the United States filed its abstract in the case, it filed a reduced abstract which Kansas felt did not accurately present the Kansas position. Therefore Kansas filed a protest against
the reduced abstract of the intervenor. No date was given for the filing of the protest by Kansas.

Kansas complained that the reduced abstract and the official abstract contradicted each other, particularly when testimony of witnesses was presented. The testimony of Mr. E. R. Chew, irrigation engineer of the state of Colorado, was considerably condensed in the reduced abstract, and omitted completely some testimony which the complainant considered particularly important. On page 515 of the official abstract Mr. Chew described the methods he used to distribute the water to Colorado irrigators, and the testimony also appeared to shed some light on Colorado's attitude toward Kansas irrigators.

In order to give them all I could I took all the water from the river that I could possibly get, and I didn't allow a bit of it to get away if I could help it. We had special orders not to allow any to get down the channel into Kansas. These special orders originated with me. 65

Colorado takes testimony. Colorado began taking its testimony in October before Supreme Court Commissioner Granville A. Richardson. One of Colorado's witnesses was Mr. T. C. Henry, a former Kansas resident who had lived near Abilene. Mr. Henry had farmed several hundred acres in the Smoky Hill River valley and had become discouraged over the lack of moisture which was necessary to carry on extensive agriculture. In the mid-1880's he left Kansas for Colorado and entered the irrigation business near the Arkansas River.

Counsel for Colorado, Mr. Fayt, questioned Henry on several phases of irrigation. Kansas had disputed the theory of return waters, so Fayt questioned the witness extensively on this particular subject. Henry claimed that the return flow in Colorado was to provide against seepage and evaporation in the bed of the Arkansas River. Consequently, it enabled a larger percentage of the flow, as resulted from melting snow and winter storms, to be carried down into western Kansas, which otherwise would be lost under normal and natural conditions. 66

There was some discussion of constructing reservoirs. Henry's opinion was asked concerning the possibilities of maintaining a sustained flow of water in the Arkansas River by means of storing the flood waters, and he replied that if the purpose were to augment the normal flow found in Kansas by building reservoirs in Colorado to sustain the flow, that might be done, but it would not be undertaken by private enterprise. If such reservoirs were provided and a regular volume released for the purpose of creating an increased and sustained flow in Kansas, something of that sort might be accomplished if there were a sufficient quantity of water to impound and thus overcome the loss of seepage that would exist under normal conditions. However, he did not think that the flow of water could be sustained over the miles of sand. 67

66 Kansas vs. Colorado, "Direct Testimony of T. C. Henry Before Supreme Court Commissioner Granville A. Richardson," 51 (October 20-21, 1904).
67 Ibid., pp. 51-52.
Since Henry did not favor the storage of water in Colorado for Kansas' use, he was questioned about the possibilities of storage in Kansas. The witness answered by comparing the terrain of the two states where storage, according to him, was possible. He said that in Colorado, most of the future large impounding reservoirs would be located across the valleys of tributaries and not on the plains, as the grades of the country were too great. In Kansas, however, along the river valley, the river grades were low and the valley was wide. The banks of the river were low and conditions were favorable for carrying out intakes to reservoirs which could be constructed. These reservoirs, according to Henry, could be built at comparatively little expense in the valley of the main river itself.68

It was strange that the witness would advocate reservoirs in Kansas, in an area where the river flow entering Kansas would disappear in the porous soil. One might pause to wonder why water stored in a reservoir constructed on sandy soil might not disappear just as readily as that flowing along the sandy bed of the river.

Under cross-examination Henry was questioned by S. S. Ashbaugh, counsel for the complainant. Ashbaugh returned to the theory of return waters, but questioned the witness from a different angle. The witness was shown a photograph of the Arkansas River at Garden City. Testimony had been given

68 Ibid., p. 53.
that no water had passed the bridge at Garden City from August, 1903, to May, 1904. Ashbaugh asked Henry,

Do you think that is making the river more permanent?

A. Well they had probably taken the water out further up the river in the state.

Mr. Hayt: What state?


Q. The river ... where it passes Garden City ... does not appear to have been made more permanent, does it?

A. As compared with periods in the past? I don't know. I don't believe that is the first time at that season of the year when the river was dry at that point.

Q. Did you ever know the Arkansas river to be dry from August until the succeeding May in all your experience excepting that time?

A. Well I don't know that that was true then.

Q. Well, I have stated that it's simply testified to as true.

A. Well, I have never seen it dry for that length of time.

Q. So that it is possible ... that some forces at least have prevented the water from passing the Garden City bridge so as to make the river at that point appear as on the exhibit now before you?

A. The volume of water, if there had been sufficient anywhere in the stream to reach that point without having been diverted, was diverted ... and that prevented the flow of water there. 69

As has been stated, Colorado based part of its defense on the doctrine of prior appropriation, but Kansas had assumed that contention. In his cross-examination of the witness Ashbaugh queried Henry on that subject. He asked Henry when the Fort Lyon canal was constructed and what other canals were in existence when the Fort Lyon canal was built. Henry replied that the canal was constructed in 1884 or 1885. Other canals

69Ibid., p. 74.
in use at the time were the Catlin and Rocky Ford canals near Rocky Ford; the Las Animas ditch on the south side of the river near the town of Las Animas; also the Manville ditch, near Lamar, and one or two smaller ditches in the same area.

Ashbaugh then asked when the first ditch near Garden City, Kansas, was erected and Mr. Henry did not know exactly, but recollected that it was in the "very early eighties." Ashbaugh then inquired if the Garden City ditch was in existence before the Fort Lyon canal, and Henry admitted that fact.

The witness was interrogated about the Amity canal and its date of construction. Mr. Henry replied that it was dug after the Fort Lyon canal in 1885 or 1886. He continued, concerning the Amity canal

And let me say in that connection that the date that I fixed as that of the beginning of the Fort Lyon canal construction applied only to a very small affair. I took hold of it in 1887 and developed it much more extensively, and then it has been since developed much more extensively.\(^7\)

Thus ended the year 1904. Both states had taken direct testimony before the Supreme Court commissioner and were prepared to submit their final briefs.

E. Additional Testimony Taken: 1905

Colorado attorneys began the year's legal maneuvering when the Kansas attorney general, C. C. Coleman, received the

\(^7\) **ibid.**, pp. 79-80.
defendant's brief, which was to be filed with the United States Supreme Court for use in the final hearing. Attorney General Coleman predicted that final arguments would be heard before the adjournment of the court for summer vacation and that a decision would be forthcoming after the court convened in October.

The two rivers theory. In the brief received by Coleman, Colorado lawyers introduce new arguments maintaining that the Arkansas River was two rivers. One was a stream which rose in the Rockies and flowed to the plains where it poured into the sands of western Kansas. At times of low water, the stream as a river disappeared. Some of the water evaporated and the residue was swallowed up in the sand. From the vicinity of the state line east to Great Bend, if not farther, at periods of low water, there was no flowing Arkansas River.

The second river arose farther east, even in periods of low water, partly from springs, partly from the drainage of the water table of the country supplied by rainfall, and partly from surface drainage. South from Wichita, the Arkansas was a new and separate stream having a constant flow. Such was the Arkansas prior to irrigation.

The defendant further contended that at times of flood, it might have a continuous flow from its source to its mouth, but still such a flow was diminished as it passed over the sandy wastes east of the Colorado-Kansas line. If
the current was slow and the volume was not excessive, all of 
the water would sink through the "sieve" and none would pass 
beyond. When the current was rapid and the volume of water 
was large, a large amount of the flood waters would still sink 
through, and the residue would pass beyond. 71

Colorado optimistic. L. G. Carpenter of Colorado did 
not believe Kansas would win its case, which was partially 
based on the doctrine of riparian rights. He recognized that 
a conflict between the doctrine of riparian rights and the 
document of appropriation was inevitable and that the issues 
in the case were of great importance to the western United 
States. Carpenter believed the Supreme Court Justices recog­ 
nized the facts and that the court might make this case the 
occasion for going extensively into the law of interstate 
streams.

The unfavorable feature of the case was that the 
Supreme Court Justices were not acquainted with western con­ 
ditions, and without such personal knowledge much of the 
testimony might be unintelligible and misleading.

Carpenter pointed out that the case did not originate 
with the citizens of western Kansas, who, he claimed, were 
generally opposed to the suit. The suit was pushed by citizens 
of Arkansas City and Wichita, where irrigation was not practiced 
under the doctrine of riparian rights. He maintained, just 
as Colorado attorneys did, that the riparian rights doctrine

71 Ibid.
was inapplicable to an arid region where water could best be used for irrigation. The doctrine had been recognized by several states and that doctrine was the law of the land outside the arid region.\textsuperscript{72}

\textbf{Attorneys clash.} In mid-June Kansas and Colorado attorneys clashed over Colorado's desire to admit more evidence before Supreme Court Commissioner Richardson. Kansas finished rebuttal testimony the morning of June 16, 1905. However, Attorney General N. C. Miller of Colorado wished to introduce more evidence on rainfall.

Following the verbal squabble between Ashbaugh and Miller, the Colorado attorney general presented a motion to strike out all the testimony presented by Kansas during the rebuttal on the following propositions:

1. evidence offered was not proper rebuttal evidence,
2. leading questions were asked by the attorneys when other questions failed to bring desired results,
3. all testimony relating to underflow was improper,
4. all testimony relating to the narrowing of the channel of the river and formation of islands,
5. increase or decrease of crops raised in the bottoms,
6. lowering of water in the wells,
7. filling up of the river channel.\textsuperscript{73}

The motion by Colorado was not passed upon. It simply went before the Supreme Court with the testimony. The special

\textsuperscript{72}Topeka Journal, June 5, 1905.

\textsuperscript{73}State Journal, (Topeka) June 16, 1905. The quotation is taken verbatim from the source which accounts for the inconsistency in the format.
master appointed in the case was not given authority to reject testimony. 74

Kansas presents witnesses. Kansas witnesses called to testify in behalf of the complainant were well acquainted with the Arkansas River. Most had traveled along the river or lived near the river most of their adult lives. Among those called to testify were J. R. Mead, O. B. Stocker, Jesse J. Todd, Ransom H. Brown, John Flin, and William Mathewson, the last of whom was the most prominent of the Kansas observers.

The testimony of Mathewson and Mead was most valuable as it extended over a period of nearly fifty years. At the time his testimony was taken, Mathewson was seventy-six years old. He had come west in 1849, first saw the Arkansas River in 1852, and traded with the Indians near Great Bend until 1867. He testified that "the river was larger and wider than it is now, and deeper, . . . it carried more water when I first knew it for years and there were no islands in it." 75 He stated that the river continued in that manner until the mid-1880's.

Mathewson, the original Buffalo Bill, said it was his opinion that the flow of the Arkansas River was not more than two-thirds what it formerly was. He was familiar with the underflow as he had dug some wells for irrigation purposes. One well was dug twelve feet deep, eight feet being above the

74 Ibid.

75 Kansas vs. Colorado and The United States of America, "Brief of Complainant on Final Hearing," No. 7, 34 (October Term, 1905).
water at a dry time. He noticed that the rise and fall of the well water corresponded with the rise and fall of the river.76

The former buffalo hunter stated that there were several times within the previous eight to twelve years prior to 1905 when there was no water flowing in the Arkansas River above the mouth of the Little Arkansas River.

When he was cross-examined by Clyde C. Dawson, attorney for Colorado, Mathewson testified that he had not seen any irrigation worth mentioning at any point along the river as early as 1856. In Wichita, the river had been narrowed artificially, but above and below the city, the river had narrowed naturally. He stated that during the dry season the river near Dodge City was often dry in the early days, but that it was more frequently dry east of Dodge City than west of the city. Mathewson was asked by Dawson if he had noticed that the flow of the river ran in cycles, and the witness replied that he had noticed it since 1890.77

Ransom H. Brown, Wichita city engineer, commented that since he had given testimony before the commission in August, 1904, he had run levels north and south of the Arkansas River at Mount Hope and Colwich for the purpose of checking the levels run by Professor L. G. Carpenter, who testified for Colorado. He had dug several wells in order to establish the

76 ibid., p. 89.
77 Topeka Capital, June 18, 1905.
relative levels of water in the river and in the ground. He found the river and ground water at right angles from the river to be the same. Such testing established that the river fed the underflow, or so the plaintiff thought.

Work on abstract begins. In early September, the taking of testimony completed, the lawyers began working on the abstract of the testimony, which they hoped to finish by October 9, 1905, when the next Supreme Court session began. Kansas planned to file a motion to have the case set down for a hearing, which would be held about sixty days later. In the interim Kansas would prepare its briefs, and arguments before the Court would be made when the case came up. Ashbaugh predicted a decision by the Supreme Court in early 1906.78

If Kansas won the case, irrigation in the Arkansas Valley would be allowed to everyone. Reservoirs for the preservation of flood waters would be constructed, thus water would be saved which was allowed to go to waste. There would be plenty of water for both states. The trouble with the Arkansas was not that it did not carry enough water for all irrigators, but that most of the waters came at one season, and it was allowed to go to waste.79

78 Kansas vs. Colorado and the United States of America, "Brief of Complainant on Final Hearing," No. 7, 94 (October Term, 1905).
The abstract was submitted to the court and the justices set the date of January 6, 1906, as the time by which the briefs must be filed.

A news article in the Topeka Capital charged that it was the object of the Colorado attorneys to extend delay because they were convinced they would lose the suit. The Colorado attorneys worked for the full benefit of the funds appropriated by the Reclamation Act. If Colorado received all the money appropriated for that state it could have nearly all the dams and reservoirs it wanted. If Colorado lost to Kansas, the appropriation would be divided among the states the government chose as semi-arid for the purpose of building water storage reservoirs.

If Kansas won the suit, it would mean the state could possibly be the number one producer of nearly all agricultural products just as it was in wheat. The value of Kansas products would almost double if the state was given the right to use the Arkansas River waters.

Because of the delaying tactics by the Colorado attorneys, Ashbaugh spent the summer in Denver preparing the abstract of the testimony. If the work had been done in Kansas, the Colorado attorneys would have found excuses for not being present. By going to Colorado, the defense attorneys could not help but be present, as a requirement of preparing the abstract was that a representative of each of the governments involved, Kansas, Colorado, and the United States, be present.80

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80 Topeka Capital, November 22, 1905.
F. Hearing Before the Supreme Court: 1906

Kansas completed the brief against Colorado on January 1, 1906. It contained about 300 pages and was illustrated with many photographs. Before the hearing began, Colorado and the United States Government had to file their briefs. The case would then be heard sometime in October, 1906.

The whole reclamation scheme adopted for improving western semi-arid lands hinged on the outcome of the Kansas-Colorado case. A decision in favor of Colorado would mean the crest state was entitled to all the water that fell within its boundaries.

The sum of the Kansas suit was that Kansas wanted Colorado to discontinue appropriation of all water in the river and store the flood waters for irrigation purposes. If this was done, both states would prosper. Up to this time the development of eastern Colorado had been almost entirely at the expense of Kansas. Kansas hoped to call a halt to this in order to develop the western Kansas river valley.  

Up to the beginning of the suit and during the suit there had been only two excessive floods, one in 1877 and one in 1904. Prior to 1890 the river did not go dry throughout its course in western Kansas except during the period of extreme drought or for a few days during the dry season of an extremely dry year.

81 Kansas City Journal, January 14, 1906.
The river disappears. Between the years 1888 and 1893 the waters of the Arkansas were diverted and the flow of the river through Kansas greatly diminished. For many months of the year the flow practically ceased. After 1890 the amount of water coming down the river in June rise was considerably less or else the rise did not appear at all. The time of the year when the river was sometimes dry or low during the early years was greatly lengthened, coming much earlier in the summer and lasting much longer, sometimes extending through the winter. As the river became drier, the bed of the stream narrowed.

The narrowing of the bed of the Arkansas River between its banks was shown by a comparison of the widths of the river in 1872, as shown by government survey, and by actual measurements in 1904. These figures are shown in Table III.

Table III

<table>
<thead>
<tr>
<th>CITY WHERE</th>
<th>1872 SURVEY</th>
<th>1904 SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syracuse</td>
<td>1,160</td>
<td>780</td>
</tr>
<tr>
<td>Garden City</td>
<td>1,181</td>
<td>980</td>
</tr>
<tr>
<td>Dodge City</td>
<td>1,528</td>
<td>550</td>
</tr>
<tr>
<td>Larned</td>
<td>1,486</td>
<td>500</td>
</tr>
<tr>
<td>Great Bend</td>
<td>1,584</td>
<td>700</td>
</tr>
</tbody>
</table>

82 Kansas v. Colorado and The United States of America, "Brief of Complainant on Final Hearing," No. 7, 45 (October Term, 1905).

83 Ibid., p. 48.
Water appropriations excessive. During the periods when the ditches with prior appropriations were not demanding the water to which they were entitled under their decree, then the ditches with later appropriations were given water to their entire carrying capacity, regardless of the decreed appropriations. This practice enabled Colorado irrigation corporations to divert and absorb the entire flow of the Arkansas within Colorado, thus leaving the stream in Kansas reduced to a rivulet.

The amount of water diverted directly for irrigation was not the only amount that was taken from the visible flow of the river. A number of reservoirs of enormous capacities were constructed for storage of water when it was not demanded by the ditch owners. The reservoirs with their available capacities were enumerated by Colorado witnesses. This information is given in the following table.

Table IV 84

<table>
<thead>
<tr>
<th>NAME OF RESERVOIR</th>
<th>CAPACITY IN CUBIC FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Laguna</td>
<td>185,011,890</td>
</tr>
<tr>
<td>The Queen</td>
<td>1,418,182,920</td>
</tr>
<tr>
<td>The King</td>
<td>796,233,732</td>
</tr>
<tr>
<td>The Neoshe</td>
<td>2,614,325,240</td>
</tr>
<tr>
<td>The Nee Sopah</td>
<td>1,022,113,630</td>
</tr>
<tr>
<td>The Nee Grondo</td>
<td>2,491,306,240</td>
</tr>
<tr>
<td>The Minnequah</td>
<td>57,275,000</td>
</tr>
<tr>
<td>The Savard</td>
<td>63,000,000</td>
</tr>
</tbody>
</table>

84 Ibid., p. 132.
The last two reservoirs were used for manufacturing purposes, not for irrigation.

Economy injured. Because the waters were diverted and impounded by Colorado, Kansas irrigators were without access to river water. The loss to the valley in terms of money was difficult to assess, but it extended to all tracts of land in the valley. The loss to the state and property owners was shown by the records of the Finney County clerk. The assessment rolls of fifteen quarters of land, selected at random, exemplified the problem which existed. Table V gives the assessed valuation of the quarter-sections of lands for three different years, as listed for taxation.

Table V

ASSESSED VALUATION OF QUARTER-SECTIONS OF LAND IN FINNEY COUNTY FOR TAX PURPOSES

<table>
<thead>
<tr>
<th>LAND DESCRIPTION</th>
<th>1889 VALUATION</th>
<th>1889 TAX</th>
<th>1897 VALUATION</th>
<th>1897 TAX</th>
<th>1903 VALUATION</th>
<th>1903 TAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW 23 22 34</td>
<td>$450.00</td>
<td>$13.67</td>
<td>$250.00</td>
<td>$8.15</td>
<td>$190.00</td>
<td>$7.79</td>
</tr>
<tr>
<td>NE 23 22 34</td>
<td>450.00</td>
<td>16.15</td>
<td>250.00</td>
<td>8.15</td>
<td>190.00</td>
<td>7.79</td>
</tr>
<tr>
<td>SW 23 22 34</td>
<td>450.00</td>
<td>13.67</td>
<td>250.00</td>
<td>8.15</td>
<td>190.00</td>
<td>7.79</td>
</tr>
<tr>
<td>SE 23 22 34</td>
<td>450.00</td>
<td>16.15</td>
<td>240.00</td>
<td>7.94</td>
<td>165.00</td>
<td>8.41</td>
</tr>
<tr>
<td>NW 25 22 34</td>
<td>450.00</td>
<td>16.15</td>
<td>240.00</td>
<td>7.94</td>
<td>165.00</td>
<td>8.41</td>
</tr>
<tr>
<td>NE 25 22 34</td>
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85Ibid., pp. 155-156.
In comparison, the valuations of lands in Prowers, Bent, and Otero counties in Colorado were valued at from $50 to $250 an acre, or not less than $100 an acre on the average. These lands were on the Colorado tax rolls at an average assessed valuation of $30 per acre.

**Colorado doctrine denounced.** If the Colorado doctrine was sustained, the reclamation of arid lands would be a failure and the whole reclamation project would be limited to the one or two crest states where the interstate streams took their rise. While such a limitation might have assisted a few small arid valleys in the upper states, it would have worked unlimited injury to the lower states.

A much larger area could be irrigated by the surplus waters when it was impounded than could be irrigated by the much smaller amount of water than flowed in the streams and rivers during the dry season of the year. That was the main purpose and object of the Reclamation Act. 86

**Principles of law support evidence.** In the brief which Kansas submitted in early January, Kansas summarized the evidence. In order to support the evidence, Kansas presented nine principles of law. The first principle of law Kansas proffered stated that the complainant could maintain the suit by virtue of its own sovereignty, as the owner of the bed of the Arkansas River, as the owner of riparian lands in the Arkansas Valley, as guardian or trustee for any portion of

86 Kansas City Journal, January 14, 1906.
its territory or citizens affected by any unlawful diversion of the waters of the river, and because the revenue derived from taxation was diminished by the diversion. Such cause was justiciable in the Supreme Court, the defendants were proper parties, and the Supreme Court had the jurisdiction and power to grant relief.87

The common law, including the doctrine of riparian rights, embraced the entire territory involved in the dispute down to August 1, 1876, when Colorado became a state. Many of the rights claimed were vested in the complainant and those for whom the state sued before that date and all the rights claimed were vested before the injuries complained of, and could not be changed by subsequent customs or laws in Colorado, without the consent of the vested owners of those rights.

The right of the state of Kansas and its citizens was a right to the usual and normal flow of the Arkansas River during ordinary years prior to the unlawful diversion, exclusive of floods and unusual high waters. The right of a riparian owner on a stream to its accustomed flow did not depend upon his use of the water, but special damage caused by diversion furnished additional ground for relief.

The underflow of the Arkansas River in Kansas was a subterranean stream, the right to which was vested in the owner

87Kansas v. Colorado and The United States of America, "Brief of Complainant on Final Hearing," No. 7, 186 (October Term, 1905).
of the surface, and its unlawful diversion, deprivation, or diminution was a substantial wrong for which equity would grant relief.

The use of the water of the river for water-power at Arkansas City became a vested right and the diversion of the water by Colorado decreased if not wholly destroyed the water-power. Such was a wrong which equity should enjoin.

The state of Kansas had a vested right in the system of irrigation in western Kansas and would maintain and protect such a system which affected a large part of its territory and citizens by any appropriate action. 88

In considering the rights and wrongs claimed, state lines were not to be considered as barriers to such rights or defense against such wrongs. When the rights of each state as to the flow of the river were mutually fixed, each could use the waters according to its own laws and customs. The existence of such laws and customs was neither grounds for attack or defense except when the rights of one of the parties was impaired.

Finally Kansas' ninth principle of law stated

Treating Kansas and Colorado in all respects as separate nations, and ignoring the vested rights of Kansas under the common law, the contention of Colorado with respect to its right to divert all the waters of the Arkansas river is untenable, and Kansas is entitled to relief. 89

88 Ibid., p. 187.
89 Ibid., p. 188.
Following the outline of the nine principles of law, the complainant's lawyers expounded on each principle. They concluded by asking that the court grant relief. The next step was the presentation of the briefs by Colorado and the federal government. Following that would be the hearing before the Supreme Court.

Irrigation water wasted. Mid-way through the summer, Senator F. Dumont Smith spent some time in Lamar, Colorado, inspecting an irrigation proposition for some eastern clients. He was astounded by the amount of water that was wasted. He recalled that the town began in 1886, and began to prosper three or four years later when the citizens began the use of irrigation.

Smith commented that the way they wasted water was "calculated to make a Kansas man cuss." He related that the water was turned loose to go about wherever it wanted to go. There was no return to the river and there was much waste by seepage and evaporation. He further said, "... it is safe to say that the amount of water used there would irrigate twice as much land if it were used with sense and discretion." 90

The Kansas lawyer said the Reclamation Bureau should begin the construction of storage reservoirs to hold surplus, storm, and runoff water should the court decision be favorable. The entire valley from Rocky Ford to Dodge City would have enough water to irrigate every acre of land in the valley and to build up one of the greatest farming communities in the

90Topeka Herald, July 10, 1906.
world. Smith asserted, "Colorado's hoggish policy is not only wrong in law and in good conscience but is also short sighted from a business standpoint."  

**Federal government files brief.** The United States filed its brief on September 5, 1906. The issue was regarded as important in its bearing upon future irrigation as stated earlier in this chapter. The brief, more than 200 pages in length, was signed by A. C. Campbell, special assistant attorney general; F. L. Campbell, assistant attorney general for the Interior Department; Henry M. Hoyt, solicitor general, and William H. Moody, attorney general.

Government counsel observed that the decision determining the success or failure of the national irrigation policy made this case one of the most important to be heard in the October term of court.

The brief reviewed the allegations made by the complainant and the defenses given by Colorado. The government also reviewed the statements made in its petition of intervention. In the argument section of its brief, the federal government stated there were about 100,000 acres of public land in the watershed of the Arkansas River, which, if irrigated, could sustain a population of 50,000 people. In the entire arid region of the United States there were from 60,000,000 to 150,000,000 acres of public land which, if irrigated, would be worth from $50 to $500 an acre and would support a population of from 50,000,000 to 100,000,000 persons.

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91Ibid.
George H. Maxwell, Chairman of the Executive Committee of the National Irrigation Association said:

In respect to the amount of land in the arid region which can be reclaimed by utilizing the waters of the streams there and by impounding the flood waters and using them, the Geological Survey has issued official reports in which the area is estimated at seventy-four million acres. I think Major (John Wesley) Powell, when he was the Director of the Survey, thought it might reach one hundred million acres. 92

In addition there were forty-seven Indian reservations within the arid region which contained approximately 48,000,000 acres on which were located 116,000 Indians. The reservations could be made to support the Indians only by irrigating from the streams. There were 200,000 acres within the reservations under irrigation as of 1906. Therefore, the government was deeply interested in the decree to be entered, "to the end that the reclamation of its arid lands may not be retarded or prevented." 93

Counsel for the federal government claimed that the reclamation and cultivation of arid lands belonging to government was indispensable to the future growth and prosperity of the nation. To support that claim, counsel commented that the impoverishment of the soil by tillage and by cultivation was going on everywhere except in a few flat regions in England and Belgium. Furthermore this impoverishment was already apparent in the United States as far west as the

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92 Ibid., p. 79.
93 Kansas v. Colorado and The United States, "Brief for the United States on Final Hearing," No. 3, 6 (October Term, 1906).
Mississippi Valley, and was very apparent in southern European countries.

The food supply is already a matter of serious import, and by reason of the steady growth in population the world will soon be near the food limit, unless there is a decrease in the birth rate or additional areas are added to the tillable lands. This additional area can only be had by drainage and by irrigation.\footnote{Ibid., p. 71.}

A Mr. Mead testified under cross-examination that well-irrigated land in the arid region produced far more per acre than an acre of land in the humid part of the United States. Also irrigated lands would support a larger population per acre by agriculture alone than would the humid country. This was possible because the conditions governing crop production were more largely under control, as a more scientific system of agriculture was used.

\textbf{Existence of underflow disputed.} One of the topics Kansas lawyers considered important in the case was the underflow. The United States took this subject and proceeded to question the complainant's testimony. Four of the intervenor's expert witnesses testified that the underground waters in Kansas were no different from the ordinary ground water found everywhere. Those waters did not depend upon and were not fed by the river except for a very narrow strip along the river banks. Many other witnesses not necessarily experts said essentially the same thing.\footnote{Ibid., p. 160.}
Charles S. Slichter, Consulting Engineer of the Geological Survey, spent several months near Garden City, Kansas, making investigations concerning the amount of underground water around the city and the source of those waters, in order to determine whether or not it would be practical to irrigate lands with the underground water. In his investigations he found that the water was supplied by rainfall and melting snow, and was not fed by the river.

The federal government's plan was to put in pumping plants to raise the water to the surface for irrigation purposes. Near Deerfield investigation had determined it was practicable to use pumping stations to recover 100 second-feet of ground water for about 150 days during each year. That amount of water would irrigate 15,000 acres of land, Slichter did not expect any ill effect on the ground waters at Garden City, seven miles down river.

In 1906 the federal government was constructing a pumping plant at Garden City at an estimated cost of $250,000. The purpose was to bring the underflow to the surface to irrigate 15,000 acres in Finney County. Up to the time of the printing of the brief, no protest by riparian owners in the Arkansas Valley below Garden City had been registered against the erection of the plant. Neither had any complaint been made to the effect that the pumping of water sufficient to irrigate 15,000 acres had caused a lowering of the level of the underground waters.96

96Ibid., pp. 162-164.
Counsel of Kansas contended that the underflow ran in a well-defined channel and were not percolating waters, that is, water which seeped through the soil. However, intervenor’s witnesses claimed that the waters were percolating. Clarence T. Johnston (1033) said

I have made some investigations with respect to what is called the underflow in the Arkansas Valley, and from this investigation I would say that it is percolating water. I am confident of that.\footnote{Ibid., pp. 168-169.}

Kansas made no claim to the effect that the subsurface water in the Arkansas Valley fed the stream, the waters of which were the subject of the controversy. On the contrary, counsel contended that the stream was the source of the subsurface water.

\textit{Antagonistic doctrines discussed.} Attorneys for the United States Government stated that the doctrine of riparian rights and of prior appropriations were antagonistic. They could not exist together, even though Kansas attempted to make the two doctrines do so. One placed no limitation on the places where water could be used and the other placed rigid limitations. The methods of acquiring titles to water and the methods of administration were entirely different.

\textit{Colorado’s sovereignty disclaimed.} In Section X of the brief, counsel for the federal government argued Colorado’s contention of sovereignty. The government claimed that the doctrine: a state, by reason of its sovereignty had “plenary
and exclusive right and power to control and regulate the use of nonnavigable waters within its boundary," would prevent the reclamation and cultivation of the public arid lands and defeat the policy of the government.

F. H. Newell, employed in the reclamation service, said that if the state in which an interstate stream originated persisted in taking all of the water before it reached the state line, this would destroy the irrigation possibilities in the lower state, as they were dependent upon the river waters that came from the upper state.98

Another witness for the intervenor, George H. Maxwell, asserted that if the state which was the source of an interstate stream should take all the water of the river it would have the effect of destroying the irrigation industries in the lower state. Also destroyed would be the agricultural development depending upon irrigation. Such a course would render the national irrigation act practically inoperative.99

Other witnesses offered testimony concerning the damage the Colorado doctrine, if upheld, could render in the arid region. All said essentially the same as Newell and Maxwell.

**New question posed.** The United States Government posed a perplexing question which had not been put forth by either the defendant or the complainant. The federal govern-

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ment questioned the application of the law in a situation where the waters of a nonnavigable interstate stream rose in and flowed through a state where the doctrine of riparian rights had been abrogated and then flowed into and through a state where the doctrine prevailed. The government considered this question crucial in the case before the bar. Upon its solution depended the continuation of the prosperity and future growth and development of the arid portion of the nation, and also the success of the government's policy in respect to the arid lands. A map of the nation showed that there was scarcely a stream of any importance in that region that was not inter-state. 100

Kansas argued in its briefs and through the news media that Colorado was using all the waters of the stream, and therefore the stream was often dry. The federal government countered saying that witnesses for the intervenor and the defendants testified that if irrigation in the upper state were confined to lands within the watershed of the stream it would be impossible to exhaust the flow of the river in the lower state. The witnesses claimed there would always be enough water in the stream bed in the lower state for domestic purposes. 101

The United States attorney claimed that the erection of reservoirs to impound the flood waters would maintain and

100 Ibid., p. 199.
101 Ibid., p. 205.
equalize the flow of the river in Kansas. This was necessary in order to carry out the policy of the government as indicated in the Reclamation Act.\(^\text{102}\)

In its closing remarks the government claimed it had a vital interest in the controversy:

that the reclamation and cultivation of the arid lands of the United States is indispensable to the growth and future prosperity of the nation; that the public arid lands can not be reclaimed if the main contention of either of the two States should be sustained; that the questions involved, in their nature and because they are of first impression, are of immense importance; and that because of the interests of the arid portions of the United States as well as the country at large, as distinguished from the interests of the two contending States, the Government, representing those larger interests, should be protected in any decree which the court shall enter herein.\(^\text{103}\)

**Kansas files reply brief.** Kansas was permitted to file a reply brief which was completed and sent to the participating parties on September 29, 1906. The brief was in reply to the arguments of the Colorado attorneys and of the federal government attorneys.

In Colorado's brief it was charged that the Arkansas River in Kansas was merely a bed of sand. According to counsel there never was enough water in the river to furnish water for man or beast. In defense the complainant asked several questions, a few of which were as follows:

\(^\text{102}\)Ibid., p. 206.

\(^\text{103}\)Ibid., pp. 208-209.
If the statement of counsel were true, what located the Santa Fe trail from Ellinwood, in Barton county, Kansas, to Bent's Fort, near the west line of Prowers county, Colorado? What made this trail the great national highway across the plains for more than half a century? What kept Fort Zarah, near Great Bend, and Fort Larned and Fort Dodge alive? . . . What induced "Buffalo" Jones to commence digging irrigation ditches around Garden City in 1879? Was it sand?

Kansas again charged that Colorado irrigators broke the river and that counsel was pleading its broken condition as an excuse for the breaking.

They are not content with creating one miracle, but insist upon two. They make a Colorado river empty nowhere or drain through impervious rocks into a different drainage area; and they make a Kansas river rise in nothing or in dry sand. Two rivers, one without a mouth and the other without a head.

The complainant accused Colorado of finding witnesses who had traveled over the Santa Fe Trail and found the Arkansas River either low or dry. However, Kansas attorneys noted that the witnesses saw the river only once or a few times during a few days, and these days were during the fall or low-water season of the year. In contrast to witnesses for Kansas who lived along the river, Colorado witnesses were simply passing through the country, seeing the river on but a single trip.

Seepage in the valley. Kansas next attacked a so-called theory that Colorado had developed. This theory was

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105 Ibid., p. 55.

106 Ibid., p. 57.
that the more water irrigators used from the river in Colorado the more even the flow would be in Kansas during the dry season of the year. This condition would have been true if Colorado had impounded the flood waters and turned them loose gradually during the dry season. However counsel for the complainant pointed out that this was not done.

The greater portion of the diversion in Colorado was made during the growing and summer season of the year. During that time, between Pueblo and the state line, all of the water was used, and then the irrigators did not get enough to supply the demands of the ditches. The dryer the season, the greater the effort that was made to capture it all, and none was permitted to escape into Kansas.

Witnesses agreed that at least two-thirds of the water was diverted into irrigation canals and ditches and spread out on the land for irrigation purposes. That fraction was lost by evaporation and absorption and the remaining one-third was left to settle into the ground. Only under the most favorable circumstances could it ever find its way back into the river below.107

It was conclusively shown that the canals and ditches along the Arkansas river between Pueblo and the state line were so located that each one in succession took all the water in the river at its headgate, together with all the seepage or return waters coming back into the river above that point.

107 Ibid., pp. 63-64.
Testimony showed that all the seepage waters were used in Colorado, and none went into Kansas except the seepage from the last ditch before the state line, which was too small an amount to be considered. Evidence further showed that in the future the return waters from Colorado ditches could never reach Kansas because the wants of the irrigators were constantly increasing far in excess of the water supply of the Arkansas River.\textsuperscript{108}

\textbf{Colorado's enhanced property.} Kansas attorneys argued that absence of express malice could not justify the acts of the defendants, nor could profitable investment be pleaded as against the taking and carrying away of the goods of another; neither could the extent of the investment nor the amount of the returns be a defense to the original act, and the greater the profit, the greater the wrong. Counsel for Colorado ignored the wrong done to other states and territories. In effect, they said that their spoilation was so great that it could not now be restrained. They pleaded their numbers and their money as against prior vested rights. The measure of Colorado's prosperity was Kansas' loss.

Apparently Colorado decided that the greater the wrong the greater the justification. A comparison of land values between the irrigable portions of the two states displayed the effect of spoilation. When Colorado began extensive

\textsuperscript{108} \textit{Ibid.}, pp. 64-65.
irrigation, Kansas had seven irrigation ditches, and the irrigable lands were being rapidly settled. The appropriators in Colorado arrested that growth and transferred the prosperity to Colorado.109

Colorado's defense seemed to indicate that they had taken so much that the irrigators would go bankrupt if they allowed water to flow in the river in its natural flow. This Kansas did not concede. Rather, Kansas believed that if the ditch owners were compelled to do justice, impound the flood waters, and use the water economically, no harm would be done. "It is the arrogant assertion of monopoly, the dominant right which they claim from geography alone, against which we contend and of which we complain."110

Against the monopoly of water appropriation Kansas protested and strongly disagreed with the contention that "might makes right and amount establishes title." Kansas insisted it was more profitable to the country on the whole to have a large area tilled by an extensive population than a small area intensively tilled by a limited population. The two irrigation systems should stand together, according to the complainant. With a proper construction of law and a proper use of water, the prosperity of both domains would be enhanced without injury to either.

109 Ibid., pp. 103-104.
110 Ibid., pp. 104-105.
The underflow argued again. A Mr. Johnson stated in his examination and in an article he authored that the ditches in Kansas were dry, and he contended they were dry because the normal river flow was depleted in Colorado by the larger ditches and the more numerous ditches.

He also supplied information concerning a lake which had since dried up. It had no visible source of supply. He had measured the fluctuations of the lake and found that the water was slightly higher than in the river-bed. If the lake had entirely sunken away within the last few years, he would not positively publish the reason, but he guessed that the ground-water plane over a large area had subsided, and the lake had subsided in correspondence with it.

If that lake . . . was large enough thirty years ago to have fished in it and was large enough for a comfortable swimming-pond for the men, and was used for that, and large enough for an outlet to run across the main street, with water enough in it to have ice-houses built upon it, and during the last five years that lake had entirely disappeared and the ground grassed over . . . as to the cause of this, I would make a guess there, too. . . . I would guess that the irrigation in the Arkansas valley to the westward has had a marked effect. . . . (1234) 111

A Mr. Newell was convinced that the taking of waters from the river by Colorado appropriators reduced the amount of water available to the Garden City ditches. Before that time, plenty of water was available. 112

111 Ibid., pp. 106-107.
112 Ibid., p. 108.
The case is postponed. The case was to have been heard by the United States Supreme Court in October, 1906. The hearing was postponed, however, because of the constitutional questions involved, until a full bench was secured by the appointment of a successor to Justice Henry B. Brown, who had resigned. Chief Justice Melville W. Fuller gave no promise when the hearing would take place other than that the case would be advanced to the head of the calendar as soon as a successor was appointed.\footnote{\textit{Wichita Eagle,} October 10, 1906.}

The case comes before the court. When the case came before the bar on December 17, 1906, Chief Justice Fuller allowed Kansas lawyers three and one-half hours for argument; he allotted the Colorado attorneys the same amount of time, but cut the United States Government to two hours. The several corporations were given a combined three hours.

Just before arguments began the newly appointed justice, William H. Moody, former United States Attorney General, vacated his seat, because his name appeared as an attorney for the government in the case.

Judge S. S. Ashbaugh, Kansas attorney, began the arguments. He reviewed how Kansans had noticed the decrease in the river and how the suit had been brought about. He enumerated the injustices done to Kansas by Colorado irrigators which have been set down in other parts of this chapter. Judge Ashbaugh concluded by asking that Colorado be enjoined.
from diverting the normal flow of the Arkansas River to the injury of prior vested rights in lower states, thus allowing them to supply their irrigation ditches from the excess waters. 114

The three litigants finished their arguments before the court at 4 p.m. on December 20, 1906. All were allowed to file briefs on certain points, but were admonished to have them in within five days because of the intricate questions involved and of the importance of the decision as it affected the government's reclamation scheme.

Up until the last week the federal government had sided with Kansas on nearly all the main questions that were raised, and in its brief it argued against Colorado's contention of complete sovereignty. However, in the verbal argument the government's attorneys reversed themselves and lined up with Colorado on nearly every point. 115

All that remained was for the court to issue its opinion. Kansas attorneys were confident of victory, perhaps overly confident, as they predicted success wherever possible. Kansas lawyers had labored six long years gathering testimony, writing briefs, seeking legal points of law, and defending itself against two governments. It was a bitter defeat to

114 Kansas City Journal (Missouri), December 18, 1906.

115 Kansas City Journal, December 21, 1906. Research materials available in Kansas do not give any reason for the federal government's shift.
have the United States Government side with the defendant, Colorado, on most points of law, as Kansas had welcomed the government's intervention. Indeed the federal government had sided with Kansas earlier in the suit. The government's defection to the defendant seemed a forecast of events to follow.
CHAPTER V

THE SUPREME COURT DECIDES

Seven years of litigation had passed. Kansas was confident of victory. The state's attorneys could not see how the Supreme Court justices could decide for Colorado when the decision would obviously affect so many other states in the arid region. Kansas lawyers reasoned that if Colorado could deny irrigation water to Kansas, it could also deny the same to other states, which by reason of geography, were lower river states. The decision would decide whether the rights of contending states were to be determined by rules that applied to individuals or whether the principle of state sovereignty still operated within the union's boundaries, so as to put the defendant in this case beyond the jurisdiction of the Supreme Court.¹

On May 13, 1907, the United States Supreme Court dismissed without prejudice the Kansas-Colorado water suit. Dismissal was without prejudice to the right of Kansas to serve its petition whenever it could show that the state was substantially injured. The federal government was ruled not

¹St. Louis Post-Dispatch, April 27, 1902.
able to control the interstate streams of the West for the purpose of reclaiming arid lands; it must get its water supply under state laws.  

The main questions in litigation. The main questions of fact decided were that irrigation by Colorado appropriators depleted the amount of water which would otherwise flow into Kansas; that some detriment was worked to southwest Kansas; that withdrawal of water in Colorado for irrigation had not proved a serious detriment to Kansas counties along the Arkansas river, was not sustained evidence; and that the contention of Kansas that the so-called underflow constituted a subsurface stream was not supported by the evidence.  

The controversy also concerned the amount of the flow subject to the superior authority and supervisory control of the United States. The court pointed out that although the power to change the common law with regard to the rivers rested with the individual states, two limitations had to be recognized.

First, that in the absence of specific authority from Congress a State cannot by its legislation destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters; so far at least as may be necessary for the beneficial uses of the Government property. Second, that it is limited by the superior power of the General Government to secure the uninterrupted navigability of all navigable streams within the limits of the United States.  

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2 Toppeka Capital, May 13, 1907; Kansas City Journal, May 13, 1907.

3 Kansas City Journal, May 13, 1907.

4 Kansas vs. Colorado, 206 U.S. 46, 86 (1906).
If the National Government was asserting that the appropriation of water for irrigation affected the navigability of the river, it would be the duty of the court to determine the truth of the charge. However the government made no such contention. It asserted that the Arkansas River was not and had never been really navigable beyond Fort Gibson in Indian Territory, and nowhere claimed that the appropriation of water by Kansas or Colorado affected its navigability.5

**Enumerated powers of the government.** The government rested its petition of intervention upon its duty of legislating for the reclamation of arid lands. It claimed that the determination of the rights of the two states in regard to the flow of waters in the river was subordinate to a superior right on the part of the National Government to control the entire reclamation system of arid lands. That assertion involved the question: Was the reclamation of arid lands one of the powers granted to the federal government? Justice Brewer quoted from a former case concerning enumerated powers.

"The Government, . . . of the United States, can claim no powers which are not granted to it by the Constitution and the powers actually granted, must be such as are expressly given, or given by necessary implication." Story, J., in Martin v. Hunter's Lessee, 1 Wheat. 304, 326.

... Turning to the enumeration of the powers granted to Congress by the eighth section of the first article of the Constitution, it is enough to say that no one of them by any implication refers to the reclamation of arid lands.6

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5Ibid., p. 87.
6Ibid., pp. 87-88.
Therefore the Supreme Court held that it was beyond the power of Congress to legislate with respect to the division of water of an interstate stream; that the only control Congress had over streams was with respect to navigation; that land belonging to the federal government within the states was subject to state laws; and that the Constitution did not give Congress sufficient power for the reclamation of arid lands, except perhaps in the territories.  

In the second paragraph of section three, Article IV of the Constitution, it reads:

"The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State."

The full scope of this paragraph does not grant to Congress any legislative control over the States, and must, so far as they are concerned be limited to authority over the property belonging to the United States within their limits. . . . the proposition that there are legislative powers affecting the Nation as a whole which belong to, although not expressed in the grant of powers, is in direct conflict with the doctrine that this is a government of enumerated powers."

Concerning the arid lands in the territories and within the states, the opinion of the court further declared:

These arid lands are largely within the Territories, and over them by virtue of the second paragraph of section 3 of Article IV heretofore quoted, or by virtue of the power vested in the National Government to acquire territory by treaties, Congress has full power of legislation, subject to no restrictions other than those expressly named in the Constitution,

7 Kansas City Journal, May 13, 1907.
and therefore, it may legislate in respect to all arid lands within their limits. As to those lands within the limits of the States... the National Government is the most considerable owner and has power to dispose of and make all needful rules and regulations respecting its property. We do not mean that its legislation can override state laws in respect to the general subject of reclamation.\(^9\)

**The evidence of the states.** The opinion turned to the evidence presented by Kansas and Colorado. It cited parts of the evidence to support the decision issued by the justices. The court recognized that Colorado was possibly taking more than its fair share. The amount of water authorized to be taken from the river was 4,200 cubic feet, and from its affluents and tributaries 4,300 feet. The average flow of the river as it exited from the Royal Gorge was 750 cubic feet. Thus it appeared that the irrigating ditches were authorized to take from the Arkansas River much more water than passed in the channel into the valley. It was difficult to determine how much surplus water, if any, came from the tributaries. There were twenty-five tributaries and the average flow from four of them into the Arkansas River was 313 cubic feet.\(^10\)

**Population tables studied.** Tables presented by the complainant and the defendant were carefully studied by the justices. They perceived that in the counties of Kansas and Colorado concerned, a considerable increase in population was found for the years 1880 to 1890. While the Colorado counties

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\(^{9}\)Ibid., p. 92.

\(^{10}\)Ibid., pp. 106-107.
continued their increase from 1890 to 1900, the Kansas counties declined. As the withdrawal of water in Colorado for irrigation purposes became effective about the year 1890, it was possible to conclude that the diminished flow of the river in Kansas, caused by the appropriation in Colorado, had resulted in making the land unproductive, and therefore, induced settlers to leave.

However, the court indicated a number of historical events which occurred about the same time which could have played a part in the decrease of population. In the years preceding 1890, Kansas had experienced a depression, with large crop failures in different parts of the state. The other event was the Oklahoma land rush. In 1889, the territory was opened for settlement and there was a large immigration into that territory. Because Oklahoma lay directly south of Kansas, many immigrants, induced by glowing reports of its great possibilities, had left that state.\textsuperscript{11}

In examining the tables of corn and wheat production, the justices deduced that there was no marked injury which could be attributed to a diminution of the flow of the river. Although the population from 1890 to 1900 diminished, the corn and wheat production largely increased.

The official figures, which were taken from the United States census reports, tended to show that the withdrawal of

\textsuperscript{11}Ibid., p. 112.
the water in Colorado had not proved a source of serious
detriment to the Kansas counties along the Arkansas River.
At one time, the court noted, there were some irrigating
ditches in the western Kansas counties, and it was true that
those ditches had ceased to be of much value, the flow in
them having largely diminished.

It cannot be denied in view of all the testi-
mony . . . that the diminution of the flow of water
in the river by the irrigation of Colorado has
worked some detriment to the southwestern part of
Kansas, and yet, when we compare the amount of
this detriment with the great benefit which has
obviously resulted to the counties in Colorado,
it would seem that equality of right and equity
between the two States forbids any interference
with the present withdrawal of water in Colorado
for purposes of irrigation.\(^\text{12}\).

\textbf{Court disclaims underflow.} Justice Brewer, in pro-
claiming the court's decision, discussed the justices' findings
centering the underflow. The Kansas claim of a second river
with the same course as that on the surface, but with a
distinct and continuous flow, did not warrant such a finding,
according to the testimony. In many places there was a
current beneath the surface. The presence of subsurface water,
in places of considerable amount and running in the same
direction, was something very different from an independent
subsurface river flowing continuously from the Colorado line
through the State of Kansas. Such waters should be regarded
as merely the accumulation of water which was always found
beneath the bed of a river whose bottom was not solid rock.

\(^{12}\text{ibid.}, \text{pp. 113-114.}\)
Naturally the more abundant flow of the surface stream and the wider its channel would mean more subsurface water. If the entire volume of water passing down the surface was taken, the subsurface water would gradually disappear, and, in that way, the amount of the flow in the surface channel coming from Colorado might affect the amount of water beneath the surface.

Therefore, the court ruled that the testimony given in reference to the subsurface water, its amount, and its flow, bore only upon the question of the diminution of the flow from Colorado into Kansas caused by the appropriation in the defendant state.\textsuperscript{13}

Conclusions are listed. Following more discussion of the river and its erratic flow, the court summed up its conclusions.

\begin{quote}
\ldots we are of the opinion that the contention of Colorado of two streams cannot be sustained; that the appropriation of the waters of the Arkansas by Colorado, for purposes of irrigation, has diminished the flow of water into the State of Kansas; that the result of that appropriation has been the reclamation of large areas in Colorado, transforming thousands of acres into fertile fields and rendering possible their occupation and cultivation when otherwise they would have continued barren and unoccupied; that while the influence of such diminution has been of perceptible injury to portions of the Arkansas Valley in Kansas, particularly those portions closest to the Colorado line, yet to the great body of the valley it has worked little, if any, detriment, and regarding the interests of both States and the right of each to receive benefit through irrigation and in any other manner from the waters of this stream, we are not
\end{quote}

\textsuperscript{13}\textit{Ibid.}, pp. 114-115.
satisfied that Kansas has made out a case entitling it to a decree. At the same time it is obvious that if the depletion of the waters of the river by Colorado continues to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits and may rightfully call for relief against the action of Colorado, . . . in appropriating the waters of the Arkansas for irrigation purposes.\textsuperscript{14}

The decree pronounced. The decree was issued following the summation of conclusions.

The decree which . . . will be entered will be one dismissing the petition of the intervenor, without prejudice to the rights of the United States to take such action as it shall deem necessary to preserve or improve the navigability of the Arkansas River. The decree will also dismiss the bill of the State of Kansas as against all the defendants, without prejudice to the right of the plaintiff to institute new proceedings whenever it shall appear that through a material increase in the depletion of the waters of the Arkansas by Colorado, its corporations or citizens, the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two States resulting from the flow of the river.\textsuperscript{15}

Bitterness voiced. Following the opinion issued by the United States Supreme Court, the \textit{Wichita Eagle} complained editorially that there were two sides to the decision -- one funny and one serious.

The facetious phase . . . inheres in the fact that the supreme court of Kansas having held that the average Kansan shall indulge in no beverage save water, the United States supreme court now steps in and denies him his water rights. The serious aspect of the decision is embodied in the holding that the Colorado . . . ditch digging corporations can go on, unhindered, diverting the waters of the Arkansas

\textsuperscript{14}\textit{Ibid.}, p. 117.

\textsuperscript{15}\textit{Ibid.}, pp. 117-118.
river, for their own benefit until not a drop is left in the main channel, granting Kansas . . . the privilege of bringing suit after the water is all gone and the ditch diggers have acquired vested rights such as no court would dare touch. 16

According to the editorial, the decision appeared to be another pinching provision in the Supreme Court as the federal government was barred from intervening in behalf of the navigable possibilities of the stream. Furthermore the decree had the effect of sequestering the waters of the upper Arkansas River in their entirety and of wiping the river off the face of the earth. Lastly, the editorialist charged, "The boasted bulwark of American liberty and equity is being demolished by judicial decision based on technicalities." 17

Thus the decree was issued after seven long years of litigation. The only question the court appeared to have settled was the part the federal government could play in the development of the arid western states and territories, and that was to more or less prohibit it from development unless the government subjected itself to the various state laws. As far as Kansas was concerned, the court admitted Kansas was not receiving much water, but it really was not severely injured. Nevertheless, the justices left the door open to further litigation should conditions warrant. And as the years passed, the suits began to mount. Some were settled out of court, some were dropped, and one was finally settled by a compact.

16 Editorial in the Wichita Eagle, May 15, 1907.
17 Ibid.
CHAPTER VI

ARKANSAS RIVER COMPACT OFFICIALLY ACCEPTED

All during the court suit and the 1907 decision, much opposition was heard. It seemed to be more vehement after the decision than before; no doubt this was due to the amount of money spent in what became a lost cause. Many Kansans criticized the state government for undertaking the extended court battle.

Early in the court suit one critic declared that the development of the western states was synonymous with the growth of irrigation in those states. If one took away irrigation, he would knock the props from under every enterprise in the Pacific and mountain states. The irrigation system was based upon the right to private appropriation of water under the regulations which had grown to uniformity all over the west. It was a right based upon public policy and had all the justification that could be found for the right to private ownership of land.

With the element of uncertainty in the air, great financial losses were sustained by the people of Colorado and most of the west. The bottom dropped from the value of irrigation stocks and bonds and the lands irrigated by ditches
were unsaleable. Public confidence was destroyed. A reporter claimed that the lawyers of the promoters had advised them that the success of the Kansas suit would destroy all water rights. He charged that "the material progress of America waits upon the barratry of a Kansas lawyer and the demagogism of a Kansas politician. It is time the people of Kansas stood from under the responsibility for this inquitous suit."¹

**Suit labeled a graft.** Following the Supreme Court's decision, a news item in the *Topeka Capital* sounded bitter in its comments concerning the loss of the suit. It charged that the case was "probably one of the most lucrative grafts ever put through the Kansas legislature under the name of legitimate expense."²

The 1905 legislature had appropriated $15,000 to pay expenses and three lawyers. That was looked upon with suspicion by a number of people in the state. When the 1907 legislature appropriated $3,000 a piece additional for each of the attorneys, everyone, according to the *Capital*, regarded it as a doubtful transaction, and many legislators publicly declared it to be a graft.³

The following figures are a record of expenses taken from Attorney General C. C. Coleman's report:

¹*Topeka Daily Herald*, January 3, 1903.
²*Topeka Capital*, May 13, 1907.
³Ibid.
S. S. Ashbaugh, attorney's fee ................ $5,050.00
N. H. Loomis, attorney's fee ..................... 750.00
P. Dumont Smith, attorney's fee .............. 1,000.00
Printing record .................................. 1,100.00
Expenses, including fee of commissioner
and report ...................................... 6,548.46
Balance December 4 .......................... 551.54
$15,000.00

The balance was barely sufficient to pay the expenses of the attorneys at the final hearing of the case in Washington D.C., on December 17, 1906. 4

John R. Mulvane, who knew western Kansas and the Arkansas River well, was glad the suit was thrown out. He asserted that the suit was a graft and that the Supreme Court apparently recognized the fact. He related that he had seen many small streams below Rocky Ford flowing into the Arkansas River with the result that there was always water in the river. He also claimed that Colorado was doing Kansas a service by impounding the water in reservoirs, as it prevented flooding during certain seasons of the year. 5

Individual suits filed. The 1907 decision of the Supreme Court did not settle the problem. On October 30, 1909, the Finney County Water Users Association, which maintained the Farmers' Ditch, applied to a state court for adjudication of priorities among various Kansas users of the river water. One of the defendants, the United States Irrigating Company, removed the cause to the United States District Court. A

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4 *Topeka Capital*, May 14, 1907.
consent decree was entered May 16, 1911, which provided for the allocation and rotation of use among most of the Kansas ditches. It was provided that the settlement would remain binding upon the parties only until the adjudication of other litigation before the court.6

On August 27, 1910, the United States Irrigating Company, a subsidiary of the Sugar Company at Garden City, sued Graham Ditch Company and others holding Colorado priorities, in the United States District Court for Colorado. It sought to restrain the appropriators from diverting water in Colorado to the alleged injury of Kansas ditches. The suit also sought to establish the company's priority for the ditches that it owned in Kansas, the Garden City, Southside, Great Eastern, and Amazon, for the purpose of proving its right to the river water.7

Evidence was taken, but the suit was settled out of court on February 19, 1916, for $125,000 cash and took a priority date of August 27, 1910, which was worthless, as it automatically gave the Colorado ditch owners prior rights to the river water.8

The Finney County Water Users Association was denied intervention in the 1910 suit and declined to become a party.


7Hans Kramer, Report to the Congress of the United States on the Proposed Arkansas River Compact Between Colorado and Kansas, April 6, 1949, p. 3.

to the contract settled in 1916. Instead the Association brought suit against the same defendants of the 1910 suit on November 27, 1916, in the United States District Court for Colorado, asserting its claim to priority for the year 1881. A motion to dismiss was denied and the case continued until the United States Supreme Court decided two cases concerning whether a priority on an interstate river could be asserted by an appropriator in the lower state against appropriators in the upper state. When the Supreme Court decided in favor of the lower appropriators, the Water Users Association instituted a second suit on January 29, 1923, against all of the appropriators on the tributaries of the Arkansas River.

While the Water Users Association versus Colorado irrigators case was pending, an effort was made to settle the dispute by compact between the years 1921 to 1923. Commissioners were appointed by each state. The commissioners met and negotiated a compact, but neither state approved their work. 9

Colorado files suit. Testimony taken by the attorneys for the Association was completed in 1926. Colorado counsel for the various irrigation interests announced that they were not going to take any testimony in the case before the bar. Instead they would bring an original suit in the United States

Supreme Court, and on January 24, 1928, Colorado filed its bill against Kansas and the Finney County Water Users Association.¹⁰

In the 1928 suit, Colorado asked for an injunction against the Finney County Water Users Association to restrain them from further maintaining their suit in the United States District Court for Colorado. The suit also asked that Kansas be enjoined forever from making any claim or asserting any rights to any part of the river's flow, or bringing any suit. Kansas by counterclaim, asserted that Colorado water users had increased their diversions to the substantial injury of Kansas since the 1907 decision and requested a judicial apportionment of the stream flow between the two states. A Special Master was appointed by the court to take voluminous testimony covering a period of nearly ten years.¹¹

Two years later a news article in a Larned paper stated the counterclaim by Kansas requesting a judicial apportionment of the water was a new legal action filed in 1930.¹² A Kansas City paper also reported a suit by Kansas was reinstated under the conditions imposed in the 1907 decree.


¹²*Larned Tiller and Toiler*, December 2, 1942.
The paper claimed the imposed conditions existed in the drought years when the farmers along the river did not receive sufficient water. Kramer in his report to the Congress simply stated the request as a counterclaim and gave no date. The Supreme Court Report of 1942-1943 does not suggest a separate suit filed by Kansas.

**Kansas and Colorado sign Stipulation.** While the Colorado-Kansas suit was pending, and when federal authorization for the Caddoa Reservoir Project on the Arkansas River was urged, Kansas and Colorado entered into a Stipulation, dated December 18, 1933. Both states agreed to use their influence to obtain the construction of the project and agreed to maintain the status quo of the use of the river waters by specifying an allocation of reservoir water between the two states.

A dam site is proposed. The proposal to build a dam had begun in 1922 when M. C. Hinderlider, Colorado state engineer, surveyed a site near Caddoa. The real drive did not begin until August, 1933, when residents of the Arkansas valley met in LaJunta, Colorado, to discuss the project with Colorado boards of county commissioners.

A mutual corporation was organized under the laws of Colorado in 1934, and operated until the passage of a special

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13 *The Kansas City Times*, July 30, 1941.

act of the Colorado legislature created a conservancy district. The new organization was known as the Caddoa Reservoir and Arkansas River Basin Conservancy and Improvement District. Members of the board were Arthur Dean, Las Animas, president; J. D. Craighead, La Junta, vice president; Vena Pointer, Pueblo, secretary; M. M. Simpson, McClave, treasurer; W. L. Sickenberger, Manzanola; A. C. Gordon, Lamar; and R. S. Grier, Hartman, director.¹⁵

In April, 1934, a group identified with efforts to obtain construction of the dam, originated a resolution which was passed by the National Rivers and Harbors Congress. Projects approved by the army engineers would be projects that Congress would approve and would urge an appropriation for their completion. Those involved in the writing of the resolution were George S. Knapp, chief engineer for the Kansas Department of Water Resources; R. G. Walters, Garden City, state senator; J. P. Nolan, Garden City; M. C. Hinderlider, Colorado state engineer, and Arthur Dean, president of the Caddoa conservancy organization.

**Flood control bill passed.** The flood control bill of June 22, 1936, designated the Caddoa project as one favored by Congress. Under the bill, the President could allot funds on a basis of $10,000,000 for its construction. The bill provided that a state or other political sub-division must meet three requirements:

¹⁵*Garden City Telegram*, June 8, 1937.
(1) furnish all rights-of-way and easements for the construction, and those lands which would be submerged; (2) save and hold the federal government free from any damage during the period of construction; (3) accept, maintain, and operate the completed project. 16

The first of the three requirements proved to be a stumbling block to advocates of the Caddoa reservoir. The provision indicated that local units, states, or conservancy districts were required to purchase land which would be submerged at an estimated cost of $280,000. If the provision was carried out, the benefit district would be responsible for moving the Santa Fe railway tracks which followed the valley, for moving the Western Union Telegraph Company, and Postal Telegraph and Mountain Telephone and Telegraph Company lines, and for providing a new right-of-way for the Arkansas Valley Natural Gas Company. Cost estimates ranged up to $2,250,000.

At a public hearing on December 11, 1936, with Lieutenant Colonel E. Raybold, chief of the army engineers in the Memphis area, Colorado representatives reported having a conservancy district which would assume Colorado's share of the cost. Kansas representatives informed the gathering that the state expected to adopt a conservancy bill in the 1937 legislative session.

The local cost angle remained the most perplexing aspect. Such problems as the removal of the railway, the division of costs and water, plus other matters relating to

16 Ibid.
the purchase of the site, needed to be worked out. Representative Clifford R. Hope, Kansas seventh district congressman, stated that there appeared a remote chance to "secure an amendment to the present flood control bill by which the federal government would purchase sites and pay for the removal of utilities." He believed that an announced policy by President Franklin D. Roosevelt, which favored projects calling for a larger amount of labor and less material, was favorable to the Caddoa proposal, because a large portion of the cost would be for labor. 

New bill solves problems. A new flood control bill was rewritten in the last days of the 1938 session of Congress, to allow the federal government to stand the entire expense of reservoir construction for flood control purposes. The act also provided that the national government would take title to power generated at any such reservoirs.

Construction begins. Construction of the dam was begun under the corps of engineers, Little Rock, Arkansas, district, but in June, 1939, the job was transferred to the jurisdiction of the Caddoa district which established headquarters at the dam site with Captain James Stratton in charge. Terms of the contract for the construction of the main dam specified that the contractors must complete the project

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17 Ibid.
18 Ibid.
within 1,000 days after notice to start work was given, so that by the summer of 1943, the reservoir would be a reality.\textsuperscript{20}

The army engineers referred to Caddoa as a multiple purpose project with flood control as its primary purpose. The second aim of the project was water conservation, which to the farmers of the area meant water for irrigation. The engineers stated that flood control space in the reservoir would handle any flood of importance on the river.

**Problems concern officials.** A question often asked concerning the dam was whether or not silting would fill the reservoir. Captain Stratton admitted that silting was a problem, just as it was in the construction of every reservoir. In Caddoa's case, the best estimate said silting would occur at the rate of 4,000 acre-feet per year.

Another question that arose over the silting concern was, would the dam have "paid out" the cost of construction and maintenance in the form of benefits before silting made it useless? In Caddoa's case, the economic life of the reservoir was estimated at fifty years. If the silting continued at the estimated rate, 250,000 acre feet of storage capacity would be lost at the end of the economic life of the dam. With the original dam paid for through benefits obtained, further expenditures to solve the silting problem would be justified.\textsuperscript{21}

\textsuperscript{20} *Garden City Telegram*, June 12, 1940.

\textsuperscript{21} *Ibid.*
The dam would have been completed in early 1943 by the installation of large steel gates on top of the structure, but priorities were denied for the gates and without them the dam's capacity was only 270,000 acre-feet, as opposed to the total capacity of 655,000 acre-feet. The United States Corps of Engineers reserved 170,000 acre-feet for flood control and the remaining 100,000 acre-feet capacity for irrigation. However, it was not enough to satisfy all parties.22

The total effect of Caddoa was to "smooth out" the flow of the river. The large floods were caught and held until the water was needed by farmers, at which time it was released at a rate of 2,000 second feet.23

**Tentative agreement reached.** Under the terms of the Kansas-Colorado tentative agreement on the division of waters impounded by Caddoa dam, Kansas received 77,000 acre-feet of the 203,000 acre-feet normally available for irrigation, and Colorado received the remainder. The discharge of the river in excess of the 203,000 acre-feet was divided equally between the two states.

Figures kept over many years showed an average annual diversion by Kansas ditches of 75,000 acre-feet. Over the years the diversion was not controlled, and the farmers took water when it was available whether they needed it or not.24

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22*Larned Tiller and Tiller*, December 2, 1942.

23Second feet refers to a measurement used by engineers meaning 2,000 feet of water released every second.

24*Garden City Telegram*, June 12, 1940.
The average annual flow of the river from 1914 to 1937 had been 315,000 acre-feet at the reservoir site. With perfect control of the water, it would be possible to divert most of the flow to irrigation purposes. As previously mentioned, the total storage capacity of the reservoir was 655,000 acre-feet. Of that figure, 385,000 acre-feet was devoted to water conservation and 270,000 acre-feet set aside for flood control.

New name for the dam. The dam and reservoir near Caddoa, Colorado, was first named Caddoa dam, but the name was later changed to the John Martin reservoir project in honor of the late Colorado Congressman, who had died shortly after construction began. He and Congressman Hope of Kansas had worked incessantly for the approval of the project.25

While the dam was under construction, Kansas and Colorado officials attempted to formulate a settlement. Such a settlement was agreed upon in Topeka on May 26, 1941. Under the agreement Kansas was to receive more water for the growing crops when the dam was completed. The exact terms were not announced, as the details were subject to change as the final agreement was concluded.

Negotiations were discontinued by either side, often on the flimsiest excuses. The May 26 meeting nearly came to an end because some Colorado officials presented a new proposal which the Kansans had not seen. It was customary for each

25 Ibid.
new proposal to be submitted to the other side previous to a scheduled meeting. This had not been done. The proposal concerned what would be done in the event of other contingencies. Just what the other contingencies were Colorado officials did not record. The Kansans declined to consider the project, and until Governor Payne Ratner of Kansas and Governor Ralph L. Carr of Colorado straightened out misunderstandings, there was much heated debate.  

The completed, tentative drafts of the agreement were expected in a month's time and the conferees agreed to meet at the end of June, 1941. But when the proposed settlement was received by Governor Ratner and Attorney General Jay S. Parker, they termed it "entirely unsatisfactory."  

The stipulation was not in accord with the agreement reached at the May 26th conference. It brought in items that were not discussed and set standards which were far from anything discussed. It established an index station at Salida whereas Kansas officials had agreed to accept the measurement of river water at either Canon City or Pueblo.

Another provision provided that if anything happened to Caddoa dam, causing it to become useless or silted up, Kansas was to be the sole loser. The stipulation was returned to Colorado officials with the statement

that unless Colorado is ready to proceed with the stipulation as outlined in the three conferences, that Kansas would ask . . . for the

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26 Kansas City Times, May 27, 1941.

27 Kansas City Times, July 30, 1941.
Supreme Court to fix a final date for filing the briefs and abstracts of the evidence and set a definite time for hearing the arguments.  

Meetings continued through 1942 and it appeared the suit would be settled. This was not to be when it became apparent that the John Martin Dam and Reservoir could not be completed until the end of World War II. The Kansas irrigators pressed for an allocation, so the Supreme Court appointed another in a long line of masters to begin a series of hearings in Denver.  

**Supreme Court delivers opinion.** Apparently little was done in the way of negotiations in 1943 as the two states were busy preparing briefs and abstracts for the hearing before the United States Supreme Court.

On December 6, 1943, the Supreme Court delivered its opinion in the Colorado versus Kansas suit. The decree granted the injunction sought by Colorado, and rejected the Special Master's findings and recommendations in declining to decree other relief for which Colorado had asked and Kansas had claimed.  

The court's opinion further admonished the litigants to compose the controversy.  

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29 *Learned Tiller and Toiler,* December 2, 1942.

by negotiation and agreement, pursuant to the compact clause of the federal Constitution. We say of this case . . . that such mutual accommodation and agreement should, if possible, be the medium of settlement, instead of invocation of our adjudicatory power. 31

**Patterson Plan proposed.** In March, 1944, officials of the two states and a representative of the federal government met to discuss and plan a temporary arrangement for the administration of the Caddoah dam. Colorado presented a document known as the Patterson Plan. The section of the plan which concerned Kansas irrigators the most was that when the irrigation pool was empty the priority rights of all appropriators along the Arkansas River in Colorado, both above and below the Caddoah project, shall be administered in accordance with said priority rights, as in the past, and as though the Caddoah project had not been constructed, and at such times no appropriator, water user, ditch, reservoir or other claimant in Colorado shall be denied or limited in his or its right of diversion or use of water in order to supplement or increase the Stateline flow then entering Kansas. 32

After consideration of the Patterson Plan, Kansas irrigators rejected the proposal, and so informed Governor Andrew Schoeppel. In a letter to Governor John C. Vivian of Colorado, dated April 11, 1944, Governor Schoeppel formally rejected the Patterson Plan and presented four counter-proposals.


32 *Record of Proceedings of Kansas-Colorado meeting (March 27 and 28, 1944, Denver, Colorado) concerning Temporary Plan of Administration of Water of Arkansas River, MSS, Governor Andrew Schoeppel Papers, Kansas State Historical Society, Topeka, Kansas.*
1. ... Kansas makes definite request for the release of one-half of the accumulated storage in Caddoa Reservoir, to be made when and as designated by Kansas.

2. After the present storage is released no more water shall be stored for irrigation purposes until such time as a temporary agreement can be reached. ...

3. Colorado is ... requested to appoint representatives to meet with representatives of Kansas to formulate an agreement for further temporary storage.\(^{33}\)

The fourth proposal stated that if Colorado was unwilling to agree to the first three items, the Kansas officials would request the United States Army Engineers to open the gates of the dam and to desist from interfering with the free flow of the water into Kansas.\(^{34}\)

**Colorado rejects Kansas proposals.** The Colorado officials did not feel that the irrigators within their state would agree to the four proposals put forth by Kansas. Furthermore, both Attorney General Gail L. Ireland and Governor Vivian felt the Patterson Plan should receive a thorough try-out before the two states could determine upon what facts the two states could agree.\(^{35}\)

Colorado's attorney general indicated the difficulties state officials were having with the water users in that state.

\(^{33}\)Letter from Schoeppel to Governor John C. Vivian, April 11, 1944, MSS, Schoeppel Papers, Kansas State Historical Society.

\(^{34}\)Ibid.

\(^{35}\)Letter from Governor John C. Vivian to Schoeppel, April 19, 1944, MSS, Schoeppel Papers, Kansas State Historical Society.
Ireland stated that it had been a "real task" to get the irrigators to agree to the Patterson Plan even as an experiment. Furthermore Colorado officials could not enter into a compact on any terms, until a plan agreeable to the irrigators had been given a trial, because any plan or compact would not pass the state legislature. 36

**Patterson Plan accepted.** On May 31, 1944, representatives of Kansas and Colorado conferred in Topeka, and came to an agreement on the Patterson Plan. Kansas officials at the meeting accepted the plan as an experimental one to be tried out until April 1, 1945. The plan did not constitute any binding precedent upon either state, but was for the purpose of obtaining information on operational procedure and results.

The plan provided for the operation of the irrigation pool in Caddo Reservoir in accordance with the authorized purposes of the John Martin (Caddo) Reservoir Project, and for the administration of the rights of appropriators along the river in Colorado. Other provisions provided for the maintenance of pre-Caddo relations between the two States, a proportionate division between the water users of the two States of such additional supplies as would be available for increased use through operations of the reservoir, and the prevention of future local and interstate disputes and litigation. 37

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Legislature authorizes compact negotiations. The 1945 Session of the Kansas Legislature passed a bill providing for the appointment of commissioners to negotiate a settlement of the controversies between Kansas and Colorado and between the water users in the two states. The bill further stated that Kansas would be represented by the chief engineer of the division of water resources, the attorney general, and one or more other persons. 38

Governor Andrew Schoeppel, as directed by the Legislature appointed W. E. Leavitt, Garden City, manager of the Garden City Company, and Roland H. Tate, Garden City attorney, in addition to A. B. Mitchell, attorney general, and George S. Knapp, chief engineer of the division of water resources. The Colorado representatives were Gail L. Ireland, attorney general, Henry C. Vidal, Charles L. Patterson, and Harry C. Mendenhall. 39

On March 30, 1945, the Kansas and Colorado Arkansas River Commissioners met in Lamar, Colorado. The agreement reached by the officials provided that during the first fifteen days of releasing water from Caddoa Reservoir beginning on or after April 1, 1945, the quantity of water released should be sufficient in amount to provide for diversions from


39 Letter from George S. Knapp, chief engineer, to Roland H. Tate, attorney, March 9, 1945, MSS, Schoeppel Papers, Kansas State Historical Society.
the river by ditches in Colorado Water District 67 and for deliveries of water across the stateline to Kansas. The second provision stated that thereafter, until all water storage on hand on March 30, 1945, had been released, water should be released from the reservoir when and as the water was demanded by the ditches in Water District 67, provided that the deliveries across the stateline would equal the aggregate diversions made by the Water District 67 ditches.

The third provision stated that all orders concerning the opening and closing or varying the control gates in Caddoa Dam for irrigation purposes would be issued to the District Engineer of the United States Corps of Engineers in Albuquerque, New Mexico, by M. C. Hinderlider, Colorado state engineer.  

An Act of Congress, dated April 19, 1945, gave consent to negotiations between Colorado and Kansas. The law provided that the two states should enter into a compact not later than January 1, 1950. The law also authorized the President to appoint a representative who would participate in the negotiations and who would report to the Congress on the proceedings and resulting compact. President Harry S. Truman appointed Brigadier General Hans Kramer, U.S.A., Retired, as the representative of the federal government in

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40Letter from Governor John C. Vivian to Schoeppel, April 13, 1945, MSS, Schoeppel Papers, Kansas State Historical Society.

the compact negotiations. 42 The first meeting of the commissioners was held in Denver, Colorado, on January 7, 1946.

**Temporary agreement urged.** On August 16, 1946, Colonel Henry F. Hannis wrote to Governor Schoeppel concerning the temporary allocation of irrigation waters. It has been recorded that Kansas and Colorado came to agreement in May, 1944, and in March, 1945, over uses of the irrigation waters. The letter from Hannis to Schoeppel indicated no such agreements were ever reached. The last agreement mentioned by Hannis was April, 1943, and Schoeppel appeared to deny even its existence.

... the temporary allocation of not to exceed 100,000 acre-feet of capacity in the present reservoir at John Martin Dam ... was authorized to be set aside for irrigation use in April, 1943.

... On April 12, 1946, this office was notified by you that no agreement between the States existed for operation of the dam for irrigation purposes, and therefore the operation of the dam reverted to flood control operation. 43

Colonel Hannis accepted the statement that no agreement existed between the states and stated that the reservoir must be operated for flood control purposes only. This meant there would be no winter storage in the reservoir and the flood waters detained would be released as rapidly as possible,

42 Letter from President Harry S. Truman to Schoeppel, November 20, 1945, MSS, Schoeppel Papers, Kansas State Historical Society. See Appendix for text of the letter.

43 Letter from Colonel Henry F. Hannis, Corps of Engineers, to Schoeppel, August 16, 1946, Schoeppel Papers, Kansas State Historical Society.
and still prevent flood damage below the reservoir. The flood waters released would be of little benefit to the irrigators because of the rate of release and of the unseasonability of the release. The release created a wastage of water which could be the basis of accusation toward all parties concerned. Since the primary interest was in the two states and the decision on allocation of irrigation waters rested with the two states, it was felt that the responsibility for loss or waste rested with Kansas and Colorado and their water users.

Colonel Hannis suggested that negotiators be appointed who would attempt to arrange a temporary agreement pending the decision of the Compact Commission. The temporary agreement should have no bearing on the permanent compact, but would prevent the wastage of water which could be used by both states, until the compact could be completed.\textsuperscript{44}

The compact commission took Colonel Hannis' letter under advisement and decided that while the matter of an interim agreement was not within their function, it was within their interests. Therefore, the commission recommended to each governor a member of the commission be assigned as negotiator and advisor in the formulation of a temporary, interstate executive agreement. The commission recommended

\textsuperscript{44}\textit{Ibid.}
that the Governor of Colorado appoint H. B. Mendenhall and
the Governor of Kansas appoint W. E. Leavitt as their negoti­
tiators. 45

Interim agreement negotiated. Leavitt met with
Mendenhall twice and as a result of the meetings and consider­
able correspondence, an interim agreement was negotiated for
the storage of the 1946-1947 winter water and for its dis­
tribution after April 1, 1947. They did not attempt to work
out a plan for the division of water after April 1st as it
appeared that the compact commission would discuss compact
needs within a few months and reach an agreement. If no
agreement was reached before April 1, 1947, Leavitt and
Mendenhall would again take up the matter. 46

The temporary agreement suggested that winter storage
commence November first and continue until April first. The
Colorado ditches could call for the river flow through the
reservoir, but their demands could not exceed 100 second
feet. What water the irrigators did use was to be charged to
Colorado and be deducted from the first 200 feet of stored
water to which Colorado was entitled when the releases began.
All winter-stored water was to be divided between the two
states in proportions on the basis of a 1000 foot release.

45Letter from George S. Knapp to Schoeppel, August 31,
1946, Schoeppel Papers, Kansas State Historical Society.

46Letter from W. E. Leavitt to Schoeppel, November 6,
1946, Schoeppel Papers, Kansas State Historical Society.
Colorado was to receive the first 200 feet, less any river flow through the reservoir used by Colorado after the gates were closed for winter storage. The balance was to be divided equally between Kansas and Colorado. 47

Water rights were no longer a matter of controversy, but one of negotiation. The rights were being determined for each state on the basis of compromise and equity. Brigadier General Hans Kramer of Denver, the federal government's representative and chairman of the compact commission, predicted the feud would end by January, 1949. The commissioners planned to have legislative programs ready for presentation to the 1949 session of the Kansas and Colorado legislatures. 48

Finally on December 14, 1948, Kansas and Colorado officials signed a compact to divide the waters of the Arkansas River. The compact was based upon the principle of a sixty-fourty division of the water, with Colorado receiving the sixty percent share. 49

Kansas Attorney General Edward F. Arn explained that under the terms of the compact, Kansas would receive forty percent of the water impounded by the John Martin Reservoir located near Lamar, Colorado. He further explained that statistics showed that nearly sixty percent of the water used

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47 Ibid.
for irrigating eventually flowed back into the river. This statement completely contradicted one of the points in the early court case which ended in 1907. In reality Arn stated, Kansas would receive nearly seventy-six percent of the river water.

**Administrative agency created.** George S. Knapp commented that in order to carry out the terms of the compact, provision was made for an administrative agency. This interstate agency was called the Arkansas River Compact Administration. Membership consisted of three representatives from each state and a representative appointed by the President of the United States, who would serve as the chairman, but would not have a vote.50

One of the compact requirements on membership was that two of the Kansas representatives had to be residents of and water right owners in Finney, Kearny, or Hamilton counties, and one Kansas representative had to be the chief official charged with the Administration of water rights in Kansas. One Colorado representative had to be a water right owner in Water Districts 14 and 17, and one had to be a resident of and water right owner in Water District 67. The third representative had to be the director of the Colorado State Water Conservation Board.51

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The Administration was required to report annually to the two governors and to the President on or before January 1 of each year. The report was to cover the Administration's activities for the preceding report-year. The report year commenced on November 1 of each year and ended on the succeeding October 31.  

The compact divided the year into two parts. The first part was a winter storage season which extended from November 1 to March 31 and the second part was the irrigation season beginning on April 1 and ending on October 31. During the winter storage period all reservoir inflow was stored up to the conservation capacity unless Colorado exercised its right to demand releases equivalent to the reservoir inflow but not to exceed 100 cubic feet per second. During the summer storage period both Colorado and Kansas could demand releases of inflow as well as stored water. Specifically, Colorado could demand releases equivalent to the inflow up to 500 cubic feet per second and Kansas could demand releases equivalent to that portion of the flow of the river between 500 cubic feet per second and 750 cubic feet per second, irrespective of the releases demanded by Colorado water users.

In addition Colorado could demand releases of stored water at a rate not to exceed 750 cubic feet per second and Kansas could demand releases of stored water up to 500 cubic

52Arkansas River Compact Administration, First Annual Report for the Year 1949, December 13, 1949, Lamar, Colorado, p. 3.
feet per second. However, when water storage in the reservoir was reduced to less than 20,000 acre feet, releases to Colorado were not to exceed 600 cubic feet per second and releases to Kansas were not to exceed 400 cubic feet per second. When the reservoir was dry, Kansas was not entitled to any river flow entering John Martin Reservoir and Colorado was to administer the water in accordance with priority rights among its users before the reservoir was constructed.53

A request for release of water from the reservoir for Kansas users was made to an authorized representative of the Administration in Kansas who relayed the request to the secretary of the Administration at Lamar, Colorado. The secretary, in turn, contacted the Corps of Engineers at John Martin Reservoir to make the release. The priority to call for water was given to the Kansas ditches on a rotation basis.54

The Administration designated several gaging stations for the purpose of administering the compact. Colorado gaging stations were the Arkansas River at Las Animas, the Arkansas River at Holly, the Purgatoire River at Las Animas, and the


Holly Drain at Holly. The Kansas gaging stations were the Arkansas River at Coolidge and the Frontier Ditch, also at Coolidge.55

Under its by-laws the Administration was to hold three meetings a year. Regular meetings were to be on the third Tuesdays of March and July and the annual meeting was held on the second Tuesday in December.56

Legislatures approve compact. The Arkansas River compact was approved by the Colorado House of Representatives on February 3, 1949, and was expected to go to the Colorado governor, Lee Knous, according to a newspaper report.57

The official report to the United States Congress stated that the Thirty-seventh General Assembly of the State of Colorado approved Senate Bill No. 6 on February 19, 1949.58

Another newspaper account gave the date of signing of the Arkansas River Compact by Colorado governor, Lee Knous,


as February 19, 1949. Whatever the discrepancy in dates, his signing was an important event in the ending of a fifty-year feud. There were a few minor objections but Governor Knous did not feel they were important enough to justify his veto.\textsuperscript{59}

Governor Frank Carlson signed the Arkansas River compact bill on March 7, 1949, in the presence of several interested citizens. Those present were Justice Edward F. Arn, George S. Knapp, Representative Vern Mayo of Garden City, who had introduced the bill, and Warden Noe, secretary of the compact commission.\textsuperscript{60}

Congress ratifies compact. In the United States Congress the compact measure was introduced into the House of Representatives by Representative Clifford Hope of Garden City and by Senator Andrew Schoeppel on the Senate side. The bill was ratified during the 1949 Session of Congress, and was approved by President Truman on May 31, 1949.\textsuperscript{61}

Thus did the fifty-year struggle come to an end. According to the Kansas Water Resources Board, the Compact cannot be said to have solved the deficient flows in Kansas, but the regulation of flows by the John Martin Reservoir had improved the chance of meeting irrigation demands by Kansas irrigation men.\textsuperscript{62}

\textsuperscript{59}Topeka Daily Capital, February 20, 1949.

\textsuperscript{60}Topeka Daily Capital, March 8, 1949.

\textsuperscript{61}Topeka Daily Capital, March 8, 1949; Arkansas River Compact Administration, \textit{First Annual Report for the Year 1949}, December 13, 1949, Lamar, Colorado, p. 3.

Conclusion and findings. In retrospect, one wonders if the 1901-1907 court case was really necessary. Much of what Kansas contended as inaccurate was in reality accurate. The most glaring example was the return waters theory which Colorado claimed in the early case. Colorado claimed that all waters not absorbed by plant life or evaporation eventually returned to the river bed. Kansas claimed that it simply was not true. Yet in 1948 Attorney General Arn stated that nearly sixty percent of the water used for irrigation returned to the river.

It appears that Kansas attorneys were not very careful in selecting facts for their case or else they simply did not understand geologic terms enough to present them accurately. To prove the Arkansas River was higher than its tributaries, counsel gave figures which would have a river running uphill. In addition, it is impossible to measure from the bed of any stream as counsel would have the court believe, as the bed of a stream cannot be truly determined.

Kansas lawyers claimed the existence of an Arkansas Valley which was only in Kansas. The Valley was separate and distinct from the river basin, yet its boundaries were vague and apparently no map showing the Valley exists. Is it possible the Arkansas Valley was imagined by someone for some purpose? If so, what was the purpose? If there is an Arkansas Valley, separate and distinct from the Arkansas River basin, why have not more people heard of it?
Counsel charged that the underflow had diminished because of the enormous diversion of water by Colorado irrigators. The diminished underflow was first noticed by farmers in south central Kansas when fruit trees and field crops failed to mature. It must be remembered, however, that irrigation utilizing the underflow had begun in western Kansas when the river failed to produce enough water for the ditches. Is it not possible that the disappearance of the underflow in south central Kansas might have in part been due to the irrigation in western Kansas? Surely irrigation on such a large scale could not take place without its effects being felt downstream. After all, this was the Kansas complaint when Colorado irrigators diverted water.

Kansas counsel welcomed the intervention of the national government in 1904, despite the government's denial of riparian rights. This seems odd, particularly when Kansas held so strongly to the riparian rights theory. Was this a public display of optimism on the part of counsel? Did Kansas think the federal government disagreed with Colorado more than it did Kansas?

Why did the national government suddenly change sides in the verbal arguments before the Supreme Court? It appeared to lose as much as Kansas did when the decision favored Colorado. The government had invested much money in land and had made many plans for dams and reservoirs under the Reclamation Act of 1902. Federal counsel denied Colorado had the exclusive
right to control all the streams with headwaters within its borders. If the Supreme Court decided against the national government and Kansas, which it did, then Colorado could control several important river basins, among them were the Platte River, the Rio Grande River, and the Colorado River. Colorado could deny water to settlers in several semi-arid and arid states, who depended on the river waters for their livelihoods. This the government sought to prevent, as well as to protect its investments under the Reclamation Act. Did the sudden switch signal a new direction in national policy? Did the appointment of a new United States attorney general shortly before the verbal arguments were heard by the Supreme Court have anything to do with the change? Was Kansas simply over confident of the federal government's position?

There appears to be some confusion between 1928 and 1930. Two newspapers, dated 1941 and 1942, printed articles stating Kansas had filed legal action against Colorado in 1930. Hans Kramer's report to Congress and the Supreme Court opinion of 1942 make no mention of any new legal proceedings on the part of Kansas following the 1928 suit filed by Colorado. Is it possible the two newspapers had inaccurate information? If Kansas did file again, it seems strange that nothing more is ever heard. Is it possible the Colorado case superceded the Kansas complaint and as a result the Kansas case was set aside until the Colorado-Kansas dispute was decided? If this was the case the Kansas case might have
been rejected for hearing once the two states were told to settle their differences by compact. If this was possible, why was there not a publication of its rejection by the court?

There appeared to be a serious lack of communication between state officials and the corps of engineers. Colonel Henry F. Hannis was apparently unaware of agreements between the two states concerning the allocation of irrigation waters. If Kansas was to get its proper share of the irrigation waters, it seems the corps of engineers should have been notified. One wonders if the lack of information was a deliberate political move by Kansas to force Colorado to come to an agreement. Unfortunately if that was the case, the only people injured by the Kansas politicians were their own constituents.

Army engineers stated that flood control space in the reservoir could handle any flood of importance. Apparently in 1965 the flood was more than the dam could handle, for massive rainstorms in the area of the headwaters of the Arkansas River created a raging torrent that destroyed thousands of acres and brought millions of dollars in damage to mature wheat crops and homes and businesses. Has the reservoir silted so much that it cannot control sudden floods or was this an unusually damaging flood which could not be controlled? Considering the number of reservoirs which have been built, one wonders why the flood created so much havoc.

In the final analysis it appears that Kansas spent a large sum on court suits without accomplishing a great
deal. A compact was negotiated, but Kansas had to settle for the pre-Caddoa conditions if the reservoir ever went dry, which is exactly what the state was fighting against in its court suits. Considering some of the facts Kansas counsel attempted to use in its suit, one wonders whether the attorneys were any more familiar with the river than were some of the Colorado witnesses.
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THE ELEVATIONS OF THE ARKANSAS RIVER
AND ITS TRIBUTARIES

In Chapter Two, page 13 of the manuscript it is stated that the Arkansas River was higher in elevation than its tributaries. Information provided by James A. Power, Jr., Assistant Chief Engineer of the Kansas Water Resources Board, generally supports the statement.

On page 15 of the manuscript, a statement claimed that the bed of the Pawnee River through Hodgeman County was 200 feet lower than the bed of the Arkansas through Ford County, Figure 20 of the June, 1962, State Water Plan Studies, Part A, showed that statement to be fairly accurate as the Arkansas River through Ford County was from 2550 feet to 2250 feet in elevation while the Pawnee in Hodgeman County was from 2200 feet to 2150 feet in elevation. At a corresponding point the Arkansas River in Ford measured 2450 feet and the Pawnee in Hodgeman measured 2200 feet in elevation.

Other measurements along the river and at corresponding points on the tributaries show the tributaries at the same elevation as the main river or higher than the Arkansas River. Walnut Creek through Lane County is higher in elevation than the Arkansas River through Gray County. The same is true of
White Woman Creek through Greeley, Wichita, and Scott counties. Those tributaries only a few miles from the main river have the same elevation as the Arkansas. Mulberry Creek in Ford County has the same elevation as the Arkansas River in the same county at corresponding points.

In the January, 1960, State Water Plan Studies, Part A, the Lower Arkansas unit is depicted in Figure 27. The manuscript on page 15 stated that the bed of the Rattlesnake through portions of Stafford County was 97 feet lower than the bed of the Arkansas at corresponding points in Pawnee County. Figure 27 gives the elevation of Rattlesnake Creek as 1980 feet and at a corresponding point in Pawnee, the Arkansas River is 2000 feet in elevation. Although the creek is lower than the river, it is not as low as the legal brief would have one believe.

Further down river the Arkansas River is again shown to be higher in elevation than its tributary, the Little Arkansas. The Little Arkansas River at a point in Harvey County is 1380 feet in elevation. At a corresponding point in Sedgwick County the main river is approximately 1400 feet in elevation, again a difference of only twenty feet. The South Fork of the Ninnescah River is considerably below the Arkansas River at a corresponding point. In Kingman County, the Ninnescah is given as 1540 feet in elevation while the Arkansas River is about 1660 feet at a corresponding point on the Rice-Reno County line.
The figures from the water plan studies lead one to conclude that the Arkansas River is indeed higher in elevation than its tributaries. The confusion which seems to exist may possibly be attributed to the wording in the 1905 brief which referred always to "the bed" of whatever stream it offered in evidence. It is impossible to measure elevation from the bed of any stream as the bed of any stream shifts with the amount of sediment deposited by the flowing river. Perhaps the individual who wrote the brief in 1905 did not know the proper terminology.
Arkansas City, Kansas, December 20, 1899.

Dear Sir:—At a regular meeting of the Arkansas City Commercial Club, held on the 17th inst., we were appointed a committee to confer with the mayors, county commissioners and chairmen of the commercial clubs residing in the Arkansas Valley and to solicit their hearty co-operation in an effort to protect the commercial, agricultural and stock interests of the people of Southwestern Kansas.

You are doubtless aware that a bill has been introduced in Congress which provides for the location of large storage reservoirs in Eastern and South Central Colorado, the object being to divert the flow of the water of the Arkansas river from its natural and legitimate channel to the basins proposed, then to be used for irrigation purposes in that state.

It is unnecessary in this letter to present arguments to you to prove that the proposed law would work incalculable injury to the people in the lower Arkansas Valley.

How to protect the interests of Kansas from desolation by those who favor the construction of those reservoirs beyond the limits of our state, is the question.

It is the opinion of our Club that a convention should be held early in January in Arkansas City, Wichita or Hutchinson and that all mayors, county commissioners and officers of commercial clubs, together with such delegates as they may select, be invited and urged to participate in its deliberations, looking to the protection of our combined welfare.

Hoping to hear from you at your earliest convenience with such suggestions and recommendations as you may think expedient, we remain

Yours fraternally,

T. W. ECKERT,
F. M. HARTLEY,
H. H. HILL,

Committee.
A. A. Godard, Esq.,
Attorney General,
Tookah, Kansas.

Dear Sir: Will you please inform me what effect it is probable in the suit the anti-immigrants of Wichita and Arkansas City will have on the interests of this section—Hamilton, Kearny, Finney and Gray, because of the vicinity of the waters of the Arkansas?

Will that little instrument called an injunction stop Colorado from seizing or detaining the water until the case is disposed of?

If Colorado is satisfied, will not this judgment of the State be under similar restraint?

These are the questions that agitate the common mind of this section. An irreparable injury will be done us under such circumstances.

The Wichita Eagle has a "well-led editorial" in Wednesday's issue, which is
Office of
F. R. French.
Probate Judge, Kearny County.

Lakin, Kans

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singly an endorsement of a "Populist argument and resolution of the days of
'96.

While the enemies of irrigation are
working to prevent the directing of the
aforesaid waters, I believe that the
Kansas Legislature is enacting more laws
to assist in further directing the
aforesaid.

In behalf of the people in this section I
cheerfully commends the wisdom of our
low mothers!

The Eagle says today, "The master Kansas digged
a number of ditches, but there is no longer
any water for them during the crop season."

The Eagle is not well posted on irrigation,
and with the exception of '96 our ditches have
and continue to furnish a reasonable amount of
water.

Pardon me, but what are affairs beside politics
that should be heard. . . .

F. R. French.
November 20, 1945.

Honorable Andrew Schoeppe1
Governor of Kansas
Topeka, Kansas

My dear Governor Schoeppe1:

I have this date, in accordance with the provisions of Public Law 34, 79th Congress, approved April 19, 1945, granting the consent of Congress to the States of Colorado and Kansas to negotiate into a compact for the division of the waters of the Arkansas River, appointed Brigadier General Hans Kramer, U. S. A., Retired, as the representative of the United States to participate in said negotiations.

I hope that the negotiations may be rapidly and successfully prosecuted.

Sincerely yours,

[Signature]

My dear Governor Schoeppe1: