This dissertation has been microfilmed exactly as received

68-13,558

FERRELL, John Robert, 1932-WATER RESOURCE DEVELOPMENT IN THE ARKANSAS VALLEY: A HISTORY OF PUBLIC POLICY TO 1950.

The University of Oklahoma, Ph.D., 1968 History, general

University Microfilms, Inc., Ann Arbor, Michigan

© Copyright by

JOHN ROBERT FERRELL

1968

1

THE UNIVERSITY OF OKLAHOMA GRADUATE COLLEGE

WATER RESOURCE DEVELOPMENT IN THE ARKANSAS VALLEY: A HISTORY OF PUBLIC POLICY TO 1950

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of

DOCTOR OF PHILOSOPHY

BY
JOHN ROBERT FERRELL
Norman, Oklahoma
1968

WATER RESOURCE DEVELOPMENT IN THE ARKANSAS VALLEY: A HISTORY OF PUBLIC POLICY TO 1950

APPROVED BY

DISSERTATION COMMITTEE

ACKNOWLEDGMENTS

I am especially indebted to Dr. Gilbert C. Fite, who consented to direct this project and provided considerable counsel and aid in the preparation of the manuscript by his criticisms and suggestions. His insight and remarkable ability, not only to detect weaknesses but also to clearly indicate how those flaws could be overcome, helped immeasurably. Writing a dissertation under such an able and recognized scholar has been a unique epportunity.

My deep appreciation also goes to Professor

Denald J. Berthrong, not only for his excellent teaching,
which was a continuing inspiration, but also for our many
informal discussions in which he expressed interest in my
study project and gave invaluable suggestions concerning
the direction the work should take. His genuine interest
and encouragement helped make this work possible.

Finally, I am grateful to Professors Arrell M. Gibson, Max L. Moorhead, and Rufus G. Hall, whose teaching and guidance have helped me throughout my graduate studies, for serving on the dissertation committee.

TABLE OF CONTENTS

		Page										
LIST OF	ILLUSTRATIONS	v										
Chapter												
I.	INTRODUCTION	1										
II.	NAVIGATION IN THE LOWER ARKANSAS RIVER BASIN	6										
III.	IRRIGATION IN THE UPPER ARKANSAS RIVER BASIN	25										
IV.	PROBLEMS AND PROGRESS OF THE THIRTIES: UPPER BASIN	49										
v.	PROBLEMS AND PROGRESS OF THE THIRTIES: LOWER BASIN	69										
VI.	REGIONAL PLANS	100										
VII.	ATTEMPTS AT COORDINATED RESOURCE PLANS	126										
VIII.	FROM PROJECTS TO PROGRAM: THE KERR PLAN	153										
IX.	conclusions	192										
BIBLIOG	RAPHY	217										

LIST OF ILLUSTRATIONS

Figure													Page
1.	Map	of	Arkansas	River	Basin	•	•	٠	•	•	•	•	5

WATER RESOURCE DEVELOPMENT IN THE ARKANSAS VALLEY: A HISTORY OF PUBLIC POLICY TO 1950

CHAPTER I

INTRODUCTION

In August, 1963, Life magazine published a feature article in which it charged the Arkansas River Navigation developmental program with being "the most outrageous pork barrel project" in United States history. Estimated to cost in excess of \$1.2 billion when completed, the 516-mile navigation channel, which included "minor flood control and power features," was, the Life writers asserted, a "real monument" to "the unchallenged all-time king of the pork barrel," Oklahoma's late Robert S. Kerr. They contended that "in a grandiose, overblown way, the project illustrates the intricate workings of the pork barrel" and "shows how the bigger rivers and harbors projects come to perpetuate themselves."

^{1&}quot;Pork Barrel Outrage: Too Much Money Spent Foolishly; Now--See the Innards of a Fat Pig," Life, LV (August 16, 1963), 23.

²<u>Ibid.</u>, 56. _ 3<u>Ibid</u>.

The Life editors fellowed up their story on the pork barrel on September 6, 1963, with a challenge to Congress to "take a good leng look at itself." Declaring that "pork lovers are no credit to our democracy," the editors assumed "for argument's sake" that Congress was unable to resist the "smell of pork" and ought to "reduce its own temptations and improve its own archaic organization." The Life editors then proposed two alternatives: an item veto, "to allow the President to veto specific items in appropriations bills without having to veto the entire bill"; or, a fundamental reorganization to correct some "basic mechanical shortcomings" which would allow it to do something other than pass pork legislation.4

It is not difficult to establish a <u>prima facie</u> case of irresponsibility in river basin development. However, relatively a <u>priori</u> assertions of duplication, conflict, bureaucratic aggrandizement, and the use of public funds for a political investment whose benefits to the nation are too dubious . . . to justify it, " are not an adequate basis for understanding the problem. Resource developmental problems and policies are rooted in the past. The decision-making framework is the democratically-organized society

^{4&}quot;Pork Lovers Are No Credit to Our Democracy," Life, LV (September 6, 1963), 4.

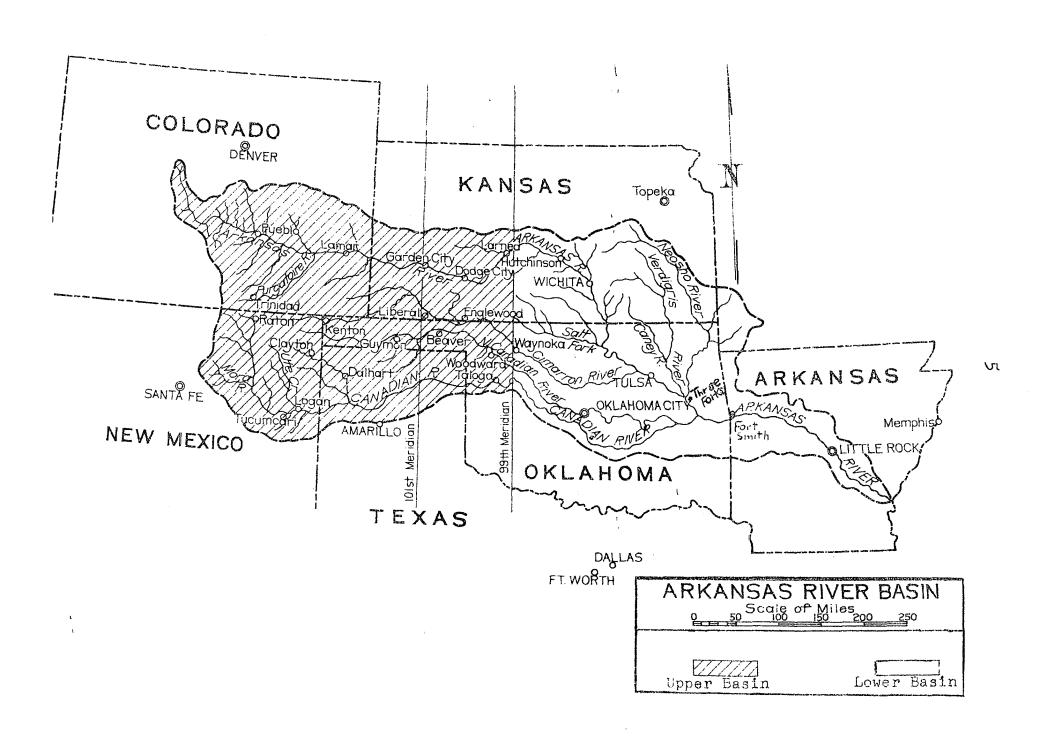
⁵ Ibid.

and the actual decisions are public in character. The realities of the situation are that a project must meet the requirements of political acceptability to be approved. Therefore, responsible evaluation of resource development must be based on an empirical study of the evolution of public policy. A historical review reveals how the demands of a people in a particular institutional environment assume their particular character, and illuminates the kinds of systems which — evolve.

This is a historical study of the policy process as it has evolved in response to a variety of forces. reviews the many programs and proposals for change in the political administrative arrangements for Arkansas River Basin development since the first decades of the nineteenth century to the middle of the twentieth. Identifying and appraising the historical forces inherent in the physical, social, and political environment which bear upon the design of institutional arrangements for water development, this study is an analysis of the group interests, personalities, laws, and proposals for change in the Basin's political and administrative resource arrangements. It focuses upon the policy-making process for Arkansas River development in the decade 1940 to 1950 in an attempt to indicate the organization of political power, its distribution, and its control in the policy-formulation process.

Between 1830 and 1950, the perennial interest of

elected representatives from the Arkansas Basin in having projects built within their districts was the most important determinant in water resource development in the Arkansas Valley. The major troubles with resource policies in the Basin at mid-twentieth century stemmed from poor administrative organization of federal activities. Over the years virtually irrevocable decisions were made on resource matters within the framework of laws, traditions, and vested interests. These decisions restricted the President, federal executive agencies, and legislators. Therefore, public policy toward resource development in the Arkansas Valley was ultimately the result of "pork barrel" politics.



CHAPTER II

NAVIGATION IN THE LOWER APKANSAS RIVER BASIN

The Arkansas River played a significant role in the development of the Valley. From 1820, when the first steamboat entered the River, until fifty years later when the first railroad was built at Little Rock, the waterway was the most available and economical means to transfer people and goods. The roads in the Valley were little better than trails. So, for most purposes, it was either water transportation or none. Because of these conditions, the attention of the Basin's settlers and their governments turned to the development of navigation.

Despite its vital role in serving the Easin's inhabitants, the Arkansas had its limitations. Rivermen were confronted with serious problems of the dangerous ever-

Little Rock Arkansas Gazette, April 1, 1820.

² Ibid., April 12, 1871.

Dallas T. Herndon, Annals of Arkansas, I (4 vols.; Hopkinsville, Kentucky, 1947), 378.

changing stream itself and its seasonal limitations. Its sandy-loam banks easily caved, creating hazardous bars and a shifting of the main channel. These bars were generally composed of sand, gravel, or rock. In addition, there were numerous snags formed by fallen trees which became fixed in the stream bed. These caused more accidents than any other obstruction. A prolific source of snags was the erosive action of the current which undermined and threw into the water trees which grew along the banks. The heavy butt ends, with their dirt and gravel-enmeshed roots, sank to the bottom, where they became embedded, with their shafts inclined upward. These sharp points could impale a vessel. 4

Accidents were so frequent that in 1830 Congressmen Ambrose Sevier and Edward Cross from Arkansas Territory requested federal appropriations to clear the Arkansas
channel. Their request for \$15,000 was denied at that time
by President Andrew Jackson, but the bill was passed two
years later. The funds were appropriated to have the United
States Army Corps of Engineers survey the river in the spring
of 1833, and that summer snag boats, directed by the Corps,

Report of T.S. Brown to the Chief of Engineers, May 8, 1833, "Arkansas River Survey," 23d Cong., 1st Sess., 1833-1834, Executive Documents, I, Serial 254 (Washington, 1834), 112-118.

⁵Clarence Edwin Carter, compiler and editor, The Territorial Papers of the United States, The Territory of Arkansas, 1829-1836, XXI (Washington, 1954), 311.

began removing ebstructions to Arkansas navigation. In October, 1840, Henry Miller Shreve reported that when the Corps' work began on the Arkansas the river "presented a forest of snags throughout its whole course," but seven years later it was "free from snags, except in a few bends, where the banks cave in to a great extent."

Another problem for navigation was the shape of the Arkansas. Below Little Rock the river was especially crooked, and from there on to Fort Smith it became wide and shallow, with many bars and sheals. Two principal up-river obstructions between Fort Smith and the head of navigation at the Three Forks were shallow rapids called the "Devil's Race Ground" and a cascade called "Webber's Falls." Flat rocky ledges extended almost entirely across the stream at this latter point, along with two or three miles of rapids. Here also the channel did not reach a depth of more than twelve inches during the dry season. Further difficulties were encountered at Three Forks, where the Verdigris and Grand Rivers flewed into the Arkansas, about 100 miles above Fort

American State Papers, Documents, Legislative and Executive of the Cengress of the United States from the 1st Session of the 22d to the 1st Session of the 24th, Inclusive, March 15, 1832-January 5, 1836, Military Affairs, V (Washington, 1860), 216; and, "Report from the Engineer Department, November 23, 1833, to Lewis Cass, Secretary of War," 23d Cong., 1st Sess., 1833-1834, Executive Documents, I, Serial 254 (Washington, 1834), 57, 66.

^{7&}quot;Decuments Accempanying the Report of the Chief of Engineers," No. E, "Arkansas River," 26th Cong., 2d Soss., 1840-1841, Senate Decuments, I, Serial 375 (Washington, 1841), 127.

Smith. Though a few steamboats made the journey beyond

Three Forks to Fort Gibson, the effort soon proved too hazardous and was ultimately abandoned altogether.

Added to the dangers of the river was the fact that the steamboats used to navigate it were not very safe. In 1879, T.J. Griffy, a steamboat pilot, reported that 170 boats had been wrecked en the stream up to that time. This supplemented a list made in 1872 by Captain Frank C. Kendall, which recorded 117 steamboats destroyed by snags, collisions, burnings and explosions. Almost every newspaper reported at least one boat disaster. Repeatedly, the editor of the Little Rock Arkansas Gazette deplored these numerous accidents, caused, he felt, by inefficiency and carelessness. He stressed the need for careful inspection, seber crows, efficient watchmen, and better firefighting equipment.

The numerous accidents, however, should not completely evershadow the many difficulties successfully overcome by responsible, skillful pilets. Confronted by bars or sheals, the steamboatmen moved cautiously. If insufficient water prevented clearance, they might drive the steamer under full power at the deepest spot. Sometimes the boat

Report of T.S. Brown, United States Corps of Engineers, in American State Papers, Military Affairs, V, 215; and Annual Report of the Chief of Engineers, United States Army, to the Secretary of War, 1882 (Washington, 1883), 1577.

⁹Annual Report of the Chief of Engineers, 1894, (Washington, 1895), 1542.

¹⁰ Arkansas Gazette, April 5, 1872.

passed safely ever with only a dull grating of the hull on the bar. If it threatened to ceme to a dead stop, the beat might still be forced over by pressing on mere steam and thrashing the paddle wheels. Still other means for getting the vessel upstream were warping, tying a line to a tree for leverage and pulling over by hand; lightening by temperarily remeving cargo; and sparring, lifting and pulling the beat forward by the use of peles.

Despite the best techniques, there were times when steambeats simply could not proceed up the river. When this happened, keelboats were used. These crafts, forty to eighty feet long with a seven to ten foot beam, were usually built to carry twenty to fifty tons, drew only a few inches of water, and were invaluable for traveling in waters too shallow for steambeats.

Keelboats were brought upstream by various methods. The most frequently used was the cordelle, a rawhide tow-line fastened to the mast near the center of the boat and pulled by men or herses walking along the bank, on the bars, or in the shallow water. When heavy timber, thick underbrush, or dense canebrake interfered with the pullers, the

Grant Fereman, History of Oklahema (Norman, 1942), 64; and Muriel H. Wright, "Navigation and Commerce Along the Arkansas and Red Rivers in Oklahema," Chronicles of Oklahema, VIII (Spring, 1930), 69.

Dallas T. Hernden, Centennial History of Arkansas (Chicage, 1922), 512.

and the best warped ferward by men on board pulling hand ever hand. At other times the keel was "poled" upstream. Boatmen stationed at either side of the prow dropped leng peles to the bottom of the channel and pushed against them as the men walked toward the stern. 13

A voyage upstream by keelboat was usually slow and tedious. Under the best circumstances, fifteen miles a day was a good journey. A round trip between Little Rock and Fort Smith, a distance of approximately 390 miles, took about twenty days and one between Fort Smith and Fort Gibson, 195 miles, about nine days if all conditions were favorable. While keelboats were still commonly used in the early 1850's, steamboats continued to be the main means of transportation on the river.

Despite this activity, there was still the problem of no dependable boating season on any part of the Arkansas River. During the wet seasons, of course, there was ample water and almost unrestricted navigation. In contrast, there was low water and restricted navigation during the hot, dry summer months, which followed the spring rains and melting snows. Water in early June was often low and remained that

¹³Phil E. Chappell, "A History of the Missouri River," Transactions of Kansas Historical Society, IX (1906), 269-270.

¹⁴ Clara B. Enro, History of Crawford County (Van Buren, Arkansas, /no date/, 334-341.

way, except for occasional summer freshets, which occurred as late as November. The rise in the river which marked the opening of the fall season of navigation and trade during the steamboat era might appear any time between September and early December. During the winter months and the period of the June rise, 200-ton steamers reached the Fort Smith landing, about 375 miles from the Arkansas' mouth. But about the first week in September, steamboat navigation above Fort Smith was suspended, and in mid-October, even small steamers had difficulty reaching Fort Smith. 15

Yet, the seasonal pattern was not absolute. Generally, a navigation season was meaningful only with reference to steamboats of a given tonnage and draft. For example, the success of steamboat builders in reducing draft in relation to tonnage and cargo lengthened the navigation season for steamboats. By 1850, advances in design and removal of the worst obstructions in the Arkansas' channel extended navigation periods to as long as eight months a year up to the mouth of the Grand River and longer below this point.

Neither early efforts to eliminate the physical obstructions to navigation nor attempts to use lighter draft

^{15&}quot;Extracts from a Preliminary Report on the Improvement of the Western Rivers, by Lieutenant Colonel S.H. Long, Topographical Engineers," 28th Cong., 1st Sess., 1843-1844, Senate Documents, I, Serial 431 (Washington, 1844), 190-191.

¹⁶ Annual Report of the Chief of Engineers, 1901-1902 (Washington, 1902), 2144.

vessels resulted in significant progress toward more efficient use of the river. Although the propulsion problem of upstream sailing had been overcome by the steamboat, nature's barriers remained. Even the ingenuity of builders and pilots, and government aid for river improvements could not overcome these limitations. The boat, furthermore, could only go where the stream went in contrast to the railroad which, with minor qualifications, could be built wherever needed. territorial disadvantages of river transportation were not so critical in the early decades of Arkansas Valley development when settlement remained close to the main lines of the river system. But when population and economic growth occurred in inland areas, this shortcoming became a serious defect. Many settlers along the Arkansas called for railroad construction as the solution to the Valley's transportation problems.

The railroads began to provide faster and more dependable transportation by the 1870's and to threaten the steamboat era. In the spring of 1871, the banner headline of the Arkansas Gazette reported "At Last! Completion of the Memphis and Little Rock Railroad -- Last Spike Driven -- Seventeen Years Suspense Over." In December, 1872, the Missouri, Kansas & Texas Railroad completed its line to Denison, Texas, where it connected with the Houston and Texas Central, making the first through road from St. Louis across

¹⁷ Arkansas Gazette, April 12, 1871.

Indian Territory to Galveston. 18 Four years later in 1876, the Little Rock & Fort Smith Railroad completed its road from Little Rock to Fort Smith just opposite the Arkansas 19 River.

Railroads thus took the dominant place in passenger and freight transportation in the Valley. By 1885 there were no steamboats on the Arkansas in the direct New Orleans trade. One packet making two trips per week was sufficient to do all the business below Pine Bluff for the greatest part of the year, and between Pine Bluff and Little Rock there was only one boat of about 200 tons making regular trips. One packet in marked contrast to the late 1850's when as many as 300 steamboat landings were reported annually at Little Rock.

Despite the precipitate decline in steamboating, many interests in the Arkansas Basin favored river transportation. Captain Charles E. Taft of the United States Army

Annual Report of the Chief of Engineers, 1894 (Washington, 1895), 1543-1544.

¹⁹History of the Bents, Washington, Carroll, Madison, Crawford, Franklin, Sebastian Counties Arkansas: From the Earliest Times to the Present, including a Department Devoted to the Preservation of Sundry Personal, Business, Professional and Private (Chicago, 1889), 503, 755.

Annual Report of the Chief of Engineers, 1885 (Washington, 1886), 1610.

²¹ <u>Arkansas Gazette</u>, July 6, 1859.

Corps of Engineers had declared in 1887 that two-thirds of the freight sent and received at Little Rock would be handled by river if it were not for the "months of uncertainty." He contended that if the stream were improved freight rates would be reduced, "as rates even without improvement are much lower by boat than by rail." Taft further asserted that where competition existed, cotton and other merchandise could be carried more cheaply by water than by rail. 22

Little Rock businessmen advocated federal aid for water transportation. The Little Rock Board of Trade in 1889 requested river improvements by the Army Corps of Engineers because Arkansas Basin coal dealers were unable to compete with those in Ohio for the New Orleans' market because of high transportation charges. Rail freight cost Arkansas three times as much as boat freight cost Ohio. 23 The Board of Trade president asserted that freight rates would be reduced 50 percent to that city and to a greater extent farther upstream if the Arkansas River were navigable throughout the year. He believed tonnage would be increased tenfold; "transportation of granite, coal, and lumber would be developed beyond the figures of the most enthusiastic." 214

Annual Report of the Chief of Engineers, 1887 (Washington, 1888), 1509-1511.

²³ <u>Ibid.</u>, 1645.

^{24 &}lt;u>Ibid.</u>, 1930.

The Fort Smith, Arkansas Chamber of Commerce, with similar enthusiasm, asked for federal aid to make the Arkansas "consistently navigable." The Secretary of the Chamber believed that if the Corps of Engineers improved the river, rates would be reduced from 50 to 100 percent, business and industry would be attracted, and thousands of acres of unimproved but rich valley lands could be brought under cultivation. "New towns would spring up along the river and an area that is rich in minerals, coal, and timber, as well as in agriculture would be opened," the Secretary wrote. He argued that "the question of transportation" was of considerable interest to the people of Fort Smith because they recognized that the competing systems would keep rates reasonable. 25

Other private interests believed the best way to prove the Arkansas navigable was to navigate. To increase traffic on the river, Little Rock enthusiasts organized the Little Rock and Arkansas River Packet Company in 1893. 26

The next year Congress partially subsidized this effort with a \$250,000 appropriation for "continuing improvement" and removing obstructions from the Arkansas, plus \$20,000 for operating snag boats. 27

²⁵Ibid., 2043-2044.

²⁶Little Rock Arkansas Gazette--Centennial Edition (Little Rock, 1936), 156.

²⁷ Annual Report of the Chief of Engineers, 1908, 1591.

Despite these efforts and expenditures, the railroads continued to make gains over the waterway. By 1896
the Arkansas River was paralleled on the north from Fort
Gibson to Swan Lake Landing, Arkansas by four railroads. At
no point were these lines over twelve miles from the stream
bed. The Arkansas was crossed by four railroads -- two at
Little Rock, one at Van Buren, and one at Fort Smith. The
Corps stated that "there were? no longer trade packets on
the river except occasional boats between Pine Bluff, Arkansas and Memphis, Tennessee when freights are assured them."
Commercial statistics reported by the Corps recorded these
developments. The value of products shipped by the waterway
had declined from \$2,846,395 in 1894 to \$1,657,218 in 1897.
With railroad service as an alternative, the Arkansas River
lost its former importance as a commercial artery.

Nevertheless, the Army Engineers believed the river ought to have another chance. They were willing to admit that piecemeal work had no perceptible effect upon commerce "but improvement by a comprehensive plan, assuring a safe and reliable means of transportation, adapted to the needs of the commerce demanding such transportation, might in time develop a commerce of large magnitude." The Engineers believed open-river navigation could be made possible

^{28 &}lt;u>Ibid.</u>, 1665.

²⁹ Ibid., 476.

from the river's mouth to Little Rock, and that by constructing thirty-three locks and dams a channel depth of six feet was feasible to Grand River at the Three Forks, 465 miles above the Arkansas' confluence with the Mississippi.

Private interests in Indian Territory also sought to develop and dramatize these Arkansas River navigation possibilities. Some prominent citizens of Muskogee in 1905 organized the Arkansas Navigation Company. In addition, they put into service between Fort Smith, Arkansas and Webbers Falls, Indian Territory a small boat of twenty-seven tons, with a loaded draft of two and a half feet. 31 Moreover, the Company had the steamboat Mary D built at Kokomo, Indiana and sent up river in the interest of promoting Arkansas River navigation. An editorial in the Muskogee Phoenix in 1906 declared: "The Mary D has demonstrated beyond . . . a doubt that the Arkansas River between Fort Smith, Arkansas and Muskogee is navigable. The boat in the past sixteen months has carried 35,000 tons of freight to and from Fort Smith and intermediate points to Muskogee."32 Enthusiasts claimed that goods could be delivered to Muskogee by boat

Annual Report of the Chief of Engineers, 1901-1902 (Washington, 1902), 2149.

Muskogee <u>Times Democrat</u>, November 22, 1906.

Reprinted in Leona P. Morris, ed., Oklahoma Yesterday, Today and Tomorrow (Guthrie, Oklahoma, 1930), 602-604.

for about half the railroad cost. 33

A possible reason for the reduction of freight rates in the Arkansas Valley was that in June, 1906, Congress passed the Hepburn or "rate" bill. 34 This amendment to a 1903 act dealing with discriminatory practices by railroads, gave the Interstate Commerce Commission power to inspect the books of railroad companies, which were to follow uniform accounting practices. If the Commission found rates unreasonable, it could establish new rates. The burden of proof as to what was fair and reasonable was placed on the railroads. Although the right of the federal government to regulate interstate carriers had long been recognized, the Hepburn bill made that regulation reasonably effective for the first time in the nation's history. After 1906, it was difficult for the railroads to maintain subnormally low rates or to grant rebates in order to compete with water carriers.35

The Army Engineers took a more realistic attitude than the Muskogeans when they reported in 1908 that "information as to the effect of the improvement on freight rates is meager, but indicates that a material reduction has resulted."

³³Glen R. Ames, "Bound for Oklahoma," American Scene, IV (Spring, 1961), 3.

³⁴ Congressional Record, 59th Cong., 1st Sess., June 23, 1906, 9083.

³⁵Harrison S. Smalley, "Rate Control Under the Interstate Commerce Act," Annals of the American Academy of Political and Social Sciences, XXIX (March, 1907), 293-294.

The Corps' position seems more valid because the Mary D confined its business during the period July, 1902, to June, 1908, to the local trade near Muskogee Landing, on the Arkansas, although the river "was at a comparatively good boating stage all year." 36

Despite the evident problems connected with consistently navigating the Arkansas, some citizens of the Valley continued to believe the effort profitable. The Muskogee Commercial Club organized the Muskogee-Oklahoma Packet Company and contracted for the construction of another steamboat. 37 In 1908, the City of Muskogee, 125 feet long, with a twenty-five foot beam, and a three foot six inch draft, costing \$35,000, was built at Jeffersonville, Indiana. On July 8, it docked at Muskogee with forty-one tons of nails and wire and immediately was engaged in freight hauling between its home base and Fort Smith. After the steamer began operating, the railroads reduced freight rates and, by constant reductions, finally managed to regain much of the business the navigation company had secured. 38 After only one year of service, the City of Muskogee was relegated to

Annual Report of the Chief of Engineers, 1908 (Washington, 1908), 507.

³⁷ Ibid.

Grant Foreman, Muskogee: The Biography of an Oklahoma Town (Norman, 1943), 136-137.

the menial task of raising gravel and sand for the building trades in the area.³⁹ This was the last significant appearance of a steamboat on the Arkansas River.

In 1909 Major M.L. Walker of the Corps of Engineers' Little Rock office asserted that "at present there does not seem to be . . . an actual demand for steamboat navigation between Fort Smith and Muskogee beyond that which can be supplied by smaller boats than the <u>City of Muskogee</u>. There was no navigation above Webbers Falls -- thirty-one miles below Muskogee -- during this fiscal year." Moreover, the Arkansas River Packet Company went bankrupt and into the hands of a receiver. 40

Arkansas Congressman Joseph T. Robinson lamented Arkansas' lack of water transportation in the first decade of the new century. He felt that open river channels should compete with railroad monopolies. A new survey of the river from its mouth to Muskogee, Robinson believed, might lead to a plan which would bring to market great deposits of coal in Arkansas' northwestern hills, and its abundant stores of zinc and marble in the mountains. In his opinion, open rivers meant cheaper transportation for freights, closer approaches to market and, in general, faster and surer development than had been the case in the past. Robinson

Annual Report of the Corps of Engineers, 1909 (Washington, 1909), 1577.

⁴⁰ Ibid., 1579.

expressed essentially the consensus in the lower basin -that federal aid was necessary to promote navigation on the
Arkansas River and to prevent floods. He Robinson gave expression to a concept that gained momentum among navigation
interests in the Valley and the nation. If sufficient
federal appropriations were to be made to improve the Arkansas for navigation, they would have to be linked with other
justifications such as flood control.

The forerunner of the Tulsa Chamber of Commerce, the Tulsa Commercial Club, promulgated this germinal idea throughout the lower Basin. As early as 1911, the Tulsa Commercial Club financially supported the powerful nation-wide waterways pressure group, the National Rivers and Harbors Congress, 42 whose slogan was "a Federal appropriation each year of at least \$50,000,000 for river and harbor improvements." The Tulsa Commercial Club also appointed a Shallow Waterways Commission and laid plans for an inland port on the Arkansas' banks. 45 Moreover, in 1915, this

⁴¹ Congressional Record, 59th Cong., 2d Sess., Febr. 5. 1907. 2308-2310.

⁴² Tulsa Chamber of Commerce, Minutes of the Board of Directors, October 13, 1911, located in Tulsa Chamber of Commerce, Board of Director's files.

Emory Johnson, History of Domestic and Foreign Commerce of the United States (Washington, 1915), 236.

Tulsa Chamber of Commerce, Minutes of the Board of Directors, March 1, 1913.

⁴⁵ Ibid., January 23, 1913.

Improvement Association, which was formed to get federal funds to premote navigation, to reduce railroad freight rates, and attempt to alleviate damages done by fleeding. 46 The Tulsa Commercial Club also endeavored to interest Oklahoma state legislators in the necessity of water transportation, and encouraged fermation of committees in river towns to prepare data showing potential waterway freight tennage if the Army Corps of Engineers received appropriations to make Arkansas improvements. 47

This rather extensive campaign for federal funds to improve navigation of the Arkansas by open channel work was unsuccessful. Between July 3, 1832 and June 30, 1915 the federal government expended more than \$3.5 million attempting to make the Arkansas a navigable river, 48 but these endeavors were unsuccessful. In the first place, Congressional appropriations were too small and often uncer-

⁴⁶ Ibid., October 14, 1915.

^{47&}lt;u>Ibid.</u>, November 1, 1915.

⁴⁸An historical summary of the projects for improvements of the Arkansas River to June 30, 1915 is in the Annual Report of the Chief of Engineers, 1915 (Washington, 1915), 1872-1874; expenditures are on page 2718.

Annual Report of the Chief of Engineers, 1932 (Washington, 1932), 1066.

tain. The limited amount of money was spread too thinly among projects over the entire river, which precluded lasting improvements in any given sector of the channel. Also, few provisions were made to maintain the channel after its improvement by the removal of snags and obstructions. Moreover, the problem of seasonal inadequacy of water remained unsolved.

by the construction of storage reservoirs to permit a steady and ample supply, a series of locks to raise the loads to the proper elevation level, and a system of jetties and revetments to control the vagaries of the meandering channel. However, neither large reservoirs nor canalization by locks and dams, supplemented by channel improvements, were advocated by the early supporters of Arkansas River improvement. Making the Arkansas a suitable avenue for commerce required vision and engineering knowledge. But more important it demanded skilled political leadership which could convince Congress that development of the river was worthy of large appropriations. Until this leadership appeared, the Arkansas was not improved.

CHAPTER III

IRRIGATION IN THE UPPER ARKANSAS RIVER BASIN

While the seasonal inadequacy of water for navigation was a primary problem in the lower Arkansas Basin, a major concern in the upper Valley was sufficient water for irrigation. Inadequate rainfall in some years made farming difficult in the semiarid region along the Arkansas, especially in southwestern Kansas and southeastern Colorado. As Frederick W. Newell observed, after periods of drought which caused grass to wither and crops to wilt, settlers left the area. Such dry periods, however, might be followed by seasons of ample rain. Settlers then returned to remain until the next long drought. Those who stayed learned that by artifically applying water to the crops they could better adapt to the frequent long periods of low precipitation.

Believing that irrigation could provide a degree of agricultural stabilization in an unstable climatic area, pioneers along the Arkansas River in Colorado tried as early

Frederick W. Newell, "Irrigation on the Great Plains," Report of the Secretary of Agriculture, 1896 (Washington, 1896), 168-169.

as 1839 to supplement the capricious rainfall by digging ditches and diverting the water from the stream onto the land. Most of these early ditches were poorly constructed, built without surveys or records of water rights. Designed to use the natural flow of the river by diverting it into gardens near the stream, these rudimentary systems relied on gravity. The early irrigators simply selected a suitable tract near the desired stream and tapped the channel at a point higher than the field to be watered. These practices, though simple and crude, demonstrated the fertility of upper Basin lands and the possibility of creating prosperous farms and communities in a land which had long been regarded as a suitable dwelling place only for the buffalo, the coyote, and the Indian.

Expansion of irrigation, however, was modest.

People recognized that vast areas of land would remain unused unless more water could be made available. By the 1860's, there was a new awareness of the need for, and the value of,

Thomas J. Farnham, Travels on the Great Western Prairies (London, 1893), 107.

Robert G. Dunbar, "The Significance of the Colorado Agricultural Frontier," Agricultural History, XXXIV (July, 1960), 119; also, Richard J. Hinton, "Irrigation in the United States: Progress Report for 1890," Senate Documents, I, No. 53, Pt. 1, 51st Cong., 2d Sess., 1890-1891, Serial 2818 (Washington, 1891), 16.

irrigation water. In a description of farming in the Arkansas Valley, B.T. Allen of Canon City, Colorado, in 1862, stated that "of course . . . we have to irrigate all lands cultivated in order to be sure of crops." He further explained that irrigation costs depended upon the quantity of water and "the convenience of it to the ground"; but it cost him, "once getting the water onto the land in ditches, about \$\\$4 per acre to the season."

These factors caused many upper Basin settlers to believe that individual efforts could not possibly build the facilities needed for greatly expanded irrigation development. Consequently, they turned to the federal government for help. An editorial in The Rocky Mountain News, published at Denver, suggested in December, 1864, that Congress enact some general law providing assistance to irrigators of agricultural lands in the western states and territories. The problem, the editor declared, was an extensive one in that more than one-half of the total area of the United States could not produce crops of grain or vegetables except by irrigation, and that surely the federal government had some responsibility for its development. The area to which he

Edward Bliss, "Territory of Colorado: Its Soil, Its Climate, Its Mineral Products and Resources," Report of the Commissioner of Patents for the Year 1861, 37th Cong., 2d Sess., 1861 (Washington, 1862), 156.

The Rocky Mountain News, October 23, 1862.

referred included California, Oregon, Nevada, the western half of Kansas, Colorado, New Mexico, Arizona, Utah, Washing-ton, Idaho, Montana, and the western half of Nebraska and the Dakotas.

Believing that the United States railroad grants were "fair precedents," the editor of this Arkansas Valley newspaper stated that Congress should grant a portion of the public domain to individuals or companies who would construct irrigating canals. The land would be divided in alternate tracts of possibly eighty acres on a checkerboard pattern. Those who received government land by building irrigation systems would be required to supply water to the owners of intervening lands at fair rates. The alternate tracts, taken by water purchasers, would sell for \$2.50 per acre to save the federal government from revenue loss. Thus, The Rocky Mountain News editor felt it would be possible to use all of the available water for irrigation purposes. He believed this would not only help the people of the area, but would also benefit the entire nation by creating values for currently unproductive lands. This, in turn, would hasten the economic growth of future western states.6

Agreement on the desirability of federal assistance became increasingly widespread. Almost a decade later, in June, 1873, a mass meeting was held in Denver for the

⁶ | Ibid., December 21, 1864.

purpose of soliciting aid from the federal government in developing a system of irrigation on land east of the Rocky Mountains. A delegation of Pueblo, Colorado, citizens representing upper Arkansas Valley settlers attended the meeting and supported a resolution which called for precisely what The Rocky Mountain News editor had advocated in 1864.

Again, no action was taken on the proposal. At a later meeting held in Pueblo, the resolution was reintroduced, but it never got beyond a memorial to Congress.

The next year, in 1874, Governor G.W. Elbert urged the Colorado Territorial Legislature to support a memorial to Congress urging federal aid for irrigation. Elbert argued that a good reason to request government assistance was that the West had valuable stores of metal, including coal, iron, copper, all the baser metals, and gold and silver. Since the mining interests were dependent on local agriculture, it behooved the federal government to assist in irrigation development. Elbert warned: "until the plain shall send to the mountain its gift of bread, the mountain will withhold from the nation its gift of gold."

Pueblo Colorado Chieftain, June 19, 1873.

^{8 &}lt;u>Ibid.</u>, June 26, 1873.

⁹<u>Ibid.</u>, January 29, 1874.

¹⁰ Alvin T. Steinel, History of Agriculture in Colorado, 1858 to 1926 (Fort Collins, Colorado, 1926), 194.

Discussing "Irrigation and Agriculture" in 1876,
Governor John L. Routt called on the Colorado General Assembly to memorialize the state's senators and congressmen to obtain federal help for irrigation development. The governor asserted that reservoirs were essential for storing irrigation water, but that neither the state nor private enterprise could bear the expense. Routt reasoned that since the federal government had given other states large grants of swamp lands which had subsequently become very valuable, they should be willing to aid in improving the vast, unproductive plains of the arid region by giving land. He felt that reservoirs and canals could retain the water of spring and early summer for later use, thus making large arid tracts productive.

Other proposals to expand irrigation in the arid West were also made. Professor Cyrus Thomas of Illinois, an entomologist with the 1876 Hayden Survey, became interested in reclamation. His imaginative and far-reaching proposal called for joining the Arkansas and the Platte by a 200-mile canal in eastern Colorado, backing up the combined waters and creating a series of lakes for irrigation. Incidentally, Thomas believed storing water in large surface reservoirs would modify the climate and increase the rainfall. He des-

Ibid.; Gilbert C. Fite, The Farmers' Frontier, 1865-1900 (New York, 1966), 187.

cribed his scheme as follows: 12

My plan is to throw up an embankment running north and south from the Arkansas to the North Platte, curving east and west so as to follow the contour. Then, by throwing dams across the streams, turn the water into this reservoir. An embankment or wall, averaging 30 to 40 feet in height, would, as the average slope here is about 6 feet per mile, form a lake six to eight miles wide and 200 miles long. This would give a surface of some 1,200 square miles. This would irrigate from 12,000 to 14,000 square miles.

Thomas apparently overlooked some of the more significant facts of the matter. Henry Gannett, one of his colleagues and critics, pointed out that even if no water was used for irrigation, the total annual amount which the Arkansas, the North and South Platte Rivers could possibly deliver at the reservoir would be approximately 73.9 billion cubic feet, enough to make a depth of about two feet in the reservoir. Furthermore, since evaporation in that climate was at the rate of five to six feet annually, the greater part being in the summer, only a small part of the 12,000 to 14,000 square miles would receive enough water for irrigation. It would indeed be difficult, said Gannett, to keep the bottom of the reservoir moist. Gannett believed that there was already more than enough good land in the immediate neighborhood of the streams to use up all the water which

Ferdinand V. Hayden, Tenth Annual Report of the United States Geological and Geographical Survey of the Territories Embracing Colorado and Parts of Adjacent Territories, Being a Report of the Exploration for the Year 1876 (Washington, 1878), 342-343.

they delivered annually. He concluded that although lands along the streams were taken, there was no necessity what-ever to carry the water more than ten miles from the river. 13

The short ditches of the early individual irrigators, however, did not satisfy the needs of the fast increasing numbers of new settlers. These latecomers occupied the bench lands which lay somewhat above the river bottom. the more accessible lands were taken, ditches multiplied, The canals which carried and reclaimed acres increased. water to the higher lands became so long and costly that they were beyond the financial means of individuals. handicap was partly overcome by the enlargement and extension of existing ditches through the joint efforts of several landowners. or by the formation of cooperative companies by farmers. Under these community organizations, each owner of lands irrigated by the system purchased or worked out an interest in the extended original canal. In return for this outlay, the farmer was entitled to receive his share of the flow of the ditch and paid proportionately for annual maintenance of the main canal and works. The irrigation systems of the community cooperative companies were constructed and maintained by the owners of the lands who formed them, the principal outlay being their own labor. These were better built and somewhat more efficient than the individually

¹³ <u>Ibid.</u>, 342.

owned ditches of the pioneers. Almost without exception, they proved profitable.

Despite the fact that by the 1880's the better developmental sites were taken and the federal government displayed a reluctance to subsidize irrigation development, some men believed additional new systems could be profitable. The irrigation corporation became a prime factor in developing the agricultural resources of the region because of the increasing magnitude and complexity of the undertakings, which required prohibitive expenditures of individuals or communities. While the primary goal of independent and community canals had been to establish productive farms for those who lived on the land, the water companies' interest was in profitable investments. They believed that large profits could be made by building canals to irrigate cheaplyacquired lands, selling water rights, and collecting water Thus, the corporation ditch rentals from the purchasers. owners were not, as a rule, water users. They built irrigation systems -- dams and ditches -- to sell water. 15

In the 1880's water companies in southwestern Kansas and southeastern Colorado constructed some of the

J.C. Ulrich, Irrigation in the Rocky Mountain States, United States Department of Agriculture, Office of Experiment Stations, Bulletin No. 73 (Washington, 1899), 19-23.

¹⁵ Ibid., 24-26.

largest irrigation canals in the United States up to that time. 16 One of these was built by the Eureka Irrigating Canal Company, organized in Ford County, Kansas, in 1884 with a capitalization of \$1,000,000. This project, designed to irrigate \$400,000 acres, called for constructing a ninety-six-mile-long canal, running from the Arkansas River west of Ingalls in Gray County, in an irregular course to a point near Kingsley in Edwards County. By January, 1887, ninety-three miles of the main canal and fifty miles of lateral extensions had been completed. The canal was forty-eight feet wide and six feet deep at its head. Although the promoters of the Eureka netted from one half to three quarters of a million dollars on the venture, the canal failed to deliver water to farmers. 17

of three more "colossal" irrigation projects announced in Kansas in 1887, only one was completed. With authorized capital stock of \$40,000, the Suez Irrigating, Water Power and Manufacturing Company proposed a ditch which was to originate along the Arkansas River near the Kansas-Colorado border, then bear to the north and east onto the uplands. The Garden City Herald reported on October 6, 1887,

Twelfth Census of the United States Taken in the Year 1900, VI, Agriculture, Pt. 2, Crops and Irrigation (Washington, 1902), 868.

Walter A. Schoewe, "The Geography of Kansas,"

Transactions, Kansas Academy of Science, LVI (1953), 179-181.

that the canal would be over 100 miles long and have over 500 miles of laterals. A later story scaled down the scheme, but the Suez Irrigation Company's plans never materialized. 19

Another big project of 1887 was the Amazon Canal. Expected to irrigate 128,000 acres, it started on the north side of the Arkansas River near Hartland in Kearny County, Kansas, and extended for 100 miles in a northeasterly direction. Construction began in the fall of 1887, but litigation over right-of-way across farms, lack of capital, and opposition from farmers who felt company profits were going to be too high, impeded progress. On August 9, 1888, the Herald reported the sale of half interest in the Amazon Irrigating Canal to a London syndicate for \$30,000. Work progressed rapidly following this sale so that by the end of 1888 approximately eighty miles of the channel had been completed; however, the Amazon Project failed because of inadequate water in the Arkansas.

Further up the river, the Bob Creek or Colorado Canal was planned. Expected to irrigate some 40,000 acres of land, it began near the mouth of Chico Creek on the north

¹⁸ Garden City /Kansas/ Herald, October 6, 1887.

^{19 &}lt;u>Ibid.</u>, November 3, 1887.

^{20 &}lt;u>Ibid.</u>, August 9, 1888.

side of the Arkansas about twenty miles east of Pueblo.

This ditch, called the largest enterprise of its kind in

Colorado, was sold in 1887 to the Missouri Pacific Railway

Company. The project lay dormant for three years until in

1890, T.C. Henry, locally famous for his construction of the

Fort Lyon Canal extension, became interested in it. Although

a portion of the canal was built, it was unsuccessful.

Water corporation investors lost heavily. Their hopes for success were based on the belief that water "created the high land values" of the irrigated tracts, and they felt that settlers had to have the water which only the companies could supply. But the land in its natural state was cheap; much of it could even be homesteaded. There was no compulsion to buy water. Many of the first occupiers were mere speculators who hoped to sell to real farmers after the irrigation works were built. So the land lay idle. 22

The water companies frequently changed ownership and were often in receivership because development costs

²¹ Joseph Orlando Van Hook, "Settlement and Economic Development of the Arkansas Valley from Pueblo to the Colorado-Kansas State Line, 1860-1900" (Ph.D. Dissertation, University of Colorado, 1933), 293-297; also, The Final Report of the Artesian and Underflow Investigations of the Irrigation Inquiry, Senate Documents, IV, No. 53, Pt. 1, 52d Cong., 1st Sess., 1891-1892, Serial 2899 (Washington, 1892), 147-149.

Samuel Fortier, Irrigation Requirements of the Arid and Semiarid Lands of the Missouri and Arkansas River Basins, United States Department of Agriculture, Technical Bulletin No. 36, March 8, 1928 (Washington, 1928), 17.

often exceeded early estimates. Also, settlement and use of water did not occur as quickly as was expected. Therefore, several years generally passed before income could meet construction, management and operation costs. In addition, if they were established near individual and community ditches they had later water rights, which lessened the value of the property and led to litigation with earlier ditch owners as well as with their own consumers. 23

Another possible reason water companies proved unprofitable investments was that little attention had been paid to the farmer's part in irrigation. Inexperienced settlers with insufficient funds were permitted to prepare land for irrigation farming with little advice or assistance. Farmers wasted expensive water because they did not realize that successful irrigation farming depended directly upon water being applied in proper quantity and at the right time. Using too much water resulted in poor crops, damaged land, and depreciated farm values. The failure of individual farmers deprived water companies of revenue and led to bankruptcy. 24

Some students of irrigation development in the

Ulrich, Irrigation in the Rocky Mountain States, 27-28.

Fortier, Irrigation Requirements of the Arid and Semiarid Lands of the Missouri and Arkansas River Basins, 17; also, Hinton, "Irrigation in the United States," 18.

Arkansas Valley attributed the water companies' failure to the fact that construction of irrigation systems in the late 1880's were out of proportion to the actual acreage watered. To them, this illustrated the speculative feature of water corporations which attempted to squeeze unfair profits out of water users. Many irrigation farmers refused to pay "exorbitant rates for the privilege of using water supplied by the large ditch corporations." They were made aware of the "evils of corporate control of irrigation systems," Alvin T. Steinel declared, by the Colorado State Grange. 26

The Grange led farmers in their fight against the water corporations. An anti-royalty bill was passed in 1888, and a State Supreme Court decision forced various companies to drop their plans for canal construction in the Arkansas Valley. In its 1888 session, the Grange passed a resolution calling for federal government aid in building reservoirs which would be owned by the state. Through this organization, farmers published a list of legislators for and against their measure, determined to punish politically those who did not support it. 27

²⁵Charles W. Irish, "Report of the Special Agent in Charge of Irrigation Inquiry," Report of the Secretary of Agriculture, 1893 (Washington, 1894), 593-594; and, Alvin J. Steinel, History of Agriculture in Colorado, 206.

²⁶ Steinel, History of Agriculture in Colorado, 208.

²⁷ Ibid.

Richard J. Hinton, of the U.S. Department of Agriculture, reported in 1890 that a "remarkable struggle" was still under way in Colorado between the irrigation farmers and the water corporations. He asserted that "the farmer organizations were as a unit in demanding the public control of all irrigation waterways and works." The major grievance of the farmers seemed to be that the larger ditch companies had constructed many dams across the Arkansas at intervals of ten to twenty miles, capable of diverting the entire flow of the stream. There were simply more canals than there was water to supply the arable lands under cultivation. 28

The problems were intensified in the nineties because the number of irrigators and acres irrigated in the Arkansas Valley in Colorado more than doubled in the decade 1889 to 1899. In 1899, there were 4,054 irrigators compared to only 2,062 a decade earlier. There were 281,052 acres under irrigation, an increase during the ten years of 138,034 acres. Main ditches extended 1,574 miles and the total cost of construction of the irrigation systems operated in the Valley in 1899 was \$3,316, 414. Significantly, the increase

²⁸ Report of the Special Agent in Charge of the Artesian and Underflow Investigations and of the Irrigation Inquiry, Report of the Secretary of Agriculture, 1890 (Washington, 1890), 488.

Data compiled from Twelfth Census of the United States, VI, Agriculture, Pt. II, Crops and Irrigation, 820, 834; and, The Final Report of the Artesian and Underflow Investigations of the Irrigation Inquiry, Senate Documents, IV, No. 53, Pt. 1, 132-133, 155-164.

in irrigated acreage was due to extension of canals existing in 1889 rather than construction of new and large irrigation systems. On Also, according to the 1900 Census, there was a marked tendency in Colorado toward subdividing large irrigated tracts into smaller homesteads. Irrigated land on farms in the upper Arkansas Valley was very small, ranging on the average from five to twenty acres. 32

Arkansas River, taking some 500,000 acre-feet from the stream by 1902,³³ the early history of irrigation in Kansas was disappointing. Contrasted with Colorado for the same period, in 1899, Kansas had only thirty-nine ditches, totaling 218 miles. Acreage irrigated from the Arkansas increased from 16,918 in 1889 to only 19,961 in 1899. There were 267 irrigators in 1889 and 343 ten years later.³⁴

Because it was so difficult to obtain enough water

³⁰ Twelfth Census, Agriculture, 802; Irrigation Inquiry, 132-133, 155-164.

³¹ Twelfth Census, Agriculture, 821.

^{32&}lt;sub>Ibid.</sub>, 836.

³³George S. Knapp, "The Kansas-Colorado Water Controversy," Twenty-Second Biennial Report of the Kansas State Water Commissioner, 1919-1920, XXVII (Topeka, 1920), 250; also see E.S. Nettleton, "Irrigation, Artesian and Underflow Investigation," Senate Documents I, No. 53, Pt. 2, 51st Cong., 2d Sess., 1890-1891, Serial 2818 (Washington, 1891), 9-11.

³⁴ Compiled from Twelfth Census, Agriculture, 868-869; and, Irrigation Inquiry, 288-298.

from the Arkansas for the large ditches, in addition to their inability to control flood waters, Kansas farmers were unable to irrigate successfully. Therefore, wells would be the most important and practical source of water supply for Kansas irrigators. As Frederick W. Newell stated: 36

Irrigation by water from a well . . . /possessed/certain advantages over that from a gravity supply, in spite of the usually greater annual cost of procuring the water. The wells and the source of water are, as a rule, under the individual control of the irrigator. It is not necessary for him to combine with other men and to invest large capital in a complicated undertaking before he can receive any benefit.

claimed that private enterprise was inadequate to deal with the extensive development they believed desirable. They felt that a comprehensive job of reclamation could only be accomplished if the federal government would initiate construction of irrigation works and provide lands with a dependable water supply. These advocates of federal aid for irrigation construction wanted to insure continued development but were unable or unwilling to gamble their financial success on the remaining irrigation sites. Their demands

^{35&}lt;sub>Twelfth Census</sub>, Agriculture, 868.

^{36&}lt;sub>F.H.</sub> Newell, "Irrigation on the Great Plains," Report of the Secretary of Agriculture, 1896 (Washington, 1896), 178.

³⁷A. Bower Sageser, "Editor Bristow and the Great Plains Irrigation Revival of the 1890's," Journal of the West, III (January, 1964), 77-78.

were recognized in the political party platforms of 1900, all of which urged federal action on reclamation. 38

Secretary of Agriculture James Wilson was ready to concede by 1901 that private enterprise would "have to be supplemented by public aid in the construction of certain classes of irrigation works." He further believed that "reservoirs located in the channels of running streams should be public works." This view was supported by Theodore Roosevelt. In his first State of the Union message, Roosevelt urged that the national government should build irrigation works so that large areas of public land could be made available for homestead settlement. 140

Congress ultimately responded to the demands made throughout the late nineteenth century for federal aid to build irrigation projects in the West. The Newland's Reclamation Act of 1902 authorized the federal government directly to survey, to design, and to construct irrigation projects financed by the proceeds from public land sales in the arid

John T. Gance, "The Origin of a National Reclamation Policy," Mississippi Valley Historical Review, XVIII (June, 1931), 42.

Report of the Secretary of Agriculture, Annual Reports of the Department of Agriculture, 1901 (Washington, 1901, xcv, xcvi.

James D. Richardson, A Compilation of the Messages and Papers of the Presidents, 1789-1908, X (11 vols.; Washington, 1908), 434.

states and to contract with water users for repayment of capital investment, but without interest. 41

The specific plan was for the federal government to build dams and other engineering structures and for the settlers to pay for them in ten annual installments without interest. The non-payment of interest was justified on the grounds that the public benefited by the establishment of homes and settled communities, and this "bonus to the land-owners" was to be considered as compensation in part for the hardships and uncertainties of pioneering. Otherwise, no subsidy was involved, and, as settlers paid for their share of the cost of construction, the works were to be turned over to them as a cooperative or an irrigation district enterprise. The money received would be used to finance new projects. No money was to be appropriated for reclamation; only the sums received from the sale of public land within the western states were to be used for this purpose. 42

The object of the reclamation law was "primarily to put the public domain into the hands of the small landowners -- men who live upon the land, support themselves,

Gance, "The Origin of a National Reclamation Policy," 51-52.

See Dorothy Lamper, Economic and Social Aspects of Federal Reclamation, Johns Hopkins University Studies in Historical and Political Science, XLVIII (Baltimore, 1930).

make prosperous homes, and become purchasers."43 The federal government was to provide only one thing -- water. The government had no obligation to help the individual farmer directly on his land. In fact, no consideration whatsoever was given to the guidance of the farmer regarding any of the numerous agricultural problems which beset him in a water-scarce region. The Reclamation Act did, however, give the irrigationists direct access to the federal treasury for construction funds, and President Theodore Roosevelt provided them a champion in the Reclamation Service which was set up as a new branch of the Geological Survey.44

In carrying out the provisions of the Newlands

Act in the Arkansas Valley, the Reclamation Service faced a

variety of problems. From 1902 to 1903 W.G. Russell, a

Reclamation Service hydrographer, and C.O. Sparks, a Depart
ment of Agriculture forester, toured southwestern Kansas,

southeastern Colorado, and adjacent areas, investigating

possible reservoir sites. None were found.

Another survey

F.H. Newell, "The Reclamation of the West,"
Annual Report of the Board of Regents of the Smithsonian
Institution, 1903 (Washington, 1904), 828.

Commission on Organization of the Executive Branch of the Government, Task Force on Water Resources and Power, Report on Water Resources and Power, I (3 vols.; Washington, 1955), 35.

^{15&}quot;Investigations in Kansas. Reconnaissance in Southwestern Kansas and parts of Colorado, Oklahoma, New Mexico, and Texas," Department of the Interior, United States Geological Survey, Second Annual Report of the Reclamation Service, 1902-3 (Washington, 1904), 326-331.

team during the same period reported that discussions of the potential benefits of irrigation in western Oklahoma had not aroused public interest. The Reclamation Service field men said that many landowners in western Oklahoma were interested "chiefly in speculative enterprises." They believed that to say irrigation was needed in the area implied an unsatisfactory climate. Advertising inadequate rainfall for farming would be harmful to their businesses. Even those who wanted it knew little about irrigation practice. Most of them had recently emigrated from the more humid eastern region and had never been in an irrigated area. The survey team concluded nevertheless that the availability of federal money for reclamation of semi-arid lands in the area did stimulate some interest. 46

The major problem of the Reclamation Service in the upper Arkansas Valley was that private and corporate enterprise had been at work for over half a century. Claims were already made to water rights and possible reservoir locations. This was especially true in Colorado. But even in western Oklahoma, on a major Arkansas River tributary, the Cimarron's water was all taken and used for irrigation purposes between Kenton, Oklahoma, and the head of the river above Folsom, New Mexico. Charles N. Gould reported to the Reclamation Service in 1903 that "throughout the greater part of the distance for sixty miles west of Kenton a dam has

^{46&}quot;Investigations in Oklahoma," Second Annual Report of the Reclamation Service, 1902-3, 413-414.

been put in on an average of every two or three miles." In fact, the federal government, coming into the region with its resource development program rather late, was in the position of buying back at large cost the valuable rights which it had given away. The laws and administration of resources in the West in the first decades of the twentieth century favored monopoly in water and the federal government was at a disadvantage in attempting to carry out the purposes of the Reclamation Act of 1902. Frederick H. Newell, Director of the Reclamation Service, contended "these conditions greatly hampered the work of the reclamation service."

These adverse factors limited the net investment of the United States Reclamation Service as of June 30, 1921, from the "Reclamation Fund" in the Arkansas Valley to only \$407,493.47. No money was spent in Colorado in the Arkansas Basin, and approximately \$82,000 was expended by the Service in the period 1902 to 1921 on surveys in Oklahoma. More than \$325,000 had been expended in the Garden City, Kansas, area developing a pumping system for the recovery of underground waters from the Arkansas River. 49 In 1910 the water

^{47&}quot;Reconaissance in Western Oklahoma and Adjacent Areas," Second Annual Report of the Reclamation Service, 1902-3, 429.

⁴⁸ F.H. Newell, "The Work of the Reclamation Service," Annual Report of the Board of Regents of the Smithsonian Institution, 1904 (Washington, 1905), 375.

Data compiled from Twentieth Annual Report of the Reclamation Service, 1920-1921, 56-58.

right charge in the Garden City area was \$37.50 per acre of irrigable land. On addition, the farmers were required to pay an annual maintenance and operation fee of \$2.75 per acre. The relatively high cost of water resulted in the failure of the project. 51

on the other hand, other federal investigators reported that the Reclamation Service's Garden City project "failed because there was no real interest in those days on the part of the farmer for irrigation." The truth of this statement may lie in the fact that in the first decades of the twentieth century the Campbell system of dry-farming still captured the imaginations of many farmers on the Plains. Campbell's main thesis was that if the cultivated lands were kept stirred, producing a soil mulch, the benefit of any precipitation would be carried over to the time when moisture was most needed. The soil was to act as a reservoir. Irrigation, therefore, was considered an unnecessary expense. 53

⁵⁰ F.H. Newell, "Progress in Reclamation of Arid Lands in the Western United States," Annual Report of the Board of Regents of the Smithsonian Institution, 1910 (Washington, 1911), 187.

⁵¹ Ibid.

⁵² Report on Water Resources and Power, II, 661.

⁵³ See W.M. Hargreaves, "Dry Farming Alias Scientific Farming," Agricultural History, XXII (January, 1948), 39-55.

This lack of scientific knowledge and technical appreciation of the intricacies involved in successful adaptation to the upper Arkansas Basin environment brought considerable hardship to the Valley's settlers in the succeeding decades. Thus, the deficiency of water would remain the critical problem for the inhabitants of the upper Valley as, in some respects, it was for the people living in the lower Basin. Also, interestingly, the history of irrigation in the upper Basin had other similarities to that of navigation in the lower Arkansas Valley. In both cases, risk capital entered what seemed a richly profitable field but, in both cases, investors found that the environmental problems were too great. They asked for government funds. When the federal government entered the field, the risk capital had largely disappeared. For irrigation, as for navigation, then, the tendency was toward increased federal subsidy.

CHAPTER IV

PROBLEMS AND PROGRESS OF THE THIRTIES: UPPER BASIN

The character of resources problems in the Arkansas Basin and the methods of dealing with them changed during the 1920's and 1930's. Handicapped by agricultural depression, financial instability, drought and floods throughout most of the period, the people of the Valley, the state governments, and the federal agencies dealing with resources problems, searched for new remedies to reduce the difficulties of a harsh environment. During these years the federal government, and to a lesser extent some Basin-state governments, began to move in the direction of coordinated natural resources research and development.

In the area of the Arkansas Basin west of the ninety-eighth meridian to the foothills of the Rocky Mountains, low and irregular precipitation, combined with scarce supplies of available surface and ground water constituted an increasingly serious problem for agriculture. During periods of higher than normal rainfall, crop production under dry-farming methods flourished. When there were periods of lower rainfall, farmers suffered from droughts, poor crops,

and economic depression. Moreover, a considerable portion of the area was not available for cultivation or grazing because the native grasses, adapted through centuries of recurrent drought, had been plowed under or over-grazed, exposing the topsoils. Ironically, good rainfall, far from being a total blessing, carried away much unprotected soil as it rushed downward to the river system. Thus, in dry years the soil blew away; in wet years, it washed off. The damaged soil and economic devastation led some men to contend that the area of the upper Arkansas Valley was unsuited for human habitation.

Men of intellect and vision believed that conservation of water and soil through controlled land resource use practices would provide the answer to the dilemma of Plains agriculture. As early as 1900, Ten Eyck of Kansas had advised Plains farmers to "go back to grass" as a means of replacing the humus content of the soil and preventing blowing. In 1903, Oklahoma farm leaders recommended building farm ponds as a method of conserving water. One supporter of this method stated that these small ponds would be the

Selman A. Waksman, "Humus and Soil Conservation," Soil Conservation, III (April, 1938), 250-254.

See W.J. McGee, Soil Erosion, Department of Agriculture, Bureau of Soils, Bulletin 71 (Washington, 1911).

Angus McDonald, Erosion and Its Control in Oklahoma Territory, Department of Agriculture, Miscellaneous Publication 301 (Washington, 1938), 13.

"redemption of the great southwest prairie country." Enthusiasm ran so high that the Oklahoma territorial legislature decided that "any person or persons . . . who shall construct . . . a dam across a ravine or waterway, thereby creating a pond or reservoir of water . . . shall be entitled to a reduction of taxes."4

From 1900 to 1910 the editors of farm journals encouraged farmers to build dams for small reservoirs which would stop soil erosion. John Fields, director of the Oklahoma Agricultural Experiment Station and contributing editor to the Oklahoma Farm Journal, urged between 1906 and 1910 that farmers plant cover crops. Many followed Fields' advice and planted large areas in Bermuda grass, which could not withstand the recurrent droughts or abnormally cold winters from 1909 to 1911. During this period, other grasses were tried by Plains' farmers to hold moisture, prevent erosion, and replace natural vegetation.

In the same period, Oklahoma farmers along the Arkansas' tributary streams west of the ninety-eighty meridian planted trees as an experiment. They believed forestation would increase rainfall, and that the trees would serve as windbreaks to prevent soil blowing. 6 Moreover, as

^{4&}lt;u>Ibid.</u>, 42.

^{5&}lt;u>Ibid.</u>, 14-18.

^{6&}lt;u>Ibid.</u>, 19-22.

early as 1917, in the Arkansas Valley, Oklahoma's State Agricultural Experiment Station and county agents instructed farmers on building terraces, planting cover crops, and other conservation practices. These efforts were inadequate because they were too limited, based on insufficient scientific knowledge, and lacked the technical and financial means to effect their purposes.

The federal government tried to help solve these problems. The Department of Agriculture actually began research into various agronomic areas in 1894, when it established the Eureau of Chemistry and Soils. That year it also began issuing bulletins describing means of curbing erosion. As early as 1903, hillside drainage studies were undertaken in the Department's Office of Experiment Stations. Investigations of terracing to prevent erosion were begun in 1914, and results of these endeavors were published in popular magazines as well as the Department's technical journals. The basic problems were that in these first decades of the twentieth century the Department did not have enough scientific data regarding the peculiar problems of

⁷C.E. Ramser, Prevention of the Erosion of Farm Lands by Terracing, Department of Agriculture, Bulletin 512 (Washington, 1917).

Robert J. Morgan, Governing Soil Conservation: Thirty Years of the New Decentralization (Baltimore, 1965), 2; and, T. Swann Harding, Two Blades of Grass (Norman, 1947), 193-209; 263-267.

⁹ Report of the Chief of the Bureau of Agricultural Engineering, 1933 (Washington, 1933), 8.

farming on the Plains, nor did it have a program of direct technical assistance to farmers for conserving soil and water.

In 1926 the Department of Agriculture launched an educational program on soil and water erosion. It urged that legislation make possible a full-scale study of the problem, and Congress responded with limited funds. appropriation enabled the Department's Division of Agricultural Engineering, in cooperation with the Chamber of Commerce of Guthrie, Oklahoma, to establish in 1928 a 160-acre soil-erosion experiment farm near Guthrie. 10 Experiments to determine the rates of soil loss from cultivated fields, the relation of those rates to the intensity of rainfall, and the effects of different crops in the control of erosion, formed the basis for some of the more detailed scientific The establishment of the Red Plains studies which followed. Conservation Experimental Station at Guthrie was the first formal recognition by Congress of soil erosion as a menace to agriculture. 11

Report of the Chief of the Bureau of Agricultural Engineering, 1935 (Washington, 1935), 9.

The Commission on Organization of the Executive Branch of the Government, Task Force Report on Natural Resources, Appendix L (Washington, 1949), 45; also, remarks of Senator Robert S. Kerr of Oklahoma, Annual Soil Conservation Award Barbecue, Muskogee, Oklahoma, May 19, 1961, Kerr Papers, Manuscripts Division, University of Oklahoma Library, Norman, Oklahoma.

In 1929, Congress expanded this pilot research program by providing a special fund for studying the prevention of soil erosion. The Department of Agriculture's Division of Agricultural Engineering and Bureau of Chemistry and Soils planned under the fund a program of cooperative research to be conducted at the Guthrie erosion experiment farm and similar farms located in seriously-eroded areas. Thus, the Department of Agriculture consolidated the research efforts of its agencies with the states' agricultural colleges and experiment stations into a single experimental and demonstration program. There still was no direct relief, however, to the individual farmer.

The serious droughts of the 1930's heightened federal concern for the Arkansas Valley's natural resources problems. At that time, searing droughts were burning the fields, as hot winds blew the topsoil into dust billows across the upper Basin. Rupert N. Richardson pointed out that the dry years from 1931 to 1936 brought great distress to several million people living in the Great Plains. "With no vegetative covering to hold it, the loose soil was blown about like ashes and the 'Dust Bowl' became a part of our __environmenta_7 terminology." Without water, the beginning

¹² Report of the Chief of the Bureau of Agricultural Engineering, 1933, 8.

Rupert N. Richardson, "The 'Summary Forward' of the Future of the Great Plains," Mississippi Valley Historical Review, XXX (June, 1943), 49.

and end of agriculture in this area, there could be no crops. Without crops, the Plains' soil could not be anchored against the wind. Thus, the cultivated soil, without water, devoid of binding grass roots and spongy humus, was turned into a dry powdery substance, which the wind blew away. The scourge of erosion devastated vast areas of land from near the ninety-eighth meridian to the foothills of the Rockies. 14

Franklin D. Roosevelt, in submitting the report of the Great Plains Commission to the Senate, w rote: 15

The problem of the Great Plains is not merely one of relief . . . It is much more fundamental than that. Depression and drought have only accentuated a situation which has been long developing. The problem is one of arresting the decline of an agricultural economy not adapted to the climatic conditions because of lack of information and understanding in the light of later experience and of scientific information now available.

Clearly, the federal government's programs of resource conservation had been inadequate. It was apparent to the agronomists and others knowledgeable in the conservation fields that demonstration projects and research publications alone were not enough to meet the widespread resource problems of the upper Arkansas Valley. Two of the Department of Agriculture's representatives inspected small water reservoirs in western Kansas during the drought of

¹⁴ See Vance Johnson, Heaven's Tableland: The Dust Bowl Story (New York, 1947).

Congressional Record, February 10, 1937, 75th Cong., 1st Sess., 1937, 1070.

1934 and found only one of several farm ponds "capable of moistening a parched throat." They attributed the serious water shortage to poor reservoir design and construction. If properly built, these small ponds "would have assured a supply of water during the urgency of drought." At the same time, in southeastern Colorado and southwestern Kansas such accepted conservation practices as terracing, contour tillage, and strip cropping were "practically unheard of," despite the fact that under the Smith-Lever Act the Department of Agriculture's extension service had been active in this work since 1915. Farmers in that area relied on summer fallowing to store moisture in the soil for succeeding wheat crops. They simply lacked the technical knowledge necessary for successful farming in the water-scarce area of the region west of the hundredth meridian.

By November, 1936, the Department of Agriculture's Drought Relief Committee had designated almost all of the area in the upper Arkansas Basin as "emergency drought counties." Almost immediately, an expanded program of relief was begun, providing materials and technical guidance

¹⁶W.C. Lowdermilk and F.F. Barnes, "Stock Ponds in the Great Plains Drought Area," Soil Conservation, II (September, 1936), 44.

Report of the Chief of the Soil Conservation Service, 1940 (Washington, 1940), 22; and J.G. Lindley, "Protecting Colorado's Range Lands," Soil Conservation, IX (August, 1940), 12-13.

in developing soil and water conservation practices on drought-stricken farms. 18 In the Soil Conservation and Domestic Allotment Act of 1936, production control was made incidental to soil conservation. By shifting land from soil-depleting crops such as corn, tobacco, wheat, and cotton, to soil-building crops such as clover, alfalfa, and pasture grasses, farmers could save the soil and moisture. The government granted subsidies for these and other soil and water conservation methods. 19

Also, as a result of the 1936 drought, considerable attention was given to the feasibility of providing an adequate water supply on farms by the construction of small earthen dams and reservoirs. The precedent for this had been set between 1933 and 1934 when the Civilian Conservation Corps constructed approximately 350 such reservoirs in North Dakota. These small ponds had been relatively successful in reducing the severe results of the drought in that area of the Great Plains. Therefore, in-

¹⁸W.F. Peel, "The Soil Conservation Service Drought Program of 1936," Soil Conservation, II (March, 1937), 204-205; and, A Study Committee Report on Federal Aid to Agriculture Submitted to the Commission on Intergovernmental Relations (Washington, 1955), 25-26.

¹⁹ National Resources Committee, Drainage Basin Problems and Programs, 1937 Revision (Washington, 1938), 107.

²⁰ Lowdermilk and Barnes, "Stock Ponds in the Great Plains Drought Area," 44-46.

creased federal assistance to individual farmers and ranchers to develop water facilities was made possible by the Pope-Jones Water Facilities Act of 1937. The Act was financed by \$500,000 from the regular appropriation for the Department of Agriculture for 1939, and by Secretary of Agriculture Henry A. Wallace's allotment of \$5 million from a special fund. 22

This money, however, came with certain limitations not common to the Water Facilities Act or the Emergency Relief Act. No more than \$50,000 was to be assigned to any one project; facilities were to assist farm families of low income; and federal construction funds were to be loans, not grants. Once an area was approved for the development of water facilities, which ranged from pump wells for supplemental irrigation to the building of small dams for stock use, the Farm Security Administration provided the funds by which it was to be financed. In some instances, the Soil Conservation Service constructed the facility; in others, a contract was let to private contractors with the Soil Conservation Service engineers acting only as consultants or supervisors of construction. 23

²¹ United States, Statutes at Large, L, 869.

H.T. Cory, "Some Engineering Aspects of the Water Facilities Program," Soil Conservation, IV (January, 1939), 172.

Report of the Chief of the Soil Conservation Service, 1940, 40.

Carefully planned water facilities were intended to achieve better land and water resources use and thus promote the welfare of the people who lived on the land. In the Arkansas Valley, the value of such facilities was already recognized. However, for various reasons the personnel for careful planning and for adequate supervision of construction were not readily available. Also, under a work-relief program, there was a tendency to construct an overabundance of facilities where there was ample relief labor, and too few in localities where relief labor was scarce. Moreover, because the federal government did not pay the whole cost of the conservation job on private lands as it had done largely for the demonstration projects earlier, farmers were reluctant to enlist in the Water Facilities program. 24

The Department of Agriculture recognized that new methods were needed to gain the cooperation of the farmers in this expanded program. From 1935 to 1937, the Department urged that the states pass laws authorizing farmers and ranchers to organize and govern soil conservation districts that would cooperate with the federal government in widespread application of soil and water conservation principles. Significantly, these community districts, established as local units of government, would conduct their

²⁴ Congressional Record, 75th Cong., 1st Sess., May 17, 1937, 4711.

operations in accordance with state enabling legislation for cooperative action to deal with their local conservation problems. Arkansas passed the first soil conservation district law on March 3, 1937, only five days after the federal government suggested adoption of such state laws. Following enactment of the Arkansas law, other states in the Basin passed similar statutes, making it possible for farmers operating millions of acres to band together for effective conservation work. 25

Reorganization of the Department of Agriculture in the fall of 1938 was intended to further the conservation services offered directly to the farmer by the federal government. The reorganization grouped together the Department's physical land-use action programs and placed them under the Soil Conservation Service. Thus, for the first time, it became possible for the farmer to work with a single representative of the federal government in matters pertaining to erosion control, submarginal land purchase and development, irrigation and drainage, upstream flood control, and the water facilities program. 26

This federal action stimulated widespread efforts to arrest further depletion of the Arkansas Valley's soil and water resources. New land was scarce, the population

Report of the Chief of the Soil Conservation Service, 1940, 5.

²⁶ Morgan, Governing Soil Conservation, 99.

was growing rapidly, and there was economic deprivation throughout the Basin. Clearly, the Valley's citizens could no longer afford to let their resources deteriorate. These dramatic federal policies inculcated at all levels of government a consciousness of the severity of the region's resource problems, and the absolute necessity of institutional action in the conservation area. It is not likely that this could have been done without national direction, a well-planned national campaign, and highly-skilled technicians. Through these developments, producers on the land received aid in reducing distress and in adjusting to critical resource problems.

The basic shortcoming of the program was that it offered so much with such limited funds. For example, although by June, 1939, Arkansas had established sixteen soil conservation districts, Kansas and Colorado had three and eight respectively, and Oklahoma had more than any other state in the nation with twenty-four, the Soil Conservation Service had worked or cooperated to develop water facilities in only twenty-four areas in those states. Therefore, these four states of the Basin had only twenty-five Soil Conservation Service watershed and demonstration areas. The Federal funds had not been appropriated for an accelerated

²⁷Compiled from Report of the Chief of the Soil Conservation Service, 1940, 6-8, 21-23.

²⁸ Ibid., 21-23.

program, although the authorizing legislation had been approved. 29 Even if the funds had been available to carry out the authorized federal program, there was no assurance the farmers of the Arkansas Valley would accept them on a loan basis along with other federal limitations. As early as 1936 the Report of the Great Plains Committee had warned that the programs of the Soil Conservation Service would possibly fail "without supplementary state legislation, in bringing about all the necessary modifications of destructive land-use practice in the Great Plains States." 30 Clearly, more was needed than just federal direction to develop an adequate conservation program in, the Arkansas Valley.

Basin-state leaders recognized these federal policy limitations and acted to promulgate a successful conservation program. This meant getting more federal funds and taking certain state actions. For example, Colorado and Kansas organized the Western Great Plains Shelterbelt Association because funds had not been appropriated for eastern Colorado and southwestern Kansas. The Colorado legislature memorialized Congress in the spring of 1935 on behalf of the organization, urging funds for shelterbelts in the

^{29 &}lt;u>Ibid.</u>, 8, 40, 64.

Future of the Great Plains (Washington, 1936),

region. 31 Kansas began an active program to construct some 3,000 small water-storage facilities 32 and passed laws imposing erosion control on farmers. 33 Legislation passed in Kansas in 1935 authorized the county commissioners to enter private land and charge the expenses of controlling erosion against the land in the same manner as taxes. 34 Kansas also adopted a policy of reducing tax assessments by \$40 per acre-foot of water storage capacity on farms where ponds were built. 35

Oklahoma adopted an especially active conservation program. In January, 1935, Governor E.W. Marland asked the Fifteenth Legislature to act immediately on his proposals for building dams to prevent floods and store

³¹ Congressional Record, 74th Cong., 1st Sess., April 15, 1935, 5614.

Congressional Record, 75th Cong., 2d Sess., January 27, 1936, 1085.

³³George S. Wehrwein, "Wind Erosion Control Legislation in Texas and Kansas," The Journal of Land and Public Utility Economics, XII (August, 1936), 312-313.

Journal of Land and Public Utility Economics, XIII (November, 1937), 420-421; and, Hale Hockley and Herman Walker, "1937 State Legislation for Control of Soil Erosion," The Journal of Land and Public Utility Economics, XIV (May, 1938), 214-215.

National Resources Committee, Drainage Basin Problems and Programs, December, 1936 (Washington, 1937), 383.

water, terracing land to stop soil erosion, and planting trees to reforest waste land. He proposed a planning board of fifteen members to survey the resources of the state and develop plans for their conservation and utilization, and a flood control board consisting of three members. Although Leon C. Phillips, speaker of the House, opposed Governor Marland, the legislature passed a measure creating the Oklahoma State Planning Board, whose duty it was to prepare and adopt a resources development plan for the state.

A special session of the legislature in November, 1936, revised the State Planning Board, making it the Oklahoma Planning and Resources Board. New divisions were created -- Forestry, State Planning, Water Resources, State Parks -- extending the scope of the former State Planning Board. Finally, in early 1939, Governor Marland appointed Don McBride Director of the Division of Water Resources of the Oklahoma Planning and Resources Board. McBride's subsequent construction of some flood control projects as "show places" for conservation practices was to have farreaching consequences not only on the state but also at the national level.

When McBride became the Director of the Oklahoma Division of Water Resources, the agency had three worn-out

³⁶ Edward E. Dale and Morris L. Wardell, History of Oklahoma (Englewood Cliffs, New Jersey, 1955), 359-360.

^{37&}lt;sub>Ibid.</sub>, 361.

Caterpillar tractors and some other dirt-moving equipment. No appropriations were made for repair or operation of this equipment. In fact, there was an informal edict from the legislature to abandon the construction of some flood control projects that the previous administration had started, but with which they had encountered great difficulty in engineering and construction. The appropriation for the work was far short of what would be required to finish the projects. 38

McBride's Division was flooded with water right applications, for diversion from streams, and for the right to impound water, but, for the most part, the farmers who needed the water worst were not able to resort to federal loans to finance adequate works to meet the need. The Division sent representatives over the state to speak on the need for soil conservation, impounding water for farm use, especially stock ponds, and for flood control and irrigation. They even distributed what was called an "A.B.C." booklet on the design of farm ponds. Almost everyone seemed to agree on the need, but nobody could answer the question of how the job could be done.

The dollar cost for building farm ponds with the available machinery was out of reach, until McBride suggested using penitentiary inmates, many of whom were competent

³⁸ Don O. McBride, descriptive statement to writer, March 17, 1967.

construction equipment operators, for workers in a demonstration program. To implement his plan, McBride first contacted the Caterpillar Tractor Company in Oklahoma City, asking it to participate in a demonstration program which would indicate the extent to which small contractors might be able to construct farm ponds on a profitable basis, and yet at a cost which the ordinary farmer could afford.

Furthermore, McBride requested that the Caterpillar Company repair the equipment which the Division then had, withholding charges for repairs until the equipment could earn enough money to pay them. Although somewhat reluctant, the Caterpillar Company, realizing that this might lead to the sale of a considerable amount of equipment, and also aware that many small contractors had equipment for which they had no use, agreed to cooperate.

Next, McBride contacted the President of Oklahoma A & M College (now Oklahoma State University), and supervisor of the seventy-seven county agents in the state, requesting that he urge their cooperation in setting up county projects for building farm ponds. When the A & M College President agreed to help, McBride then reported his activities to his own three-member board, indicating that the board would have to request that the Governor parole to them or McBride trusties from the reformatory and penitentiary who could operate the equipment.

McBride's proposal was to build twenty farm ponds

in a county. Before construction began, agreements with the landowners would be secured. According to the agreement, the landowner would put in escrow with the office of the county agent or bank designated by him money equivalent to five cents per cubic yard for the fill and excavation required; the structure would be guaranteed safe; and the drainage areas would produce adequate runoff to maintain a farm water supply for the use of that individual farm. Finally, maintenance of the structure would be assured by the farmer.

The program was initiated in southwestern Okla-Enough farmers signed up, parolees did the work, and the first demonstration project of twenty ponds was completed. Indeed, even before it was finished, McBride received requests from other counties for similar projects. The Division replied to these requests by stating that the project was a demonstration program, but that the great need for farm ponds in the states would be met by private contractors on a basis approved by the Division. Therefore, with "free equipment," free construction labor, and free engineering, the Division was able to construct the first demonstration project at a cost of less than five cents a cubic yard of dirt moved. McBride was careful to indicate, however, that it would cost around fifteen cents per cubic yard of fill in place to have a private contractor do the work or to have it done under the auspices of the federal

government.

In all, by 1941, there were approximately fifteen or twenty such projects in the seventy-seven counties in Don McBride asserted that Oklahoma's demonstration Oklahoma. projects stimulated the Soil Conservation Service through its earlier Soil Conservation and Domestic Allotment Act of 1936 to provide increased financial assistance to farmers in carrying out certain approved soil and water conserving practices. He also believed Oklahoma's projects of the early forties added a great deal of emphasis to the Watershed Protection and Flood Prevention Act of 1954 which provided for a project-type approach to soil and water resources development, conservation, and use. Under this Act, as with the earlier McBride program, each project was a local undertaking with federal help, not a federal project with local help. Possibly more important still was the role the McBride program played in convincing the upper Arkansas Basin farmers that soil and water conservation practices were both practical and advantageous. Finally, McBride had a strong influence on Robert S. Kerr.

CHAPTER V

PROBLEMS AND PROGRESS OF THE THIRTIES: THE LOWER BASIN

While the people of the upper Valley suffered from drought and erosion, flood problems in the lower Basin became progressively worse. These destructive natural phenomena had been occurring long before the region was settled. In fact, the lower Mississippi Valley was formed by erosion of soils. But, man-induced erosion, accelerated by unwise land treatment, in addition to man's costly developments on the river's alluvial plains, increased the destruction from floods and other hazards.

Disastrous floods which frequently occurred, sweeping through the Arkansas Valley leaving death, destruction, and desolation in their wake, aroused the people to the magnitude of the flood control problem. Large earthen structures bordered the river. Constructed to withstand high waters, these dikes represented the accepted flood abatement policy in the lower Basin until the

Arkansas River and Tributaries, 74th Cong., 1st Sess., House Document 308, August 24, 1935, Serial 9936, I (3 vols.; Washington, 1936), 47-55.

especially destructive inundations in 1927. The devastations of that year, when Arkansas Valley citizens lost approximately \$58 million and when the earthen dikes along the lower river were swept away, resulted in sharp criticism of the "levees only" policy. The 1927 flood, moreover, revealed that the property owners, who joined to form levee districts to construct the seemingly protective devices, were unable to further underwrite such projects. Also, the inundations raised the question whether it was not more feasible to prevent floods by holding the water upstream rather than funneling the water into narrow channels in the lower stream where levees alone could not withstand the pressure.

The advocates of upstream dams argued that at times the Arkansas River was the greatest flood tributary of the Mississippi. The Arkansas was therefore a major controlling factor in solving the Mississippi's overflow. For example, in the 1927 flood, when the Mississippi River was already at full capacity, the Arkansas River discharged directly across the channel 200,000 cubic feet of water per second, creating a water-wall in the Mississippi some eight or ten feet high and backing up that depth of

² Congressional Record, 70th Cong., 1st Sess., March 21, 1928, 5127-5128; and Ibid., April 12, 1928, 6310; also Arkansas River and Tributaries, I, 82.

water for many miles.³ This Arkansas water contributed greatly to the historic devastation of the lower Mississippi Valley. To many of those concerned with preventing a recurrence, the solution was dam-building on tributary streams to store this water which could later benefit the flocd-producing areas on the upstream watersheds.

The role of upstream development in flood prevention was hotly debated while the great Mississippi flood was still in progress. Congress investigated the problem of how to prevent a recurrence of the disaster. The Chief of the United States Army Corps of Engineers, General Edgar Jadwin. although he admitted that the fifty year old "levees only" policy of the Army needed revision, continued working to prevent "well-meaning" persons from diverting the "application of the sure remedy /levees/."4 Even after the havoc of 1927, the Corps' emphasis was on engineering works, other than reservoirs, in the lower Mississippi Basin. Generally ignoring the increased rate of runoff in the upstream Mississippi watershed which contributed to the massive overflows, the Corps' program tried only to contain the river which each year seemed to rise higher and destroy

³Congressional Record, 74th Cong., 1st Sess., January 24, 1935, 973.

⁴U.S. Congress, House of Representatives, Hearings before the Committee on Flood Control: Flood Control, 69th Cong., 2d Sess., November 7-23, 1927, pp. 1844-1845.

more.

This narrow view of flood control had numerous critics in the Arkansas Valley. The Oklahoma City Chamber of Commerce declared on December 8, 1927, that the Corps' levee program did "not contemplate the reduction or control of floods" before overflow waters accumulated in the main stream where they did the greatest damage. Neither did the Army's system make use of flood waters in the reclamation of dry lands, which the Oklahoma City Chamber of Commerce insisted were "as much entitled to governmental solicitude as reclamation of wet lands below." More important to the Oklahoma Citians, the Engineers' flood control policy ignored "every available use of water in economic development, whether it be industrial, or agricultural, or navigation, or commerce."

The Arkansas Valley states also opposed the Corps' flood control position. Seven states comprising the drainage basin of the Arkansas and its tributaries established the Arkansas River Flood Control Association with Clarence B. Douglas of Tulsa as president. This interstate commission adopted a plan of upstream reservoirs and proposed constructing 200 dams in Colorado, New Mexico, Texas, Kansas, and Oklahoma at a cost of approximately \$130

⁵ Congressional Record, 70th Cong., 1st Sess., January 5, 1928, 1066.

million. Everette B. Howard, United States Representative from Tulsa, supported this approach in Congress because, he said, the "Army engineers had admitted to him that the plan would control floods on the Arkansas and its tributaries and make the Arkansas navigable for a considerable distance." Moreover, Howard asserted that just three reservoirs constructed upstream from Tulsa would have prevented the \$36 million loss incurred by the states of Oklahoma and Arkansas in the 1927 inundations.

Representative Heartsill Ragon of Clarkesville,
Arkansas, essentially supported Howard's position. Ragon
used statistics furnished by the Bureau of Agricultural
Economics to show that the damages in Arkansas had been
greater than those in Mississippi. He was particularly disturbed that flood relief in the Arkansas Valley was "practically ignored" and that the so-called "Jadwin plan" for
high waterflow abatement still ignored upstream reservoirs.

Another congressman from the Arkansas Valley, William W. Hastings of Tahlequah, Oklahoma, was an especially

⁶¹bid., 1065-1066.

⁷Congressional Record, 70th Cong., 1st Sess., January 9, 1928, 1198.

⁸<u>Ibid.</u>, January 12, 1928, 6310.

⁹ Ibid., March 21, 1928, 5126.

severe critic of the Army Engineers' emphasis on downstream works to control floods. To Hastings, the floods of 1927 had proved the "futility of depending on the levees system alone." He believed reservoirs should be established on the upper reaches of the Arkansas River and each of its larger tributaries where, in the event of menacing floods, the waters could be withheld instead of pouring "with torrential force down the several tributaries into the Arkansas, then into the Mississippi, where they could not be controlled." Significantly, Hastings emphasized project planning to include other uses of water that could be conveniently coordinated with flood control. He astutely pointed out that "these impounded waters should be released gradually for the benefit of irrigation and navigation, and the power that could be generated from the dams . . . utilized for the benefit of municipal and industrial purposes in the several communities and States."10

This concept of coordinated river basin improvement received impetus in 1927 when Congress instructed the Army Engineers to undertake basin surveys of the major ll streams in the nation. The subsequent "308 Reports,"

¹⁰ Congressional Record, 69th Cong., 2d Sess., December 8, 1927, 276.

Annual Report of the Chief of Engineers, 1927 (Washington, 1927), 5-6.

named for the House Document that contained the Corps' original estimate of the surveys' cost, were the first effort on the part of the federal government to appraise the nation's water resource problems and potential on a water-shed basis. Engineers, economists, and others working on these surveys throughout the decade following 1927 collected much basic information and developed a store of practical information about flood control, navigation, irrigation, and hydroelectric power.

Meanwhile, on January 21, 1927, Congress passed the heralded Rivers and Harbors Act, which initiated the first concrete steps toward planned water development. In fact, Congressional authorization of the Boulder Canyon Project Act the next year was the nation's first major multiple-purpose project. Boulder Dam and its reservoir would regulate the Colorado River for the benefit of Arizona and California irrigation projects, supply domestic water for Los Angeles, and assist flood control. The Act included navigation among its purposes, but there was in fact no navigation below the dam. Moreover, Boulder Dam put the federal government into marketing hydroelectric power on a major scale; 80 percent of the construction costs were for this purpose.

Commission on Organization of the Executive Branch of the Government, Report on Water Resources and Power, I, (3 vols.; Washington, 1955), 37-38.

^{13&}lt;sub>Ibid</sub>.

Congress' decision in 1933 to develop the Tennessee River was another extension of federal activity toward comprehensive river basin planning. From its inception, the Tennessee Valley Authority, as a federal government corporation, was concerned with improving the navigability and flood control of the Tennessee, providing for the reforestation and proper use of marginal lands in the Valley, encouraging agricultural and industrial development, generating and selling hydroelectric power, producing chemical fertilizers, and assuring the benefits of a "more abundant life" to the Valley's inhabitants. 14 Thus. for the first time in the nation's history, a single agency was given responsibility for developing the resources of a specific river-basin region. As envisaged by President Franklin D. Roosevelt, the Tennessee Valley project was a significant undertaking in democratic management and in the relatively new art of comprehensive regional planning, blazing the way, it was hoped, for enterprises of a similar nature and scope in other suitable sections of the country. 15

To give impetus and direction to further regional development, President Roosevelt authorized a Mississippi

William H. Droze, High Dams and Slack Waters: TVA Rebuilds a River (Baton Rouge, Louisiana, 1965), 20.

¹⁵ Whitney R. Cross, "Ideas in Politics: The Conservation Policies of the Two Roosevelts," Journal of the History of Ideas, XIV (Winter, 1953), 428-429.

Valley Commission in 1933 under the Public Works Administration. This committee, composed of eight men prominent in their respective disciplines, was assigned to develop an improvement program of resources conservation in the Mississippi Basin drainage area consisting of all, or parts of thirtyone states, embracing the entire heart of the continental United States from the summit of the Rocky Mountains in the west to the Allegheny Mountains in the east. The Mississippi Valley Committee's proposal for the Arkansas Basin enumerated twelve projects consisting of six upstream reservoirs and six flood-control levees in compacted high-cost developed areas which the Committee classified as "ready for immediate execution." About a dozen other projects were considered economically sound and listed as "having future value." Numerous other potential development sites and projects were also considered in the Valley by the Mississippi Valley Committee, but discarded.

About the same time that the MVC was established, the Basin states set up a study commission independent of the federal survey. The Arkansas Basin Committee submitted a report to the Public Works Administration on October 1, 1934, recommending a definite program of projects under "Class A" and "Class B." The Arkansas Committee listed those projects as "Class A" which they believed "economically

Congressional Record, 74th Cong., 1st Sess., January 24, 1935, 937; and, Ibid., August 22, 1935, 14191.

justified by the benefits to be derived from their construction"; "Class B" projects were those lacking "immediate justification for construction, but which were of sufficient importance for inclusion in a comprehensive program and the need for which would apparently develop in the future." The cost of these recommended works was approximately \$70 million.

Arkansas Valley interest groups followed up these reports of the Arkansas Basin Committee and the Mississippi Valley Committee with an active promotional campaign to get the recommended projects built with federal funds. For example, the Tulsa Chamber of Commerce contacted other city organizations to petition federal legislators and the executive branch, urging them to present their desires for river basin development. In June, 1934, the Tulsa Chamber of Commerce proposed that the President appoint an Arkansas Basin Authority with special reference to the necessity for cooperative legislative action between the Basin states and the federal government. 18 Moreover, an Arkansas Valley Association was organized at Little Rock pledging itself to work for congressional enactment of a "permanent resources program" for the Arkansas River Basin. 19 The powerful

¹⁷<u>Ibid.</u>, January 24, 1935, 937.

¹⁸ Tulsa Chamber of Commerce, Minutes of the Board of Directors, June 18, 1934.

¹⁹Little Rock, Arkansas Gazette, July 11, 1935.

National Rivers and Harbors Congress also urged Congress to appropriate funds for upstream reservoirs on the Arkansas and its tributaries without further delay. 20

By the late 1930's, various Arkansas Valley congressmen were urging substantial federal assistance for development of resources in the Basin. The Oklahoma House of Representatives' delegation was especially active in asking their colleagues to sign a petition to the President to build a series of dams and reservoirs in the Arkansas Valley. Wesley E. Disney, a Tulsa Representative, personally discussed with President Roosevelt what procedures would be most effective to secure federal aid for Arkansas River improvement. Representative John L. Martin of Colorado supported Disney's subsequent House Resolution for the establishment of an Arkansas Valley Authority because he believed it represented the objectives of both the Arkansas Basin Committee and the Mississippi Valley Committee.

While Arkansas Valley Representatives were pressing their demands on a reluctant Congress, the Army

²⁰ Congressional Record, 75th Cong., 3d Sess., April 26, 1938, 1732.

^{21 &}lt;u>Ibid.</u>, June 14, 1938, 9304.

²²Tulsa Chamber of Commerce, Minutes of the Board of Directors, June 18, 1934.

²³Congressional Record, 74th Cong., 1st Sess., January 24, 1935, 937.

Engineers submitted that part of their "308 Reports" which dealt with the Arkansas River and its tributaries. 24 The examining district engineer declared that "from Pueblo, where the river enters the Great Plains, to the Colorado-Kansas State line, storms of cloudburst intensity result in occasional floods,"25 some four million acres were "liable to inundation," and the annual average losses totaled approximately \$4,500,000.26 He noted that control and protection works costing about \$4 million had been constructed at Pueblo following a disastrous flood of 1921 in which 120 were killed. 27 Other local protection works existed in such cities as Wichita, Tulsa, Muskogee, and Fort Smith, and extensive levees had been constructed to protect even bottom lands below Fort Smith. Also, levees on the river's south bank below Pine Bluff, sixty-one miles below Little Rock had been constructed by the federal government as part of the system designed to protect the lower alluvial valley of the Mississippi.²⁸

²⁴ Arkansas River and Tributaries, 74th Cong., 1st Sess., House Document 308, August 24, 1935, Serial 9936 (3 vols.; Washington, 1936).

²⁵Arkansas River and Tributaries, I, 6, 84.

²⁶Ibid., 29.

²⁷ William G. Hoyt and Walter B. Langbein, Floods (Princeton, New Jersey, 1955), 364-365.

²⁸ Arkansas River and Tributaries, I, 81-83.

The district engineer contended that his investigations of these projects showed that the cost of any comprehensive plan of reservoir control in the upper Arkansas Basin greatly exceeded the benefits. He did believe that the construction of the Caddoa Reservoir on the upper Arkansas River about eighteen miles above Lamar, Colorado, for the joint use of irrigation and flood control, was "economically justified provided that the irrigation interests benefited pay a part of the cost." This proposed dam, however, would have no effect on floods further downstream than western Kansas. The district engineer also proposed construction of a dam and reservoir at Fort Reno on the North Canadian River fifty-five miles above Oklahoma City if \$1.280.000 was allocated for domestic water supply. believed a third and final site "would appear economically justified" at the proposed Conchas Reservoir, located on the South Canadian River in northeastern New Mexico because sufficient flood damages could be prevented, and there was a potential value for irrigation and water supply. 29

The Corps' district engineer did not believe protection of agricultural lands by levees was justified.

However, to him, construction or improvement of local levees at federal expense in areas of high property value were "economically justified or advisable for the protection of life and property." Actually, he thought the "best" method

^{29&}lt;sub>Ibid.</sub>, 7.

or system for controlling downstream floods was construction of twenty-one reservoirs on the Arkansas River tributaries at an estimated cost of \$116,195,000, or an average of \$10.25 per acre-foot of protection, including operation and maintenance. However, he concluded that the "most effective plan for Mississippi River flood control would entail the construction of a Targe7 reservoir just above Little Rock." 30

A major problem of considering one large reservoir, the Corps' survey showed, was the desire of local interests for a nine-foot navigation channel. The district engineer believed this channel was not feasible because of the "slope and unstable bed of the stream." Moreover, "even if fully conserved by storage reservoirs" the Arkansas' erratic flow was "inadequate to provide a dependable nine-foot channel without locks and dams," he declared. survey and report did present a "comprehensive plan for improvement" by considering construction of forty locks and dams, each with a lift of about eleven feet and an upstream storage reservoir "to assure the requisite water for lockage." Also, to provide an adequate channel, some dredging would have to be done; and, to afford stability of the improved river, extensive bank protection works were considered necessary. The total cost of these projects was estimated at \$204 million to provide a nine-foot navigation

³⁰ Ibid., 144-146.

channel to Catoosa, up the Verdigris River, fifteen miles from Tulsa. The Corps selected the Verdigris route because the elevation at Catoosa was lower, requiring fewer locks and dams and was therefore cheaper than proceeding further up the Arkansas. 31

The district engineer made a study of the prospective tonnage which might be carried on the Arkansas if it were fully developed for navigation. He concluded that benefits would accrue to a "large part of Arkansas, all of Oklahoma, nearly one-half of Kansas, and southeastern portion of Colorado, the eastern half of New Mexico, and the Texas Panhandle." About 7,460,000 tons, or about 10 percent of the 1929 total railroad tonnage, was estimated as potential waterway commerce. The transportation savings, based on that tonnage at the average water rate of 4.7 mills per ton-mile, was estimated at \$10,220,240 annually. Therefore, the district engineer concluded that improvements of the Arkansas River for navigation were not justified because the benefits fell "far short of annual charges of improvement" which were estimated at \$18,712,000.33

The Corps' survey considered possible benefits accruing from other water uses if the river were developed

^{31 &}lt;u>Ibid</u>., 3, 161, 183.

^{32&}lt;sub>Ibid.</sub>, 156-157.

^{33&}lt;sub>Ibid., 3, 183</sub>.

with federal funds. For example, the district engineer observed that about 750,000 acres were under irrigation in the Basin west of the ninety-ninth meridian in 1929, the greater part being in Colorado and Kansas above Garden City. He reported that water was diverted at twenty-three dams on the main river and flood and winter flows were conserved in some sixty-four tributary and off-channel reservoirs. nificantly, the survey showed that more land was under irrigation than could be readily served with the available water supply. In fact, conflicting claims to water rights were under litigation at the time of the report. 34 The district engineer concluded that the benefit of waters returned to the stream bed in the irrigated areas of the upper Basin would accrue to irrigation rather than to navigation; that the benefits from reduction in soil erosion and by flood control works would be "too inconsequential to allocate to those factors any appreciable portion of the cost of reservoir construction."35

The Corps' report also considered the possible benefits derived from hydroelectric power development in the Valley. The engineers considered this facet of multiple-purpose reservoir use "limited because of prior rights of irrigation in the western portion of the stream, the irregu-

^{34&}lt;u>Ibid.</u>, 66-77.

^{35&}lt;sub>Ibid.</sub>, 8, 78.

lar stream flow which required large reservoirs for regulation, and cheap steam power resulting from the abundance and proximity of coal, oil, and gas." The district engineer did not believe any of several potential power sites investigated "would be commercially sound at the time."

The Army division engineer concurred generally with the report of the district engineer. He, too, believed that "the maintenance of a nine-foot channel on the Arkansas by means of locks and dams \[\sum_{as} \] most doubtful, if not actually impracticable except at a cost far in excess of the estimates." The division engineer asserted that "the experience in the development of navigation on similar streams \[\lad{did} \] not warrant the assumption that a commerce of 7,500,000 tons would develop on \[\tau_{the arkansas} \] if a nine-foot channel were provided." He did not believe that the flood control projects presented by the district engineer were economically justified, and recommended that the federal government not "participate in plans for flood control, irrigation, power, or navigation on the Arkansas River Basin except as already authorized by law." 36

Federal law required that the Corps' Arkansas

Valley reports be reviewed and commented upon by other divisions and officers of the Engineers. The Mississippi River

Commission stated that the construction of reservoirs in the

^{36 &}lt;u>Ibid.</u>, 25-27.

Arkansas Basin to prevent floods in that Valley or to alleviate overflow in the Mississippi Valley "would cost more than equal relief from present flood conditions by the use of other approved methods of flood control." Generally, the Board of Engineers for Rivers and Harbors concurred with the conclusions of the Division Engineer and the Mississippi River Commission. The Chief of Engineers, General Edwin C. Markham, agreed with the findings of the Board of Engineers.

Of course, Arkansas development promotion interests opposed these conclusions of the ranking divisions and officers of the Corps of Engineers. Newton R. Graham, chairman of the Tulsa Chamber of Commerce Waterways Committee, prepared a brief opposing the Corps' "308 Report" for the Arkansas Basin, and Ray Lattner, Director of the Tulsa Chamber of Commerce, introduced a motion that the Board of Directors authorize expenditures to send lobbyists to Washington, D.C. The Tulsa Chamber adopted a resolution suggesting that through Graham the Waterways Committee take steps necessary to effect changes in the Engineers' "308 Report" to eliminate "unreasonable fiscal charges" to the end that

^{37&}lt;sub>Ibid.</sub>, 28.

³⁸ Ibid., 10-15.

^{39&}lt;sub>Ibid., 1-10.</sub>

"economic justification may be shown and recommended by the United States Army Engineers in their final report to Congress." The Tulsa Chamber resolution declared that in determining economic benefits the Corps had credited only a small portion of the available tonnage to the investigated projects and had made no allowance for expected increases in the future. Moreover, in determining construction costs, the Chamber believed the Corps had included items not customarily included in similar projects. 40

The Colorado State Legislature also passed a joint resolution which it sent to the Congress. The Coloradans declared that they needed additional water supplies, not to provide for cultivating new lands, but because existent water was "wholly inadequate." They said they were unable to construct these essential storage works without federal aid and believed their demands for federal funds were justified "because the element of flood control is a national, rather than a local problem," and the federal government could "well afford to be just in the distribution of construction of such works" which would impound the flood stages of the rivers and thereby alleviate overflow problems downstream. 41

Tulsa Chamber of Commerce, Minutes of the Board of Directors, February 25, 1936.

⁴¹ Congressional Record, 74th Cong., 2d Sess., April 6, 1936, 4995.

Several Arkansas Valley congressmen were opposed to the Corps' plan of development for the Arkansas. Senator Joseph T. Robinson of Arkansas, an ardent believer in multiple-purpose development, stated that the Army Engineers "made practically no attempt to coordinate their navigation program with flood control, nor with development of hydroelectric power." He contended that "the water which we are in a hurry to get rid of when a flood occurs, and which is so destructive and damaging, if held in reservoirs, can be used not only for power purposes, where the conditions permit, but if the waters which are now wasted were properly reservoired, undoubtedly they could be used for the fertilization of the soil."42

Senator Dennis Chavez of New Mexico also pointed out that problems of erosion and floods were related when he declared "the water that is washed off the farmer's land carries with it valuable topsoil -- his principle capital. This water borne soil -- this debris or erosion -- goes on into the streams and reservoirs and irrigation ditches, where it causes still further costly damage. The increased rate of run-off from eroded slopes, together with the clogging of stream channels, causes ever higher floods." 43

Representative Frank Carlson of Kansas probably

⁴² Ibid., April 2, 1936, 4778.

⁴³ Ibid., May 7, 1936, 6780.

expressed the opinion of many of his colleagues when he stated that "while undoubtedly some levees and channel straightening are needed for flood protection, particularly on the lower reaches of the streams, the great need is for the conservation and storage of water." Moreover, Carlson asserted that "despite the fact a large portion of Kansas is listed as semiarid, we suffer severe flood losses practically every year in some section of the State."

Representative Phil Ferguson of Oklahoma, a member of the House Flood Control Committee, appeared before the Mississippi Valley Association Convention at St. Louis in November, 1935. He stated that some members of the Committee thought the "principle of building reservoirs on the tributaries should have some recognition." Up to that time, he continued, they had been unable to bring a proposal for an upstream flood control dam system to a vote in the Committee, "because of the opposition of the members from the lower Mississippi, who insisted that diversions were the only way to solve the problem."

The Army Engineers continued to emphasize strongly the levee and diversion system in their reports to Congress in 1935. Congress generally followed the Corps' advice, and when the omnibus House bill was reported by the Flood Control Committee of the House, it did not incorporate a

¹bid., January 27, 1936, 1084.

single project that had not been surveyed and favorably recommended by the Corps. However, when the bill reached the House floor, numerous other projects were incorporated by amendments. Meanwhile, the Senate delayed the bill, and it was recommitted to committee. In the meantime, before the Senate committee took action, severe floods in the east and northeast sections of the United States brought a new sense of urgency and concern. Extensive popular curiosity as to why the floods could not have been prevented provided the impetus to set the legislative process in motion. Arkansas Valley and other western congressmen until now had been unable to impress their colleagues with the same arguments they had been using throughout the late twenties and early thirties regarding the value of upstream watershed planning.

The Flood Control Act of 1936 had special significance in that it not only recognized upstream reservoirs as vital flood control projects but also acknowledged the principle of erosion control and water retardation work on the agricultural lands as aids to downstream overflow protection. This was the first time the role of the land in flood alleviation work received official recognition in national policy. The Department of Agriculture, in cooperation with the Corps of Engineers, was authorized to undertake preliminary examination and survey of lands needing

⁴⁵ Ibid., January 22, 1936, 830-832.

flood control. The Department's work was confined to water-sheds, whereas the Corps worked upon the waterways. Agency reports were coordinated and the Bureau of Reclamation was brought into the process whenever its statutory functions were involved. 46

Prior to the Flood Control Act of 1936, the Corps of Engineers had primary responsibility for almost all federal flood control projects. Most of these works involved levee systems for protection of developed flood plain areas along the lower Mississippi River. The 1936 legislation provided the basis for extending not only the Corps' activities but also brought an old established agency into a hitherto unrecognized role. The Department of Agriculture already believed that water and soil conservation could best be effected by adopting modern farming methods. Department's Soil Conservation Service emphasized such techniques as strip cropping, contour cultivation, and terracing, among other things. The Department's Agricultural Engineering Division projects consisted of check dams, gully plugs, water spreaders, and other small water- and soilretarding structures. These measures on the land alleviated overflow by reducing sediment and runoff. However, the Department did not see its new function as replacing downstream installations. Agricultural employees repeatedly

⁴⁶ United States, Statutes at Large, XLIX, 1570.

asserted that "downstream installations have a very definite function and must be permanently depended upon as an important phase of flood control work." On the other hand, they were quick to point to the existence of mancreated conditions bringing about more frequent and more extensive floods. It was within "this margin of difference between natural conditions and man-modified conditions that watershed treatment . . \(\subseteq \text{could} \) be expected to make its contribution. "48

Moreover, the record of debate makes it clear that the intent of the 1936 legislation was not to help improve, or "reclaim," rural lands. Rather, it was to extend federal assistance only to prevent "catastrophic" and "dramatic" damages by floods of great magnitude. In fact, despite strong pressures, the House Flood Control Committee rejected for inclusion in the bill a number of projects, the principle purpose of which would have been just improvement of farmlands. 49 Clearly, the Flood Control Act of 1936 was passed by Congress as the solution to the nation's flood problem by a coordinated watershed program of prevention and control in which the upstream watershed farmer,

⁴⁷ K.H. Davis, "Watershed Treatment and Flood Control," Soil Conservation, II (May, 1937), 247-250.

Report of the Chief of the Soil Conservation Service, 1940 (Washington, 1940), 5.

⁴⁹ Congressional Record, 74th Cong., 2d Sess., 1936, 4775-4782, 7573-7587, 7704-7710.

reinforced with soil- and water-saving practices, aided the downstream fortifications of the Engineers in protecting the developed flood plain areas of the alluvial lowlands.

Acceptance by Congress of the concept that upstream control was a reinforcement to downstream protection did not fully satisfy the Arkansas Valley development advo-They still disputed two major factors: the Corps' "308 Reports" recommendations for the Basin, and the methods of funding construction works under the 1936 legislation. Regarding the Corps' construction recommendations for Arkansas Valley projects, the proposed Caddoa Reservoir in Colorado was the only one of thirteen proposed dams authorized in the Flood Control Act of 1936, and authorizations must be followed by appropriations. It was on this point of fiscal funding that the 1936 Act was most onerous to Arkansas Valley interests. Prior to that legislation, the federal government assumed the entire cost of flood control projects. However, the Act of 1936 required that local interests should provide lands, rights-of-way, and easements, and should stand the cost of damages.

Extensive opposition existed in the Arkansas

Valley to this requirement of local contributions. Representative Alva B. Adams of Colorado contended that the authorized Caddoa Reservoir would not be built because appropriations could not be released until local interests paid the cost of the site, and they did not have the money. Adams

was especially perturbed because the 1936 Act did not apply to the Tennessee Valley and such projects as Fort Peck Reservoir on the Missouri River in Montana.

Representative John E. Miller of Arkansas also wondered why in one valley a different rule should apply from that which applied to the Arkansas Valley. Under the Copeland Act of June, 1936, Miller contended it was "impossible to build reservoirs . . . because the local communities were required to furnish rights-of-way and to operate the reservoirs after they were completed, and further to hold the Government harmless against all claims for damages, whereas in the Tennessee Valley the federal government was building reservoirs at no cost to the local residents."

⁵⁰ Congressional Record, 75th Cong., 3d Sess., February 24, 1938, 2379.

⁵¹ Ibid.

duty of controlling all this interstate drainage rest/ed/ on the federal authority, which should shoulder its full responsibility." To McClellan, the lack of funds appropriated by the federal government was not due to budgetary considerations, as some had charged, but rather flood control had been "definitely subordinated to power development It /was7 stymied behind the power issue" and apparently would not be greatly advanced until the federal government had determined what its policy was to be "regarding the enormous undeveloped power resources that exist/ed/ on our streams throughout the Nation . . . Let us hope," McClellan said, "the formulation of a clear, definite, and well-defined Federal power policy will soon be accomplished and announced in order that a comprehensive, integrated national flood control and power-development program may be undertaken and its objectives ultimately achieved."52

While the Washington congressmen were debating what they felt were weaknesses in the 1936 Flood Control Act, some of the interests in the Basin were also taking action. Nearly 200 delegates attended an Arkansas River Valley Conference at Little Rock in 1937. The A.R.V.C. declared that it was difficult to apportion costs between beneficial areas which were widespread and frequently interstate. They passed a resolution requesting amendment of the

^{52 &}lt;u>Ibid.</u>, January 19, 1938, A 293-294.

1936 legislation providing for Congress to assume the entire cost of all dams built in the future because watersheds crossed state lines. 53 That winter, in January, 1938, the Tulsa Chamber of Commerce formed an Arkansas River Committee to study all phases of Arkansas Valley development and present them to business and professional interests in Tulsa, and selected as chairman John H. Dunkin, a powerful business and civic leader. The TCC Committee determined to discover first hand what resource development was taking place nationally in other river basins, and to create enthusiasm for Arkansas Valley projects. The Chamber's River Committee planned an extensive trip with a great many delegates in the spring of 1938 to such basins as the Tennessee, Ohio, and Missouri. After this "Arkansas River Valley Opportunity Tour, " Chamber Board Director Victor Barnett emphasized "the need of river navigation to protect Tulsa's principal industry /oil7," and the TCC determined to "carefully prepare a speaker's manual" and arrange to have speakers address every organization and every school in the Arkansas River Valley. On May 3, 1938 the TCC passed a resolution urging restoration of the Arkansas River for navigation as the major project of the organization. 55

⁵³Tulsa Chamber of Commerce, Minutes of the Board of Directors, February 16, 1937.

⁵⁴ Ibid., January 25, 1938.

⁵⁵Ibid., May 12, 1938.

next month President Franklin D. Roosevelt made an address in Oklahoma City in which he declared that "the day will come when all the waters of the Arkansas will be controlled for greater human good." The Director of the TCC, Victor Barnett, contended it was nearing the time to bring the Corps of Engineers' Colonel Eugene G. Reybold to Tulsa for a climaxing drive.

The powerful National Rivers and Harbors Congress, whose president was William J. Driver, a member of the House of Representatives from Arkansas, also actively supported those demanding Arkansas River improvements. Through Driver, the Rivers and Harbors Congress invited Representative Martin of Colorado to speak before their organization. Martin declared that he wanted the support of the Rivers and Harbors lobby in getting the Flood Control Act of 1936 amended at least to relieve the local sponsors of flood control projects of damages to lands and improvements. Martin would make those charges part of the construction costs borne by the federal government. He said that unless Congress passed amendatory legislation, "90 percent of all flood control projects in the act of 1936, and in the amendments of 1937, and the program of proposed new projects /would/ never be built."57 In fact, as Martin had earlier

⁵⁶Ibid., July 12, 1938.

Congressional Record, 75th Cong., 3d Sess., April 28, 1938, A 1732.

pointed out in the House, two years after passage of the 1936 act, practically none of the scores of authorized projects were even begun.

The National Rivers and Harbors Congress responded to Congressman Martin's address by passing a resolution urging Congress to pass legislation then being considered by the House Committee on Flood Control to "make damages to lands and improvement, including relocations of railroads and other public utilities, construction charges to be borne by the federal government on all dams, reservoirs, levees, and other flood control facilities, on all flood control projects constructed under the Flood Control Act of 1936, and amendments thereto." 59

Congress responded to these various demands and pressures. The 1938 Flood Control Act modified the law of two years earlier by requiring the federal government to pay the full cost of reservoir projects. Moreover, the 1938 Act added authorizations totaling \$100 million for reservoir construction in the Arkansas River Basin and its tributaries. However, appropriations were not provided.

Franklin D. Roosevelt fairly well summed up the

⁵⁸Ibid., March 2, 1938, 2712.

⁵⁹ Congressional Record, 75th Cong., 3d Sess., April 28, 1938, A 1732.

⁶⁰ United States, Statutes at Large, LII, 1216.

Arkansas Valley development situation in the late thirties when he declared that the Army Corps of Engineers' "308 Report" for the Basin was not sufficiently comprehensive. The President declared it was "only one phase of the very large interlocking problem. For this reason, it may be considered neither truly comprehensive nor effectively integrated." Roosevelt wanted to delay, not start development on one stream, stop when partly through, and then have the government start work on another river. He said that "appropriations should, of course, be viewed in the light of the budgetary necessities of the Government." Therefore, Roosevelt wanted "a further and complete study made by all the Government agencies involved, sitting together."61 Obviously, further surveys would be made and greater delays incurred before extensive funds were appropriated for Arkansas Basin development.

⁶¹ Quoted in Congressional Record, 75th Cong., 3d Sess., February 24, 1938, 2379.

CHAPTER VI

REGIONAL PLANS

The federal government had responded in a limited way to the challenges of drought and extensive flooding in the Arkansas Valley during the 1930's. However, many Basin residents and their representatives believed these piecemeal, moderately-financed federal efforts were too limited. They were concerned with the need for overall long-range planning and more unified development and control of water and other resources in the Valley. As a result, in 1941. two identical Arkansas Valley Authority bills, drafted by David E. Lilienthal at President Roosevelt's request. were introduced in Congress by Senators John E. Miller and Hattie W. Caraway, and Representative Clyde T. Ellis of This proposed legislation provided for "the Arkansas. fuller development and utilization of resources through plans, projects, and activities for or incidental to the promotion of navigation, the control and prevention of floods, the

Address of Representative Clyde T. Ellis, October 17, 1941, reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 4821.

safeguarding of navigable waters, and the reclamation of public land, in order to aid and protect commerce among the several States, strengthen the national defense, conserve the water, soil, and forest resources of the Nation, and promote the general welfare of the United States."

patterned after the Tennessee Valley Authority and was similar to other bills which had been introduced into Congress for the establishment of regional authorities in other watersheds. The AVA bill asked for a three-man board to administer a four-basin area comprising the Arkansas, White, Red, and St. Francis River valleys, which included all or part of eight states -- Arkansas, Oklahoma, Louisiana, Missouri, Kansas, Colorado, New Mexico, and Texas. The proposed area for development consisted of 308,165 square miles. This compared to only 40,500 square miles in the TVA region. In fact, the TVA, a storm center of the New Deal period, dealt with an area about one-seventh as large as that to be brought under control by the Arkansas Authority.

The corporation would have considerable control over rivers named in the act. The Authority was to be given powers of eminent domain and the right to require states to participate in constructing projects. It could also build storage reservoirs, generate hydroelectric power, and sell

²Congressional Record, 77th Cong., 1st Sess., January 10, 1941, 122, and January 24, 1941, 292-297.

water and electricity. All development in the Basins would be under the Authority's auspices, although the services of the Corps of Engineers could be used.

A primary duty of the Authority would be to submit annually to the President plans for the construction of projects. The President, after study and investigation by the Director of the Budget and such other agencies whose advice he requested including state and local agencies would submit the plans to Congress with his recommendations. Congress, and the state and local agencies involved, would have to authorize the projects submitted by the AVA and forwarded by the President. Projects, of course, could not be undertaken until Congress made the necessary appropriations.

Representative Ellis believed that every justification advanced for the Tennessee Valley Authority applied to an Arkansas Valley Authority, and to an even greater degree. He declared eloquently that the four rivers were "bleeding to death the heart of the great Southwest," an area which was poverty ridden. In fact, he said, the per capita income in Arkansas in 1939 was less than half the national average. The per capita incomes in the other seven states, especially those areas lying within these basins, were also comparatively low. Thus, Ellis saw the area as an

³ Congressional Record, 77th Cong., 1st Sess., January 24, 1941, 292.

exploited one, "the colonial empire of the United States." The Arkansas Valley, he said, was plagued with serious problems of flood control, had great med for improved navigation and an adequate supply of irrigation water, had high power rates, and serious water and wind erosion problems. Millions in federal funds had already been spent in the Arkansas Valley for flood control reservoirs and levees, navigation, irrigation, drainage, reforestation, and still the Valley had not been properly reclaimed.

Almost all observers acknowledged that the resources problems of the Arkansas Valley were critical.

However, not everyone agreed that a federal corporation of the Authority type was the best means for solving them.

Governor Ralph L. Carr of Colorado believed the proposed Authority was "the greatest menace to States' rights and individual liberties" then existing. 6 Carr declared: 7

At the present time a State's Representatives in the Congress may protect the rights of the people

⁴Ibid., A 4821.

⁵Little Rock Democrat, February 6, 1941, reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 702.

⁶Inaugural message of Governor Carr, January 13, 1941, reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 333.

⁷ <u>Ibid., A 33</u>4.

who elected them. If this Authority were to be set up, the only power left in our Senators and Congressmen would be to vote appropriations to carry out the plans of the Authority. No longer could a Senator or Congressman rise to the defense of the people of his State . . . The control of the natural resources of the States is to be taken so that State lines may be erased, that State ownership of property may be denied, and that rights of individuals may be destroyed . . . In short, the whole system of life within these river basins is to be altered and changed to conform with a theory of government which nullifies constitutional rights and leaves individual States stripped of everything but their names.

Declaring a "state of civil war," Carr asked the Governors of sixteen western states to join him in what he called a "bloodless" battle against the Arkansas Valley Authority.

On February 7, 1941, representatives of thirteen western states convened in Denver at the call of Governor Carr. They specifically condemned the proposed AVA and voted unqualified opposition to any proposal for the creation of "power yardsticks similar to the TVA anywhere west of the Mississippi River." Governor Carr was authorized to name a seven-man committee to draft legislation for a three-point alternative proposal. One of the main objectives of the Governors was to get coordination of the federal agencies then engaged in constructing and operating projects for the development of water resources.

Congressional Record, 77th Cong., 1st Sess., February 3, 1941, 403.

⁹H.W. Blalock, "The Arkans as Valley Authority," Public Utilities Fortnightly, XXVIII (September, 1941), 343.

Other objections to the Ellis-Miller-Caraway AVA proposal were set forth at the Denver meeting. First, the AVA bill provided for exclusive federal control over all projects, preventing states from entering into compacts without consent of the Authority. It also appeared to subject controversies over water rights to the courts where the principal office of the Authority might be located. Furthermore, it would have empowered the Authority to investigate, construct, and operate projects without regard to other federal agencies. The Authority could have issued bonds for many purposes, and could have vacated certain authorizations already made by the Congress. Finally, critics felt that the Bill subordinated irrigation to navigation, development of power, and flood control.

Senator Edwin C. Johnson of Colorado, who had been asked to attend the Denver meeting did not appear. Johnson, a strong New Dealer, reminded the Governors in a telegram that Carr was a spokesman for the private utilities. Johnson charged that while Carr talked about irrigation, he was really trying to protect privately-owned power companies. Furthermore, he reminded the conferees that the supposedly wicked and grasping federal government had contemplated or had under construction at that very time, flood and reclamation projects totaling \$104,890,000 throughout the West. This, Johnson said, destroyed the argument that the adminis-

^{10 &}lt;u>Ibid.</u>, 343-344.

tration had evil designs against the best interests of the people of the area. Further, Johnson reminded the Governors that Senator Miller and Congressman Ellis, sponsors of the bill, had invited the congressional delegations from arid and other states to write a provision which would fully protect irrigation and the reclamation service.

Representative Ellis also defended his bill and questioned the basis for the objections by Carr and other western governors. Ellis denied that any question of states' rights was involved because, since passage of the Reclamation Act in 1902, the West, including Colorado, had received several million dollars in federal expenditures for multipurpose dams and for interstate stream control. be rather strange, he argued, if western leaders now opposed bringing even greater federal aid to irrigation and other water problems. Ellis declared that "water rights are property rights, and the due-process clause of the Constitution specifically guarantees that no person shall be denied of this property without due process of law." Regarding those "alarmists" who had alleged that the waters of the upper Arkansas were desired by the people of the lower Arkansas for power and navigation. Ellis asserted that "if water were needed in the lower Arkansas, it would be

Telegram sent by Senator Edwin C. Johnson of Colorado from Washington, D.C., February 5, 1941; reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 524.

needed most in the dry season" when the river was dry "a few hundred miles east of Colorado." Moreover, he contended, there were "no suitable power sites on the main stem of the flat, meandering Arkansas." Ellis charged that Carr was really the leader of a private power trust, and that he could serve his people better by directing his efforts toward declaring war on the high power rates in his own state. 12

The people of Colorado, Ellis believed, did not agree with Governor Carr. Coloradans, according to Ellis, wanted more water for irrigation, control of floods, cheaper power rates, more effective efforts to control erosion, and further industrialization of their state. Ellis believed that Governor Carr's views were inconsistent with those of a majority of Colorado citizens. Carr was thinking in terms of Civil War economic policy, Ellis said, while his people were living in 1941. Ellis pointed out that in 1938 the people of Colorado paid more than twice as much for electricity as they would have if they had enjoyed TVA rates. 13

Many Coloradans did disagree with their governor on the question of an AVA. On January 15, 1941, an editorial in the Denver Bulletin declared that completion of the AVA

Congressional Record, 77th Cong., 1st Sess., February 3, 1941, p. 463.

¹³ Ibid.

project would reduce Colorado electric rates to among the lowest in the nation, and, in addition, provide for flood This, the editorial continued, was making the powerful Public Service Company of Colorado nervous. Bulletin also questioned the opposition of Governor Carr and United States Senator Alva Adams on the basis of states' rights, since Colorado had done little or nothing with water development in the way of building dams or flood control or power projects in the past fifty years. Moreover, the editor argued that Colorado did not have to construct necessary and worthwhile projects which were being proposed in the AVA scheme. 14 Another editorial in the Denver Bulletin, stated that the Arkansas Valley Authority plan would be heartily welcomed by most citizens of Colorado.15

The Lamar (Colorado) Daily News pointed out in a front-page editorial that great benefits would come to the people of Colorado under the AVA bill. The writer felt that the Arkansas Valley as a whole should be developed rather than confining programs to state lines. Scoffing at Governor Carr and his aides, the editor said that they should

^{14&}quot;A.V.A. Power Project is Favorable," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 266-267.

[&]quot;Public Power Welcomed," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 267.

remain at home to guard Pike's Peak and let Colorado's congressional delegation develop policies for the Arkansas Valley.

Highly significant in the AVA controversy was the support offered by the Colorado Grange, one of the two strongest farm organizations in the state. The Grange's main interest was in cheap electric power. The Colorado Granger, official paper of the organization, editorialized in March, 1941, that it supported the AVA because farmers all over the state would receive cheaper power, and that many farmers without electricity would get it. The writer discounted the charge that Colorado might lose a portion of its water if an AVA were established. He quoted Senator Johnson, "our own outstanding granger," who said that Colorado would not lose one drop of water under an AVA arrange-"It would be easier to roll a snowball through the gates of hell, "according to Johnson, "than to get a bill through Congress that would interfere with the irrigation system now operating in Kansas and Colorado on the Arkansas River."

Grange writers kept repeating that the real question was that of electric power. Why, they asked, should Coloradans pay 85 percent more per kilowatt-hour than the people of the Northwest and the Southeast? One Grange

^{16&}quot;Protecting Us From the A.V.A.," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 267.

editor wrote that "the TVA yardstick rates have forced reduction in light and power rates in many parts of the country, and the American people right now are saving \$580,000,000 a year or about \$15 for the average family because of the TVA." Finally, the editor warned that industry would go where cheap power was available, and if Colorado stood aside, opportunity would pass her by. 17

The AVA also got support from the Sentinel in Grand Junction, Colorado. It, too, believed that the federal government had no intention of depriving Colorado or any other western state of its water rights by establishing an AVA. According to the Sentinel, the President had told Congressman Edward T. Taylor that he would approve whatever law or procedure was necessary to safeguard Colorado's prior water rights, while also permitting the utilization of waters downstream for power purposes. Herein, wrote the editor, was an assurance to the western congressional delegation that AVA legislation would contain proper safeguards.

The position of New Mexico on the proposed AVA was defined by A.T. Hannett, an attorney for the Interstate Streams Commission. The state did not object to the pro-

^{17&}quot;The A.V.A.," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 1117.

^{18&}quot;A.V.A.," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 703.

posal so long as the water rights of New Mexico were not interfered with, and if amendments were made that would recognize the validity of riparian ownership and appropriation of flow then in force. It did not appear that New Mexico would benefit to any extent from the flood control reservoirs and building of power projects, unless the Conchas Dam on the Southern Canadian could be used to generate additional power. The only power projects specifically provided for in the bill creating the Authority were in Arkansas and Missouri. Nevertheless, the people of New Mexico were not opposed so long as current water rights were protected. 19

As Ellis described it, water was life to the upper valleys, but death to the lower valleys. Arkansas and other states in the lower basin could not by themselves solve the flood problem, since the control of the Arkansas River depended upon construction of dams on tributaries to the Arkansas in Oklahoma and other states. Without wanting a single drop of the irrigation water of the upper basin, states in the lower basin wanted to institute some workable method of flood control. On the AVA, for them, was the

¹⁹ Albuquerque Journal, "State's A.V.A. Position," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 1070.

²⁰ Blalock, "The Arkansas Valley Authority," 314.

answer to one of their greatest problems, and they gave it strong support.

The Arkansas press, Ellis reported, was almost 100 percent for the AVA proposal. 21 An editorial in the Fort Smith Scuthwest Times Record, suggesting that a bright new world was possible, endorsed intelligent conservation and use of water contemplated in the AVA. The editor explained that it embraced not only power development but also the best soil-conservation practices in the upper reaches of the small streams which, untamed, finally did millions of dollars of damage on the flat lands in the lower valleys. He strongly supported the proposed soil conservation program, including check dams, diversion works, strip and contour planting, use of soilholding crops, and the numerous other methods that conservation experts had developed to keep water where it fell and where it would do the most good. These practices would keep water out of the choked banks of the streams and rivers where it could do infinite damage. The Times Record editor believed that reservoirs for flood control could create the water power necessary to generate electricity. Moreover, deeper waters could be maintained downstream which would invite navigation and all the benefits which would follow. He declared that the availability of electric energy would naturally lead to industrial

Congressional Record, 77th Cong., 1st Sess., 1941, A 427.

development, employment, and a higher standard of living for the people.²²

The Arkansas Gazette at Little Rock also generally supported the AVA. The editor criticized those who were raising what he considered invalid objections to the plan, especially the idea that it represented a dangerous expansion of federal power. He claimed that the people of the Tennessee Valley did not feel subjected, but that they were enthusiastic over the opportunities provided by the TVA. 23

Also in Arkansas, Senate Concurrent Resolution
No. 6 sponsored by state Senators J. Wesley Sampier and
Jean Baker reflected legislative sentiment. This resolution petitioned Congress to enact the bills providing for
the creation of the Authority and urged the President to
sign them. An Authority, said the resolution, would open
up thousands of acres of fertile agricultural land for cultivation in the Valley's river basins. It would supply
much needed electric-generating capacity to produce power
at low cost; stimulate and assist the development of the
vast undeveloped mineral resources; and encourage diversified agriculture. Furthermore, it would provide navigation

^{22&}quot;A Bright New World," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 427-428.

[&]quot;Federal Authority and States and River Development," Congressional Record, 77th Cong., 1st Sess., 1941, A 428.

facilities at lower costs, benefit irrigation, provide recreation facilities, and industrial jobs for many people. Finally, the Authority would eliminate the hazards and economic destruction of floods. 24

A series of forceful editorials appeared in the Southwest American at Fort Smith. Throughout 1941, editor C.F. Byrns concentrated on urging his readers to support the AVA proposal. He explained that the future of the Arkansas Valley was more than the struggle between private and public power. He wrote that an area so poor and yet so rich in undeveloped resources should welcome coordination to solve the problems of wind and water erosion, flood damage, lack of navigation, the need for more irrigation water, and the scarcity of cheap power for industry, farm, and home. He argued that a central Authority could deal effectively with these problems. 25

Support for the AVA also came from certain interests in Missouri, Kentucky, Louisiana and Georgia. A representative group of 5,000 people met at Branson, Missouri on September 14, 1941, and formed the Southwestern Water Resources Association. They endorsed the AVA in behalf of

²⁴ Reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 844-845.

[&]quot;Realistic View of A.V.A.," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 887-888.

themselves and "the other Arkansas Valley states," and said that the purpose of their organization was to aid in the further development of the great natural resources in the region between the Mississippi and Rio Grande Rivers. 26 The Southwest Valleys Association, embracing the valleys of the Arkansas, White, Red, and St. Francis rivers of the States of Arkansas, Missouri, Louisiana, Texas, Oklahoma, Kansas, New Mexico, and Colorado endorsed the AVA at its annual convention in Little Rock, Arkansas in 1941. Association adopted a resolution advocating an Authority which would "use the services of the U.S. Army Engineers in planning and constructing projects for flood control, navigation, and hydroelectric power development, and further cooperate with the Federal Power Commission, Reclamation Bureau, Department of Interior, and National Resources Planning Board." The resolution further required that control of floods be under the jurisdiction of the Corps of Engineers. 27

The Louisville Courier-Journal declared on February 13, 1941, that there should be no problem working out a plan which would satisfy both Arkansas' desire for flood control and the needs of the upstream states for irriga-

²⁶ Congressional Record, 77th Cong., 1st Sess., October 2, 1941, A 4466.

^{1 27 &}lt;u>Ibid.</u>, October 27, 1941, p. 4858.

tion. 28 In Colfax, Louisiana, on December 22, 1941, Grant Parish endorsed the pending Arkansas Valley Authority bill. 29 Also, the Atlanta (Georgia) Constitution of February 9, 1941, impressed with the success of the TVA, suggested that the AVA could enhance the economic future of the area. 30

Even though the proposed Authority seemed quite promising to many in the lower Arkansas Basin, tremendous opposition continued in the upper valley. To meet local objections, on March 17, 1941, Senator Johnson of Colorado introduced a bill to replace the AVA proposal. Johnson's substitute proposal was quite similar to the original bill, with one major exception. He wanted to divide the Arkansas River into upper and lower basins. The Arkansas River and its tributaries west of the 100th meridian were declared to be not navigable in fact or in law. The Authority, therefore, would have no right or power to make any demand on the upper basin for the delivery of water for navigation to the lower basin. Declaring that the water in the upper

^{28&}quot;The Arkansas is a Provoking River," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 1552.

^{29&}quot;Resolution Concerning the Arkansas Valley Authority," reprinted in Congressional Record, 77th Cong., 2d Sess., 1942, A 123.

^{30&}quot;The River Areas," reprinted in Congressional Record, 77th Cong., 1st Sess., 1941, A 1552.

basin would be used primarily for domestic, commercial, and irrigation purposes, this bill would prevent the Authority from interfering with any rights the states then had to water in the upper basin. It also could not abrogate the rights of the several states to enter into agreements or compacts regarding utilization of water or in any way affect the activities of the Bureau of Reclamation in the upper basin. It further provided that the courts of the respective states should have jurisdiction to require compliance with the provisions of the section dealing with waters within state borders in the upper basin. 31 while the Ellis-Miller-Caraway proposal provided an Authority very similar to the TVA, with desirable changes based upon TVA's experience, the Johnson proposal was similar to the Bonneville-Grand Coulee set-up, where a single administrator was responsible for the administration of the projects under the direction of the Secretary of the Interior. Also, the Authority would have had much less control and influence under the Johnson bill, and real unity and coordination probably would not have been achieved.

In October, 1941, the Tulsa Tribune called for a revised Ellis Bill which would restrict the Authority's function to distributing the power from new dams. It suggested that a power pool be set up, drawing from Mark-

Blalock, "The Arkansas Valley Authority," 281-282.

hams Ferry, Fort Gibson, Tenkiller, Bull Shoals, and Table Rock projects when they were built by the Army Corps of Engineers. Such power pools could draw new industry and thus remake the entire region. And, said the <u>Tribune</u>, Oklahomans would support such a revised bill. Senator Elmer Thomas was in favor of new dams. Senator Josh Lee and Congressman Wesley E. Disney were impressed with the arguments for efficient central control of water resources. The Tulsa Chamber of Commerce stated that the future of eastern Oklahoma depended upon an abundance of cheap power, whether public or private, for the development of its natural resources. The editor of the <u>Tribune</u> felt that it would be easier for Ellis to make the proposed changes than it would be to work out a social and economic program fair to each state based on the existing AVA bill. 32

On January 26, 1942, Senator Josh Lee of Oklahoma in the Senate and Representative Ellis of Arkansas in the House, introduced a new AVA bill, with the full approval of President Roosevelt. The chief difference between the earlier measure and the new bill was that the Arkansas River Basin above Hutchinson, Kansas, the Cimarron and Canadian River Basins, tributaries of the Arkansas, and the Red River Basin, except for the Ouachita, a tributary, were eliminated from the Lee-Ellis proposal. Moreover, the

³² Tulsa Tribune, October 7, 1941.

Authority would be directed by an administrator, subject to the policies of a board, rather than administered by a board. Completion of dams then under construction and future building of new dams would be done by the Corps of United States Army Engineers.

It was a masterpiece of compromise. The territory of the most vigorous objectors in eastern Colorado and western Oklahoma, was eliminated from the scope of the bill. Moreover, the bill allowed use of both public and private power facilities, with no disadvantage to either. The Tulsa Tribune endorsed the new AVA bill, calling it "a reasonable measure, soundly conceived, and well written." Furthermore, the Tribune editor said, "probably it is the most vital piece of economic legislation ever presented Congress affecting Oklahoma and Arkansas."34

Despite the efforts of Ellis and Lee to present a bill acceptable to all interests, there was still opposition. This time, it came primarily from Oklahoma's Governor Leon C. Phillips and the Oklahoma City Times. Governor Phillips had been carrying on a one-man war against public power ever since he took office in 1939. He had fought continuously with the U.S. Army Engineers on the construc-

³³s. 2226 and H.R. 6464, Congressional Record, 77th Cong., 2d Sess., 1942, 620, 691, A 236-237.

³⁴ Tulsa Tribune, January 30, 1942.

tion of the Denison Dam on the Red River and tried, without success, to stop construction on Grand River Dam, being built by a state agency with federal funds. His controversy with the Grand River Dam Authority centered around road relocation and rebuilding the area around Grand River lake. He favored a system of flood control and irrigation designed to hold water where it fell as opposed to the big dam projects. Also, Phillips supported a system of farm ponds, lakes, and storage reservoirs progressively distributed along tributaries in the general drainage shed of rivers. The was not, therefore, surprising that Phillips was against the AVA and called the proposal a "growing monster."

Equally opposed to the proposed AVA was the Oklahoma City Times. On January 22, 1942, it leveled strong objections at the proposal. The Times writer explained that the hope of producing power to manufacture aluminum in Arkansas for the war effort was a delusion. No power could be generated by the proposed dams for three or four years, he wrote, which would be too late to have any effect on winning the war. The editor also quoted Don McBride, director of the Oklahoma State Division of Planning and Water Conservation, who figured that energy could be produced from natural gas and coal much cheaper than from water power.

³⁵ Edwin C. McReynolds, Oklahoma: A History of the Sooner State (Norman, 1954), 378.

Furthermore, the AVA would be an invasion of states' rights. Experience on the Grand River and elsewhere had, according to the Oklahoma City writer, proved that such projects did not provide effective flood control. Another argument against an AVA was that work on it would divert vast amounts of material and labor badly needed for defense. The people of Oklahoma had never suggested that they wanted this "federal power octopus wound around their necks and backs." Finally, TVA had failed to produce adequate power for defense when it was most needed, and another river authority was not necessary. The editorial concluded that any congressman or senator who supported the AVA bill should be marked for defeat. 36

Although there were groups both for and against the proposed Arkansas Valley Authority throughout the entire region, the conflict may be seen generally as an upper-lower river dispute. In the upper Valley, water historically had been a fixed form of private property used mainly for irrigation. Procedures had been set up for determining the relative right of water uses based on dates of first withdrawals, amounts diverted, and other factors. More than a thousand distinctive rights to the waters of the Arkansas existed in Colorado in the 1940's. Each right had a rank, and the division, extending over thousands of

^{36&}quot;Oklahoma Doesn't Want Arkansas Valley Authority," Oklahoma City Times, January 22, 1942.

miles of the main stream and its tributaries, had to be carried out on the basis of priorities. Such a division was a complex and difficult problem. It had required approximately three-quarters of a century for the people of the upper Basin to devise a working system. Thus, they thought the AVA might be more injurious than beneficial because it would disturb or interfere with the existing system which the people understood and to which they were attached. They feared especially that an Authority would force them to give up this water to benefit navigation in the lower Basin.

The residents of the lower valley generally favored an authority because they needed flood control and desired year around navigation. The people of the entire lower Basin would have been provided with cheaper electric power, a matter of considerable interest to those who wanted more industry. Despite the support of various newspapers and interest groups throughout the region and the many elected representatives of the people, the opposition proved too powerful. The amended AVA bills were tabled in the respective Congressional committees. Thus, the 1941 and 1942 Arkansas Valley Authority attempts failed. This would also be the case for subsequent endeavors for regional authorities.

Meanwhile, another group had been working to develop a coordinated approach to the resource problems of

the Arkansas Valley. The National Resources Planning Board reiterated the general position taken by those who favored the original Arkansas Valley Authority. Based on its extensive study, the Board in 1943 began preparation of a report on future planning of the Arkansas River Valley, "which would have presented it as an integrated whole" from its mouth to its source. They believed that coordinated multiple-purpose facilities were necessary to provide water for all uses and needs. Soil and forest conservation, flood control, water reclamation, and the development of hydroelectric power sites, the Board argued, presented a series of closely interrelated and overlapping problems affecting the entire nation. 37

There was, however, organized resistance to the Board's proposed report. Dr. ElRoy Nelson, director of the state planning commission, "told National Resources Planning Board officials that publication of the report, seeking to combine forcibly the interests of regions and people as diverse as those in the Colorado mountains, the irrigated high plains, and the flatlands of eastern Arkansas, would discredit all planning and cause all men and agencies concerned in planning to be laughed out of Colorado." The

²⁷ Charles E. Merriam, "The National Resources Planning Board; A Chapter in American Planning Experience," American Political Science Review, XXXVIII (December, 1944), 1075-1088.

Board subsequently eliminated from its report the material on the upper valley from Garden City, Kansas westward. 38

The modified project report was called a "prelimiplan" for development and conservation of the region's resources. It called for a much greater coordination of activities to reduce flood damage, develop irrigation projects, classify and properly use land, establish new and manage existing forests, control soil erosion, reorganize farm units, provide drainage, and make other necessary adjustments. Rather than supporting any kind of authority concept, the National Resources Planning Board merely acknowledged that adequate organization, financial assistance. and authority were not available to effect this coordination. 39 Thus, the report stated, although nature had provided the resources necessary to support a balanced agricultural and industrial economy, the potential of the Arkansas Valley lay relatively unexploited. 40 As of 1943. according to the Board's report, the most important problems

^{38&}quot;Plans Revamped -- Resources Planning Board Agrees to Delete All Portions of Report Dealing with the Upper Arkansas River Valley," Business Week, June 12, 1943, 37-38.

National Resources Planning Board, Regional Planning, Part XII -- Arkansas Valley (Washington, 1943), vii.

^{40 &}lt;u>Ibid., 1.</u>

surrounding land, wood, and water in this area had not been successfully solved.

CHAPTER VII

ATTEMPTS AT COORDINATED RESOURCE PLANS

To those knowledgeable on resource planning in the Arkansas Valley in 1943, it was clear that neither the legislative nor executive branches of the federal government could specify the operational guides to be used in arriving at a single "best" plan for the Arkansas. Sharp differences of opinion existed both in the Valley and outside it over the various water uses. There was no single, uniform federal policy governing comprehensive development of water and land resources. Even if aimed toward comprehensive development, projects depended upon a number of statutes passed at different times, devoted to individual segments of basin development and administered by separate executive agencies. The multiplicity of legislative purposes and of executive authorities in conservation policies led to duplication and conflict.

Efforts were made to deal with lack of unity in resource planning through governmental reorganization.

The objectives of integrated planning were sought by the Arkansas Valley Authority advocates. However, extending the

Tennessee Valley Authority type organization to the Arkansas Basin failed to win Congressional approval. Also, the National Resources Planning Board sought to provide leadership and to coordinate efforts among the federal water resources agencies and the states in the Basin. But Congress terminated the NRPB in August, 1943, by cutting off its funds, and barred the President from utilizing any substitute for it by specifying that the functions previously exercised should not be transferred to any other agency or performed "except as hereafter provided by law."

The demise of the National Resources Planning
Foard in 1943 left the federal executive planning machinery
outwardly weakened. A previously noticeable trend toward
greater prominence of the Eureau of the Budget as general
staff agency was, however, strengthened. In October, 1943,
Executive Order 9384 made the Eureau of the Budget responsible for programming public works and reviewing agency
proposals before their submission to Congress. That year,
Congress gave the Bureau supplemental funds to finance a
new division manned by about thirty-five trained engineers
and economists, but did not implement the authority by

l
See C.E. Merriam, "The National Resources Planning Board; A Chapter in American Planning Experience,"
American Political Science Review, XXXVIII (December, 1944),
1075-1088.

appropriating additional money for the same purpose.²
Objective executive review of resources plans and programs was lost by default, except to the extent that the Bureau of the Budget could accomplish it without being provided with adequate funds or sufficient staff.³

The federal agencies responsible for water resource development took steps to achieve greater river basin planning unity. In December, 1943, subsequent to the abolition of the National Resources Planning Board's Water Resources Committee, the Chief of Engineers of the War Department, the Commissioner of Reclamation, and Land Use Coordinator of the Department of Agriculture, and the Chairman of the Federal Power Commission made an informal agreement providing for the agencies to cooperate in preparing multiple-purpose project reports. This agreement was the charter for the Federal Inter-Agency River Basin Committee (FIARBC) which became the chief coordinating device for the federal water resources agencies. Monthly meetings were to be held at which these concerned agencies might demon-

²Commission on Organization of the Executive Branch of the Government, Report on Water Resources and Power, I (Washington, 1955), 67.

Address of Elmer B. Staats, Deputy Director of the Bureau of the Budget, "Problems of Interdepartmental Coordination in Water Resources Administration," before a joint meeting of Inter-Agency River Basin Committees, Boulder, Colorado, August 19, 1960, in files of the Department of the Interior, Southwest Regional Coordinator, Federal Building, Muskogee, Oklahoma.

strate their ability to cooperate in working out the many problems confronting them. He Moreover, the Inter-Agency Committee was useful as an argument favoring use of existing agencies in administration of river basin problems, and served as a rallying point for the agencies in their defense against creating additional valley authorities. Unfortunately, the Federal Inter-Agency River Basin Committee functioned on an entirely voluntary basis and without presidential supervision. It did not provide the Executive Branch with an effective means or procedure for accomplishing an independent and objective review of water resource projects proposed by its agencies. Authority was still divided. Responsibility to the Executive existed in name only.

The pressure for coordination of agency activities was a dominant problem of the entire federal water resource effort in the early 1940's. During the latter part of World War II, a "shelf" of public works was ordered prepared against the contingency of a post-war depression. Thus, spending for the development of resources was on the upswing and certain to expand in the near future. In fact, by 1943, Congress had already authorized projects totaling

Ъ

Statement by Fred G. Aandahl, Assistant Secretary, Water and Power Development, Department of the Interior, before meeting of the Arkansas-White-Red Basins Inter-Agency Committee, Vicksburg, Mississippi, January 31, 1957, in files of the Department of the Interior, Southwest Regional Coordinator, Federal Building, Muskogee, Oklahoma.

an estimated \$50 million for the Arkansas Basin. However, there was no effective central control either in the Executive Branch or in the Congress, whose jurisdiction was spread among several committees. The basic problem tended to center on details relating to the nature of integrated planning. The divided nature of aims, purposes, and objectives created an unclear pattern for effective action.

Under these circumstances, Congress acted in a pragmatic fashion. It adopted general policies and specific projects and avoided deciding upon explicit objectives and criteria because of a lack of a clear concensus in the Arkansas Valley and outside it. The result was a patchwork of plans and projects by separate agencies for separate purposes. Through the give and take of congressional negotiation, these piecemeal projects could be approved even when there was no general agreement on the objectives and criteria implicit in their design.

Devastating floods in the Arkansas Valley in 1943 focused attention on the weaknesses of "scatter-money" planning works. In its wildest rage on record, the Arkansas exceeded maximum stages of other historic floods at several gauging stations in Oklahoma and Arkansas. It rolled over more than 500 miles of land, cities, houses, factories,

Just House of Representatives, Flood Control Plans and New Projects: Hearings before the Committee on Flood Control, June 8, 1943, 78th Cong., 1st Sess. (Washington, 1943), 117-118.

defense plants, highways, and acres of vitally needed grains and foodstuffs. Damages approximated \$31 million, and twenty-six lives were lost. Again, as in the 1927 floods, levees along the river failed to provide adequate protection. 6

Because of the exceptional damage suffered from the flood, the House of Representatives Committee on Flood Control adopted a resolution on July 2, 1943, requesting that previous reports on the Arkansas River be reviewed with a view to determining whether any modification should be made with respect to flood protection. 7 These factors furnished the impetus and opportunity to various interests to express their views on how to protect people and property from the Arkansas River, and at the same time make the river an agent for the economic development of the Valley.

The Army Corps of Engineers' Tulsa District Engineer, Colonel Francis J. Wilson, proved to be an enlightened advocate of comprehensive planning. In September, 1943, Colonel Wilson told the Arkansas Flood Control Association that its special "problem must be considered in the light of the interrelated problems of the entire Basin." Flood

U.S. House of Representatives, Arkansas River and Tributaries: Arkansas and Oklahoma, House Document 758, 79th Cong., 2d Sess., July 30, 1946 (Washington, 1947), 5-6, 37-39.

⁷ Congressional Record, 78th Cong., 1st Sess., September 21, 1943, A 3933.

control could "not be solved in a piecemeal manner," he asserted. In a statement far different from that heard earlier by Valley residents from the Corps' representatives, 8 Colonel Wilson declared:

Any study of the possible uses of water and the control of its flow must consider the path of the water from the time it first falls on the ground in the form of rain or snow, to the time when it finally reaches its temporary resting place in the ocean, from whence, through evaporation, the cycle is repeated. Terraces, contour farming, reforestation, and other controlled cropping practices are of value in obtaining the greatest use of the rainfall for agricultural purposes and for the retention for the largest possible portion of the water, near the place where it first falls. Intimately related with this method of control which has been called the little waters is the reduction of soil erosion by the use of these practices.

Emphatically, Colonel Wilson added that:

While the practice of head-water conservation will assist in the control of destructive flood waters, it is obviously impossible to obtain total control by such means. The study of major floods on the larger watersheds shows that such floods result from continued rainfall occurring after the soil is saturated when the highest run-off is produced, so that the effect of terracing, contour farming, and other controlled cropping practices is largely lost during major storms. It is therefore necessary to direct our studies and investigations to the problem of controlling this run-off, so that it does not devastate the flood plain areas along the streams.

wilson advocated multiple-purpose detention reservoirs. If "strategically" placed, he felt, these projects could be considered as a group, and their effects upon each other and on the Basin evaluated as a unit, thereby obtaining

^{8 &}lt;u>Ibid.</u>, A 3935-3936.

the highest economic justification. He believed that efficient management of these works could conserve flood waters for useful purposes and at the same time protect rural and urban property, and save human lives. These developments could supply new communities and growing cities with water, generate power, provide for expanding industries, reopen paths of water transportation, water arid areas, and establish means for recreation.

The engineering, social, and protective issues of Arkansas Valley development advocated by Colonel Wilson did not, of course, stand alone. Equally important with deciding what should be done was the question of who should make the decisions on specific water projects and how they should be financed. To these significant factors Arkansas Senator John L. McClellan turned his attention. He introduced a bill on November 9, 1943 "to provide for the construction, maintenance, and operation of flood control and navigation improvement, including dams, reservoirs, and allied structures, in the basins of the Arkansas and White Rivers, and for the disposition of surplus electric energy generated by the federal control and navigation improvements in the basins of such rivers."

⁹Ibid., A 3936-3937.

Congressional Record, 78th Cong., 1st Sess., November 9, 1943, 9323-9324.

The McClellan proposal was brief, simple, and direct. It stated a definite policy with respect to the construction, operation, and maintenance of all water resource improvements on the Arkansas and White Rivers and their tributaries. Navigation and flood control activities would be carried on by the Chief of Engineers. Electric power and energy generated at any of the projects and not needed in the operation of the project would be delivered to the Secretary of the Interior for marketing in "accordance with commonly accepted principles of fairness and sound administration." The bill also provided for the construction and operation of irrigation facilities by the Secretary of the Interior whenever he and the Secretary of War agreed upon the need and the practicability of building such facilities in conjunction with any of the projects covered by the bill.

The McClellan bill did not authorize any particular project. It stated an overall policy and advanced an operational program for the Arkansas Basin. It would accomplish its purpose entirely through existing departments and agencies of the federal government. It was based on fairly clear trends in administrative procedures and was realistic with respect to Congressional passage. There would be no rearrangement or shuffling of functions between the various agencies, "no fanning of the fires of jurisdictional jealousy," as McClellan put it.

Interestingly, McClellan admitted he saw no con-

flict of interest between water uses. He boldly stated that dams "ought to be constructed primarily for the purpose of flood control and navigation and secondarily for the purpose of generating power." Controlling floods received primary emphasis in the McClellan proposal because he contended that if the people were not protected from devastating overflows, then "all the fruits and benefits which come to any section from cheap power were? washed away and lost when the floods" came. Regarding irrigation, McClellan said he realized the major problem of water scarcity in the upper Arkansas Valley; however, he saw no reason for an upstream-downstream controversy because downstream flood control could be achieved by storage of water in upper Valley reservoirs.

McClellan offered the bill not in opposition to any other proposal. He was not particularly against an authority type arrangement. He simply desired an established policy and wanted construction to begin as soon as possible. In McClellan's opinion, until Congress and the Executive agreed upon and executed a definite plan for developing the nation's waterways, either by separate authorities or some other method, it was advisable and necessary that Congress at least establish some kind of general policy it could pursue.

Despite its multiple advantages, the McClellan

^{11 &}lt;u>Ibid.</u>, November 21, 1944, 8247-8248.

proposal was not completely acceptable to Congress. In fact, the Senate Commerce Committee, after considering the bill at some length, did not report it out of committee but incorporated some facets of the McClellan bill into the pending flood control legislation. Thus, the Flood Control Act of 1944 embodied the major section of that McClellan proposal which had as its intent the establishment of an overall policy dealing with integrated river basin development, but further mollified the "dominant interest" position of the Army Corps of Engineers advocated by McClellan.

The Flood Control Act of December 22, 1944, constituted the most important declaration of national policy since the 1936 law. It required the Corps of Engineers and the Department of the Interior to submit their reports to one another, to the federal agencies, and to the states for comment prior to submission to Congress. It reorganized the interests and rights of states in water. Another notable feature of the 1944 Act was the limitation it placed upon the use for navigation of waters arising in states lying west of the ninety-eighth meridian. It established the policy that these waters could be used for navigation only if such use would not conflict with present or future needs for consumption. The Act authorized the Secretary of the Interior to construct additional works for irrigation at

¹²U.S., Statutes at Large, LVIII, 887.

Corps of Engineers' dams and provided for disposal by the Secretary of the Interior of power generated at Corps dams. It directed the Secretary of War to prescribe regulations for the use of flood control storage in all reservoirs constructed wholly or in part with federal funds. Finally, it authorized the sale of "surplus" water for municipal and industrial use.

The 1944 Flood Control Act was certainly a further step toward coordinating resources development. ever, the legislation was still directed primarily at facilitating and implementing development for the special purposes for which the regular federal agencies were responsible. To the advocates of an Arkansas Valley Authority, the new Flood Control Act only encouraged further efforts by the major agencies to become the dominant factor in the proposed new multiple-purpose programs. Those favorable to an Authority wanted to replace the multiple-purpose and dominantpurpose surveys and plans which were already authorized. They favored a basin program treated as a single unit for all purposes rather than an aggregate of plans for separate purposes to be individually approved. They argued persuasively that the dominant agency approach tended to relegate such important functions as watershed management, pollution abatement, fish and wildlife conservation to secondary positions. 13

¹³Tulsa Chamber of Commerce, Minutes of the Board of Directors, December 19, 1945, in Tulsa Chamber of Commerce Board of Director's files.

In January, 1945, the Arkansas Valley Authority Association of Oklahoma adopted a resolution expressing discontent with federal resources planning for the Basin. petitioned Congress to create an Arkansas Valley Authority for the "whole river" because the Association "found the various and piecemeal developments conflicting with one another." Moreover, the AVA Association contended that each of the several federal agencies was "expected and authorized" to be "concerned with only a part of the purposes to which the river /could be put." The AVA advocates contended a remedy was needed for this arbitrary division of interests and responsibilities. These special interest agencies were supported by groups which, according to AVA proponents, desired only to satisfy their particular demands. Emerging from these "circumstances and confusions of purpose and conflicts of interest" was a policy of "stalemate, inaction, and a declining economy." The Authority advocates asserted this would continue to be the Valley residents' reward so long as the Arkansas River was parcelled out in pieces to the various federal agencies. Therefore, the Arkansas Valley Authority Association proposed that Congress create a single agency independent of all existing federal executive departments, under a mandate to develop its own plans and carry them out in cooperation with the Basin-state governments, and "with responsibility to all interests and for all uses

of the river."14

Other interest groups in the Arkansas Basin came to the defense of the Corps of Engineers. The Land Owners' Association of Fort Gibson, Oklahoma, was specifically formed to support the Army's Arkansas River development plans. The Land Owners' Association opposed the Authority because its members believed the proposed federal corporation would be primarily interested in hydroelectric power development and would exercise flood control by inundating the bottom lands. 15

The Tulsa Chamber of Commerce also defended the Corps' improvement plan. Since 1927, the Chamber had been especially active in promoting an effective flood control policy for the lower Arkansas Basin and had considerable confidence in the Army Engineers. More significantly, the Tulsans realized the compatibility of multiple-purpose projects for flood control-navigation. Glade R. Kirkpatrick, an especially influential member of the Tulsa Chamber, emphasized that that city could not continue to grow without this development. Pointing out that Tulsa had been built principally on one single activity, he asked the pertinent ques-

¹⁴ Congressional Record, 79th Cong., 1st Sess., March 12, 1945, A 1154.

¹⁵

Tulsa Chamber of Commerce, Minutes of the Board of Directors, February 20, 1945, in Tulsa Chamber of Commerce Board of Director's files.

tion:

How much longer will this oil activity support Tulsa, the city it has built? History discloses that all inland cities that have prospered and reached more than one hundred thousand in population have done so because of some special activity and that they have [almost all] failed to hold their growth without water transportation . . . Cities located on water can compete in all lines of business and industry on a like cost basis with other cities on water and with a lower cost than competitive inland cities. The way for Tulsa to guarantee her continuance as a successful city is to reach out and bring unto herself the benefits of river navigation, thus assuring more industry, better agriculture and the development of all our natural resources. To do this we must have a low cost of moving goods, both processed and raw--WATER NAVIGATION.

Kirkpatrick further asserted that "from a hard headed business standpoint, Tulsa and the people of the Valley should keep working until navigation \(\subseteq \text{was} \) accomplished." He was concerned that if Basin residents went off "chasing after Authority rainbows" the Corps' program would be delayed and, if eventually authorized and adequately funded, the Army might be hesitant to complete quickly a development that could be given to a federal corporation.

Other members of the Tulsa Chamber of Commerce—agreed with Kirkpatrick's position. On February 27, 1945, the Chamber passed a resolution advocating its support for the multiple-purpose program proposed by the Corps of Engineers. Their resolution emphasized construction by existing federal agencies of reservoirs for all beneficial

¹⁶ Ibid., February 27, 1945.

purposes on the main stem of the Arkansas with a series of locks and dams for navigation. The Chamber proposed a "complete soil conservation program on the entire watershed to control water where first runoff appears." Also, the resolution declared that the Basin states should continue to control use of their water resources.

The Tulsa Chamber of Commerce position received support from the Basin states. Both the Oklahoma Planning and Resources Board and the newly created Arkansas Resources and Development Commission declared themselves for a "unified development" of their states' resources under cooperation with established agencies. Moreover, the Arkansas Legislature adopted a concurrent resolution endorsing the flood control program planned by the Army Engineers and specifically opposing an Arkansas Valley Authority.

Clarence F. Byrns, editor of the Fort Smith Southwest Times Record, probably expressed the general consensus of the majority of lower Arkansas Basin interests in 1945.

Although he had earlier been an ardent advocate of the Ellis-Miller-Caraway and Ellis-Lee Authority bills in 1941 and 1942, Byrns now preferred "the democratic approach of the Corps of Engineers to centralized control of the Authority."

¹⁷ Ibid.

Congressional Record, 79th Jong., 1st Sess., March 13, 1945, 2075-2076.

He contended the Corps' proposal for Arkansas River development was "strictly non-political" and "realistic." Byrns believed that an Arkansas Valley Authority would be primarily concerned with power at the expense of flood protection and navigation. Significantly, Byrns admonished editorially that if the Arkansas Valley people "should reject the Engineers now and advocate an Authority we should be trading off a virtual certainty of the greatest value for an uncertain prospect of an unknown substitute somewhere further down the years." He thought the people of the Valley ought to give "full support" to the Corps of Engineers and the Resources' Committees of Arkansas and Oklahoma.

In May, 1945, the Arkansas-Oklahoma Interstate Water Resources Committee released its two-year study of possible economic benefits resulting from potential Arkansas River Basin improvements. Governors Ben Laney of Arkansas and Robert S. Kerr of Oklahoma, agreed with the majority of the Corps of Engineers' 1944 proposals for the Valley's development. However, the Interstate Committee, comprised of Don McBride, T.E. Harbour, and Newton R. Graham of Oklahoma, and Reese Carudel, J.C. Murray, and Clarence F. Byrns of Arkansas, believed they had found "additional benefits" which made project planning more economically feasible than the Corps' proposals. Bluntly, the Com-

¹⁹Fort Smith Southwest American, March 5, 1945.

mittee argued that the unit costs of construction indicated by the Engineers were too high and the public benefits listed were too low. The Corps, they stated further, had not even mentioned collateral benefits which would accrue to the area from a developed river with an adequate navigation channel. In fact, the Committee contended, "No man can today vision the future of the Arkansas Valley." Therefore, the Committee did not just emphasize potential increased benefits but also pointed out "possible minor changes" in the Corps' plan which if adopted would lower construction costs, thus increasing the economic profit ratio of the project well above the figure of 1 to 1.08 found by the Engineers' survey. With these suggestions, the two states endorsed the Army Engineers' proposed program of Arkansas River Basin multiple-purpose development. 20

Resources leaders in Oklahoma were vitally interested in more than just flood control, navigation, and hydroelectric power development. Especially significant were citizens of the Washita River Valley, which cuts across the central part of the State from the northwest to the southwest, who were asking for immediate action on a program of comprehensive Basin development. In 1940 they formed the Washita Valley Improvement Association and adopted resolu-

The States of Arkansas and Oklahoma Present Additional Benefits in the Proposed Comprehensive Improvement of the Arkansas River Basin (Tulsa, Oklahoma, 1945), 6-7.

tions asking that recently completed surveys of the Corps of Engineers, Bureau of Reclamation, and the Soil Conservation Service be coordinated as President Roosevelt required and then sent to Congress for approval. The needs for development were seemingly obvious, yet the federal agencies delayed comment on each others' plans.

The Washita Valley Improvement Association endorsed construction of storage reservoirs and soil erosion measures. Clearly, it would oppose construction of large dams on the The Washita residents wanted a series of twenmain stream. ty-four or twenty-five small retardation structures complemented by erosion control measures recommended by the Department of Agriculture. Representative Jed Johnson of that district asserted before the House Flood Control Committee in 1940 that large dams "would be no solution at all. a method of flood control, which Army Engineers have heretofore recommended, could defeat the purpose of the undertaking by inundating the alluvial lands in the Valley and driving thousands of thousands /sic/ of farmers out." Johnson said that he and the Washita Basin residents would "continue to oppose any impractical, absurd, expensive, and out-of-date theory of flood control that would propose a series of four or more large dams on the main stream of the Washita River

²¹Congressional Record, 77th Cong., 1st Sess.,
January 8, 1941, A 66.

rather than a large number of small dams on its tributaries."22

Association on Congress foreshadowed the post-World War II water resources upstream-downstream agency conflict. In discharging its responsibilities under the 1936 Flood Control Act, the Department of Agriculture made preliminary examination and surveys, prepared flood control survey reports, and submitted these reports for review by the states and other federal agencies, and for clearance by the Bureau of the Budget. The reports were then transmitted to Congress with a recommendation by the Secretary of Agriculture that he be authorized to carry out the proposed measures and that required funds be appropriated. The Department's intent was to treat the lands of an entire river basin as one specifically authorized "project."²³

In the period before United States' involvement in the war suspended the Department's flood control activities, it completed fifteen of these survey reports and recommended that eleven of them be authorized. The Washita

²² Congressional Record, 76th Cong., 3d Sess., April, 19, 1940, 4802-4803.

Commission on Organization of the Executive Branch of the Government, Report on Water Resources and Power, I, 777-778.

^{24.} Report of Survey of Washita River Watershed in Oklahoma and Texas, House Document 275, 78th Cong., 1st Sess., September 17, 1943, House Documents, II, Serial 10793 (Washington, 1943).

River Basin was one of these watersheds, and it received authorization in the Flood Control Act of 1944. With funds forthcoming, the Department of Agriculture would be installing both land-treatment and headwater engineering measures including detention dams. Obviously, then, the Department and the Corps, which had also surveyed the Washita Basin before the war, were competing for limited funds with different types of programs intended to satisfy essentially divergent interests.

Dissimilar groups would profit from the disparate programs of the Army Engineers and the Department of Agriculture. The proponents of the Corps' program were the chambers of commerce, other urban groups, and plain farmers who formed "valley improvement associations" to oppose flooding rich river bottom lands with the water held back by big dams. These interest groups favored the Engineers because the upstream programs could not guarantee adequate protection to urban centers and lower basin developed valley lands.

On the other hand, large downstream projects provided no upstream overflow protection. The upper basin people formed "watershed improvement associations." These interest groups were comprised of farmers who would benefit directly by having conservation structures built at federal expense on their property, some who would be displaced by inundation if large dams were constructed, businessmen,

opponents of public power, and various conservation organizations who believed their interests would be advanced by upstream projects and impaired by large downstream works such as the Corps of Engineers advocated. Both "valley improvement associations" and "watershed improvement associations" were active in Oklahoma.

Governor Robert S. Kerr made a sustained effort to bring these divergent interests together. He appointed the Chairman of the Oklahoma State Planning and Resources Board, Don McBride, and the Chairman of the Arkansas Basin Flood Control Association, Newton R. Graham, to the special Arkansas-Oklahoma Interstate Water Resources Committee. McBride was most active in upstream watershed development. He had requested the Department of Agriculture to assume responsibility for comprehensive development of the Washita River Basin as early as 1938, 25 lent great incentive to the small dam and reservoir projects in Oklahoma, and formulated the state's soil conservation district program. on the other hand, had been most active since the early 1920's in promulgating lower Arkansas River flood control and navigation. He had appeared before Congress several times and was nationally known among river basin development advocates. Graham was dubbed the "Admiral of the Arkansas."

Robert J. Morgan, Governing Soil Conservation: Thirty Years of the New Decentralization (Baltimore, 1965), 171.

²⁶ Tulsa Daily World, August 7, 1960.

Kerr also took an active role in the resources development of the state. He sloshed through the mud and destruction of the 1943 floods and afterwards often said they were a turning point in his resolve to control the river for beneficial purposes. 27 He continued to support farm pond construction to such an extent that approximately 66,700 were built in Oklahoma during his governorship. 28 Kerr also toured the various national river development sites and actively sought information on resources developments and planning. 29 Moreover, he even became a national resources figure while still Oklahoma governor, when he took the lead in mobilizing the national effort to get legislation transferring World War II surplus machinery to soil conservation districts for soil conservation work. presided over a "march on Washington," dramatizing the proposed legislation and pressing the administration to grant the machinery to the states. 30 He later wrote that, although their immediate efforts were defeated by a powerful

^{27&}quot;Land, Wood, and Water," Lawyers Title News, August, 1960. (Monthly publication without volume number or page numbers)

²⁸ Don O. McBride to Kerr, October 17, 1956, Kerr Papers, The University of Oklahoma Library, Manuscripts Division, Norman, Oklahoma.

²⁹ The Kerr Plan, undated mimeographed sheet in Kerr Papers.

^{30&}quot;Farmers Plan Capitol March to Demand Relief,"
Oklahoma City Daily Oklahoman, December 9, 1945; and "Appeal for Farm Aid," New York Times, January 17, 1946.

manufacturers' lobby, they did launch the first national effort by soil conservation district supervisors and laid the foundation for the subsequent National Association of Soil Conservation Districts. 31

Possibly the most significant factor in these activities was the awareness and knowledge Kerr gained of his state's and the Arkansas Valley's resource problems. Kerr dramatized his convictions in the 1948 senate campaign with the slogan, "Land, Wood, and Water." His stated goals were a reasonably stable economy. free from the major losses and dislocations caused by floods and drought, which Kerr did not believe could be achieved without further development of the region's resources. He contended that water developments should be planned as integral parts of basin programs and that "planning for water resources could not be dissociated from planning for all resources." Moreover, Kerr believed that the federal government had not given sufficient consideration to non-federal interest, opinion, and participation in planning water resources projects. declared that some agency must be granted fairly broad responsibility to integrate at least the major federal water development functions in given river basins. The scope of its functions need not be as broad as that of the Tennessee Valley Authority, but it must be broad enough to enable the

³¹ Kerr, "Land, Wood, and Water," MS, 349-350.

agency to formulate a program of water use and control, taking into consideration the purposes of navigation, flood control, irrigation, power development, pollution control, recreation, domestic and industrial water consumption. 32 Clearly, Kerr was already thinking of a means for interagency review and coordination on a Valley-wide basis, with strong presidential support.

While Kerr was campaigning on a broadened resources development platform in Oklahoma, Don McBride was in Washington encouraging coordinated resource planning in the Arkansas Valley. Formerly chairman of the Oklahoma Planning and Resources Board, McBride had accepted the position of executive director of the National Reclamation Association at the end of Kerr's gubernatorial term. McBride contended that the water and soil resources of the Arkansas and Red River Basin should be viewed as a single integrated resource, to be developed as one unit instead of project-byproject. He thought it would probably be necessary to develop some new formulas in order to bring reclamation projects to "areas such as western Oklahoma where water projects were not economically feasible because of no hydroelectric possibilities." The current laws compelled farmers to repay the entire costs of irrigation projects from water

³²Draft of address by Kerr, dated September 11, 1948, Kerr Papers, The University of Oklahoma Library, Manucripts Division, Norman, Oklahoma.

purchases. McBride said the farmers needed the excess power benefits from projects in the eastern part of Oklahoma to help defray expenses for reclamation developments. Therefore, McBride asserted, "where there is one river basin there must be one plan of development and control." He stated that he could not "understand why after three years of continuous surveys by the Army Engineers and the Agriculture and Interior Departments, that they can't begin to integrate their programs and to determine the overall picture sufficient for legislation." Without mention of Kerr, McBride predicted that a bill would be introduced to establish an inter-agency program making it possible to integrate the plans of the executive departments. 33

Strong support for the "one plan for one basin" concept was also urged by the Tulsa Tribune. The Tribune's associate editor, Victor F. Barnett, had consistently advocated this approach to resource development and had been instrumental in setting up a series of lectures by Joseph Ross of Dallas, one of the Southwest's most earnest seekers after economic prosperity through resource development.

Discussing various agencies working for land and water control in Oklahoma, Texas, Arkansas, and Louisiana, Ross told his auditors at a South-West Industrial Conference in Lawton, Oklahoma, that "we must knock their heads together so

Tulsa Tribune, October 15, 1948.

they will adopt a coordinated plan." Ross suggested a regional authority "to unitize the conservation, development, and control of the land and water resources of the Arkansas and Red River Basins." This was essentially McBride's suggestion and Kerr's position during the 1948 senatorial campaign.

^{34 &}lt;u>Ibid.</u>, October 4, 1948.

CHAPTER VIII

FROM PROJECTS TO PROGRAM: THE KERR PLAN

Oklahoma's senator-elect Robert S. Kerr told his audience at the Seventeenth Annual Convention of the National Reclamation Association on November 18, 1948, that "saving and rebuilding the soil and conserving and using the water are so important in the life of this nation as to be almost, if not entirely, sacred." He further stated that "flood loss and soil loss are part of the same tragic story--the record of our ignorant and profligate steward-ship of the land." A deeply religious man, Kerr was imbued with a strong Protestant ethic and pioneer spirit which held that worldly achievement was the sign of God's favor and that man should dominate his environment. Kerr felt he had a mandate from the Creator, and the people, to husband the natural resources.

Draft of address by Senator-elect Robert S. Kerr before the Seventeenth Annual Convention Banquet of the National Reclamation Association, November 18, 1948, Kerr Papers, Manuscripts Division, The University of Oklahoma Library, Norman, Oklahoma.

See Marquis W. Childs, "The Big Boom from Oklahoma," Saturday Evening Post, CCXXI (April 9, 1949), 22-23, 118-120.

Kerr was also an intensely practical man. He emphasized that "Oklahoma and the West and the America of tomorrow would be the product of two things: people and resources." To him, the most significant of the region's natural resources were soil and water. Kerr said:

Every gallon of water that moves across and out of a state without having been properly used is a public loss. Every particle of soil carried away is a public tragedy. To permit continued erosion of soil by uncontrolled water and the ensuing loss of both the soil and the water is to encourage general poverty and invite national disaster.

As governor of Oklahoma, he had observed the effects of flood and drought. He felt a greater disaster would be "the failure of a people of a region or their representative leaders to develop that region's potentialities and harness its waters to make them a positive asset as a natural resource of inestimable value rather than a liability." Although Kerr knew his constituents generally agreed that river basin development was necessary, he also realized they were a diverse lot. Various interests in the eastern part of Oklahoma wanted flood protection and a navigation channel, while those in the western sector were concerned with water scarcity. To be entirely successful and

³Draft of address before the Seventeenth Annual Convention Banquet of the National Reclamation Association, Kerr Papers, Manuscripts Division, The University of Oklahoma Library, Norman, Oklahoma.

⁴ Ibid.

enhance the political stature of its promoter, any program would have to satisfy the several groups, which were unified only by their mutual interest in water.

Many of those concerned with resource planning and development of the Arkansas Valley decried the limitations of traditional atomistic views. Their thinking had evolved beyond the multiple-purpose, project-by-project approach to something near a comprehensive multiple-development of water and soil resources. They realized that river basin development demanded the cooperation and coordination of federal. state, and local governments which were represented by about two dozen relatively independent federal agencies, various elements of state governments, and numerous localities and municipalities. In the Arkansas Basin, there had been inadequate coordination of the programs of various agencies and inadequate consultation with and consideration of the interests of the states, local communities, and individuals most vitally affected. There were several federal agencies engaged in various phases of water control and development, each operating under separate legislation and with different objectives. Plans of these agencies were dissimilar in detail and in purpose.5

Moreover, most of the planning done to that date had been in the fields of flood control, navigation, irriga-

Interview with Charles Border, John H. Barhydt, and Francis O. Wilson, Tulsa Chamber of Commerce, Tulsa, Oklahoma, May 22, 1967.

tion, soil conservation, watershed control, and hydroelectric power. There had not been sufficient planning, according to many development advocates, for such functions as drainage, preservation and propagation of fish and wildlife, recreation, pollution abatement, and municipal and industrial water supplies. Also, no extensive effort had been made to evaluate all the soil and water conservation needs of the Arkansas Valley, or in any way to combine estimates and consider the Valley as a single watershed.

Many Arkansas Valley leaders, therefore, believed planning should represent collective judgment based upon all available information of what was most needed for the Basin. The issue was not whether there should be planning, but rather who should plan and to what ends. The growth of the region's economy was linked not only with its natural resources, but also with the use it made of managerial and technological resources.

Don McBride, Newton Graham, and others had informed Senator Kerr of these circumstances. Kerr then decided to become the spokesman for these river development interests. In part, Kerr, as a practical politician, wanted the continuing loyalty of his constituents, but he was also influenced by his geographic background, ideology, and the

^{6&}lt;sub>Ibid</sub>.

⁷Letter from Don O. McBride to the writer, dated February 26, 1968.

circumstances surrounding his governorship. Drought in the western part of his own state while he was governor and floods in the eastern sectors emphasized the organic character of the economy and revealed the limitations of the traditional programs of the federal agencies with their special interest approaches. Apparently, Kerr concluded that these agencies no longer represented the entire area of public interest in this field.

Was evident, and that "the inability of the various agencies to work together to evolve a coordinated plan had been too well illustrated, too often repeated to be overlooked." He also said that in the history of national resource policy, as "each new authority or agency was created by Congress, each went its own way," and sought financial support independent of an overall development. Kerr believed that teamwork among the agencies of the federal government was necessary to plan a program which would solve the multiple resource problems of the Arkansas Basin.

Since a valley authority could not receive congressional approval and was strongly opposed by powerful

⁸U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 54272, a bill for the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control and other purposes, Part 1, July 12-26, 1949, 81st Cong., 1st Sess. (Washington, 1949), 630-631; also see Congressional Record, 81st Cong., 1st Sess., 1949, A4954-A4955.

interests within the Arkansas Basin, Kerr decided that an inter-agency and state river basin commission was the most practicable alternative. This would seemingly meet the difficulty of diverse agencies by integrating their programs into one plan acceptable to all. Essentially, the detailed planning, construction, and operations would be done by established agencies, with the existing protections of local and state authority and interest. It was, Kerr contended, a "middle-of-the-road course between a federal authority, on the one hand, and a piecemeal limited effort on the other."

asked Congress to establish a study commission for the Arkansas, White, and Red River Basins (S.1576). Essentially, this was the bill Don McBride had drafted in October, 1948, when he was executive director of the National Reclamation Association, and before Kerr was even elected to the Senate. The "Kerr plan" was, however, broadened to include the Red River Basin because such watersheds as the Washita Valley cut across the western part of Oklahoma, and the southeastern

Press release from Senator Kerr's office, October 1, 1949, Kerr Papers, Manuscripts Division, The University of Oklahoma Library, Norman, Oklahoma.

The Kerr bill--S.1576, A Bill to Establish the United States Study Commission on the Arkansas-White and Red River Basins--is reproduced in U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 613-616.

¹¹ Letter from McBride, February 26, 1968.

areas of the state were frequently inundated by the Red River and its tributary streams. Kerr probably included the White River in his proposal because of the possibility of extensive hydroelectric power development. The excessive profits from these power projects on the White River could then be used for upstream watershed developments that could not so easily show a profitable cost-benefit ratio.

Kerr also included the three basins in his proposal to broaden the political support of more states. Texas, New Mexico, Colorado, and Oklahoma wanted increased federal resource development funds but, as one contemporary put it, "there was obstinate opposition and fear that a regional authority might be enacted in Congress. "12 these state interests were to get optimum development of their resources, have a voice in the planning process, and avoid a valley authority administration, they needed regional leadership at the Washington level. Kerr was willing to provide this. Undoubtedly, the Kerr plan was also aimed at reducing tensions among conflicting interest groups in his constituency who were seeking special benefits, to avoid the internecine strife among the agencies dealing with water resources, to provide more data relevant to future policy decisions, and to consider the entire needs of the area. Kerr stated that "the sole purpose" of his proposal was "to

¹² Ibid.

bring about coordination; to bring together these divergent viewpoints; to emerge with broader concepts; and to assure a new feeling of unity which /had/ been lacking."13

Kerr believed the study commission would provide information which, combined with program goals and preferences, could aid in reaching policy decisions based on the resources of the area as a single integrated unit for planning purposes rather than by the project-by-project approach. The major significance of this would be that future authorizations and appropriations could then be based on the unitized regional plan rather than on a particular project, such as a specified flood control structure in the lower part Thus, the survey could reveal how of one of the basins. each proposed additional development would affect the whole region and whether economically sound projects could financially support other desirable improvements in a comprehensive regional plan. Also important was the fact that advocates of Arkansas, White, and Red River Basins development were competing with other basins such as the Missouri and Columbia for project funds. Kerr wanted to dramatize the situation of the Arkansas-White-Red Basins by calling for a study commission that would reveal the abundant resources of the three basins which could be unlocked if federal funds were made available on a regional basis. A comprehensive

¹³Address of Senator Kerr before the Third National Water Conservation Conference, Chicago, Illinois, September 22, 1949, Kerr Papers, Manuscripts Division, The University of Oklahoma Library, Norman, Oklahoma.

survey might, therefore, show the unity of all projects and uses of water in the Arkansas, White, and Red River Basins and reveal not only the balance of valley resources but also how the whole region could be affected by each proposed additional developmental feature.

Senator Kerr wanted "an integrated and cooperative investigation, study, and survey" of the three basins in Arkansas, Colorado, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas by a commission composed of representatives of the federal resources agencies and the eight basin states. He asked for a chairman selected by the President from the area and not otherwise connected with the federal government. This inter-agency and state commission would coordinate efforts toward developing a comprehensive improvement plan for the land and water resources of the entire area. 14

Under the terms of the proposed legislation, the commission was to exist only until its planning work was complete. It would not supplant any existing agency. The Kerr bill contained no authority for any actual construction or development. Neither would it interfere with projects already proposed or authorized. It was not designed to govern the resource development of the three basins or to provide any authorization for policy decisions. Also, the

Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 616.

Kerr plan would not bring the states any new power of decision; they already had the authority by the 1944 Flood Control Act to review federal agency proposals. Rather, the Kerr proposal was intended to mobilize more effective state action by organizing the governors of the eight concerned states into an extragovernmental organization to study and participate directly with the federal agencies in the planning process. 15

most of the federal agencies concerned with resource development in the Arkansas, White, and Red River Basins. The Department of Agriculture, the Department of the Interior, and the Federal Power Commission representatives testified at the House and Senate hearings and backed the general purposes and objectives of the bill. After endorsing it, the representatives of these agencies suggested relatively minor revisions. They supported the Kerr proposal in part because of the pressure from President Truman and the Bureau of the Budget. Moreover, they saw the commission as an

¹⁵ Clifford H. Stone, Director of the Colorado Water Conservation Board, "An Analysis of S.1576," dated June, 1949, in a legislative portfolio of matters pertaining to S.1576, Kerr Papers, Manuscripts Division, The University of Oklahoma Library, Norman, Oklahoma.

¹⁶U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 649-658, 675-678, 681-684; also see U.S. House of Representatives, Flood Control Act of 1949: Hearings before the Committee on Public Works on H.R. 5472, May 16-January 2, 1949, 81st Cong., 1st Sess. (Washington, 1949), 972-974.

opportunity to strengthen their position against the Corps of Engineers in the area, expand their role in gathering data on resources, and increasing their own activities in the three basins beyond that provided by prior legislation. Furthermore, the study commission might end the demands for an Arkansas Valley Authority, which was a threat to their existing functions in the region.

Nearly all the states of the three basins accepted the Kerr bill for much the same reasons that it was endorsed by the federal agencies. For example, Coloradans, who strongly opposed an Arkansas Valley Authority, actively supported Kerr's proposal. Senator Eugene D. Millikin, to whom authorities were "repulsive," stated that he liked "the idea of this bill." He was satisfied that no authority was being set up. Neither Congress nor any state which disliked the ultimate report of the study committee need accept it. In Millikin's opinion, this was the proper approach to the water problems of the area.

Clifford H. Stone, the director of the Colorado Conservation Board, also strongly advocated acceptance of the Kerr bill. Stone emphasized that no "comprehensive program" had been devised for development of the Arkansas-

¹⁷ Letter from McBride, February 26, 1968.

¹⁸ U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 639-640.

White-Red Basins. "Isolated projects have been either constructed, or are under construction," he stated; however, "the integration of basin-wide development by interested Federal agencies has not been undertaken." Stone believed that this was sufficient reason for the federal government to follow the course outlined by the Kerr bill. However, Stone insisted a thorough resources inventory be taken well in advance of major project planning.

In general, all the other states of the Arkansas, White, and Red River Basins except Louisiana concurred with the positions expressed by the Coloradans. Senator Russell Long and several witnesses from the Red River Basin in Louisiana feared that authorization of the study commission would be used as an excuse by the "ace economists in the House Appropriations Committee" to withhold appropriating funds for further flood protection works in their area. L.R. Matthias, Executive Secretary of the Red River Valley Association, testified before the House Committee on Public Works on May 27, 1949, that if any money were available, it should be given to existing agencies for completion of works under construction or already authorized by Con-

^{19 &}lt;u>Ibid.</u>, 640-641.

U.S. House of Representatives, Flood Control Act of 1949: Hearings before the Committee on Public Works on H.R. 5472, 993-1004; also see U.S. Senate, Flood Control-Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 644, 687-707.

gress.²¹

In a letter to Kerr in July, 1949, Governor Earl K. Long of Louisiana stated that he would support any measure that would accomplish or accelerate development of the basins concerned. Kerr's measure, in his opinion, however, would retard development programs and "occasion unnecessary delay in the completion of projects already authorized." Governor Long therefore declined Kerr's invitation to endorse the study commission proposal. 22

The hearings on this legislation before House and Senate committees reveal that almost all opponents of the Kerr plan expressed complete confidence in the Corps of Engineers. It mattered little whether their hostility to the proposed survey commission was inspired principally by opposition to hydroelectric power, by fear that the favored position of navigation interests in river development might be adversely affected, or by other causes; certain interest groups in the lower basins of the area clearly did not want any interference with the civil works functions of the Army Engineers. These downstream interests saw the Kerr plan as a potential threat to the Corps' flood control program and

²¹ U.S. House of Representatives, Flood Control Act of 1949: Hearings before the Committee on Public Works on H.R. 5472, 995.

U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 694-695.

wanted to reduce any opposition to the Engineers in Congress. This position stemmed clearly from self-interest. The Army Engineers had constructed many projects in the lower Arkansas, White, and Red River Basins, and Congress had authorized the Corps to build additional projects at a cost of approximately \$2 billion. These lower Basin pressure groups were not interested in a broader concept of Basin-wide planning. The Engineers' program was satisfactory to them, and they were unwilling to share political influence and funds with the upper Basin agencies and their special clientele groups.

The Army Engineers avidly supported the downstream vested interest groups. At the hearings on the Kerr proposal for a survey commission, Colonel Herbert C. Gee, speaking for the Corps, testified that the federal agencies had sufficient authority, that "comprehensive studies" had already been prepared, and that adequate machinery existed for coordinating the resources planning activities of the federal agencies in the 1944 Flood Control Act. Therefore, the Corps' official concluded, a special inter-agency and state effort was unnecessary.

²³ Irving K. Fox and Isabel Picken, The Upstream-Downstream Controversy in the Arkansas-White-Red Basins Survey (University, Alabama, 1960), 7.

²⁴U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 1, 638-644.

Senator Kerr himself questioned Colonel Gee on July 25, 1949, before the Senate Subcommittee of the Committee on Public Works. At this hearing, the Corps' representative admitted that examinations of the Arkansas River had not been made or authorized covering the scope of information and area sought in the Kerr proposal. Moreover, Gee stated that Kerr's bill included matters "not presently under investigation at all."25 Yet, Colonel Gee asked: "What purpose would be served by authorizing an investigation for navigation in the upper basin states of the Arkansas River?" Kerr replied that he did not believe the Army Engineers knew "it all" and he intended "to make it possible to help them find out a lot of the story which they /had7 not yet either learned or imagined." The Senator was convinced that navigation along the Arkansas "over its entire course through Oklahoma and on into Kansas" was not only "possible" but "imminent." 26

Kerr also took issue with the Corps of Engineers regarding plans for coordinating the programs of the federal agencies in the Arkansas Basin. Major General Lewis A. Pick, Chief of the Army Engineers, testified on May 10, 1949, before the House Committee on Public Works on the Arkansas

^{25&}lt;u>Ibid.</u>, 684-685. 26<u>Ibid.</u>, 685-686.

navigation plan, stating that he contemplated no interagency problems in Arkansas River development because the agencies had "worked out" their problems in "a very splendid manner in the Missouri Basin." Kerr replied that, although he supported the Missouri River developmental program, the studies on which authorizations were based were inadequate, and it was quite apparent that the program which had evolved was rather ineffective. To Kerr, the Missouri Basin project revealed elements of interagency confusion and competition, and pointed up the med for responsible administration of a national water policy. Coordination of information, he asserted, would have brought about a better plan. 28

Will M. Whittington, Chairman of the House Committee on Public Works, stated on May 27, 1949, that his Committee had agency program coordination in mind even before the 1944 Flood Control Act. In fact, he asserted that this was considered as early as 1936 when Congress passed the first general Flood Control Act. Provisions were made, he continued, in the 1944 Flood Control Act "for the

²⁷U.S. House of Representatives, Arkansas River and Tributaries, Arkansas and Oklahoma--Navigation: Hearings before the Committee on Public Works, May 10-11, 1949, 81st Cong., 1st Sess. (Washington, 1949), 25.

U.S. House of Representatives, Flood Control Act of 1949: Hearings before the Committee on Public Works on H.R. 5472, 979.

further coordination and correlation of all projects, including even the states involved." Whittington further suggested that Kerr's study commission report would not improve things beyond the 1944 Act. Kerr replied that he did not "contemplate" that the apex of progress had been reached, nor would he suggest that there was "no greater work" that the Public Works Committee or the Congress could do. Rather, he believed that the study commission "might be an addition to and may be providing for a little additional use of the same facilities and perhaps provide for a little better plan."²⁹

J.H. McGregor, a Representative from Ohio and member of the Public Works Committee, concurred with Whittington's opposition to the Kerr proposal. McGregor stated that the Public Works Committee analyzed each project with a view toward how it would fit into the basin-wide resources program. Moreover, he believed that the Army Engineers were "doing a good job," and he thought that the study commission might jeopardize the Corps' position. Kerr's proposed legislation, McGregor continued, would give the commission "tremendous power" and "we would ask ourselves why not defer any action on any project incorporated in this entire program until the Commission has acted and possibly made recommendations."

²⁹Ibid., 981-984.

^{30&}lt;sub>Ibid., 985</sub>.

Representative Tom Pickett of Texas, also a member of the House Public Works Committee, was concerned with this same aspect of the Kerr proposal. He asked Kerr whether the bill would not put the commission in a "position of implied endorsement, to say the least, of a comprehensive plan and recommendation that might be submitted when at the time when we get through with it, it has to be passed on specifically, part by part and piece by piece by the various agencies of the Government that now exist." Serr replied: 32

Whatever plan of development you now have or in the future develop will be either project by project or groups of projects; but in the final analysis, they are reduced to the status of the development of the individual project; and when they have all been developed, they will be parts of a whole . . . whether we develop it project by project, sector by sector, basin by basin.

The purpose of the proposed commission, Kerr continued, was "to enlighten the Congress as to the needs on the watershed, and enable the Congress then to make up its mind as to how it will develop with reference to sector by sector, stream by stream, or basin by basin." However, Kerr contended, there was nothing which could then be done to add or take from Congress' authority in the future, "but," he concluded, "we can do that which will enable them to be better informed as they act in whatever manner they in their

³¹ <u>Ibid</u>., 988-989.

³² Ibid.

wisdom choose."

At this point Representative Homer D. Angell of Oregon, another member of the House Public Works Committee, identified the Kerr proposal with the recommendations of the recent Commission on Organization of the Executive Branch of the Government (First Hoover Commission). Angell's questions reveal what legislators were thinking and help pinpoint the reasons for some congressional opposition to the Kerr proposal.

The Commission's <u>Task Force Report on Natural</u>
Resources, published in January, 1949, recommended transferring all the rivers and harbors work of the Army Corps of Engineers to a consolidated "Water Development Service" in the Department of Interior, and establishing regional advisory committees to test the soundness of every proposal made. The Commission also suggested as an important addition to the executive structure a Board of Analysis which would correlate and appraise for the President the various agency plans from their inception to their presentation to Congress. Of course, these Hoover Commission proposals threatened the Corps' continued independent existence as an

^{33&}lt;sub>Ibid</sub>.

³⁴ The Commission on Organization of the Executive Branch of the Government, Reorganization of the Department of the Interior, March 15, 1949 (Washington, 1949).

arm of the legislative branch. 35

Evidently, Senator Kerr believed that if the Hoover Commission's recommendations were implemented, they would help solve the governmental problems of developing Arkansas River Basin potentialities. Kerr explained at a National Water Conservation Conference in September, 1949, that the bill he had introduced in April had "the same objective as the Hoover Commission and its recommendations for natural resource development." Moreover, he told the House Public Works Committee that if the Commission's proposals were accepted, they would solve the resource problems his survey commission plan was designed to correct, and his bill would not be needed. To Kerr, there were some, though not enough engineers in the Corps who appreciated that flood control involved upstream watershed development as well as dams and dikes on the lower mainstream, and that channel deepening was but a means toward the end of economical transportation. But they had no practical way to combine their efforts with those of the other technicians needed to complete the job. 37 At this point, he seemed convinced that

The Commission on Organization of the Executive Branch of the Government, Task Force Report on Natural Resources, January, 1949 (Washington, 1949), 6-7, 28-39, 65-78, 89-93.

³⁶ Address of Senator Kerr before the Third National Water Conservation Conference, September 22, 1949.

³⁷U.S. House of Representatives, Flood Control Act of 1949: Hearings before the Committee on Public Works on H. R. 5472, 989-990.

administrative unity of water resource developments in which the Corps played a part could only be had by weakening the relationships between the Army Engineers and key committee members in Congress. His study commission proposal and the Hoover Commission's recommendations did just this.

Kerr and the majority of the Hoover Commission members concluded that the nation was faced with the problem of federal agencies spending large sums of money without a basic plan, under competitive and wasteful conditions. and without effective direction from the Executive Office. Arthur A. Maass, a longtime critic of the Army Engineers' civil functions, declared that the Corps "was the object of the Hoover Commission's censure largely because its record of non-co-operation /sic/, arrogance, and independence is perhaps unequalled in the history of an executive division."38 Therefore, the Hoover Commission would abolish the Corps' public works functions and end the project-byproject approach which lent itself easily to the pork-barrelers in Congress. Kerr's proposal, although it would not eliminate the Corps from the rivers and harbors field, seriously threatened the independent position of the Engineers.

There was a strong reaction to any reorganization

Robert de Roos and Arthur A. Maass, "The Lobby That Can't be Licked," <u>Harpers Magazine</u>, CXCIX (August, 1949), 22.

of the Corps' functions. Senator McClellan, himself a member of the Hoover Commission, entered an impassioned minority defense to deny the President reorganizing power over the Army Engineers. 39 McClellan was simultaneously the ranking Democrat on the Senate Public Works Committee and president of the powerful National Rivers and Harbors Congress, called by Maass and Robert deRoos "an involuted sort of affair which includes among its membership representatives and senators -- the lobbied -- as well as the contractors, and state and local officials -- the lobby."40 three days before Kerr submitted his study commission proposal, McClellan, as president of the National Rivers and Harbors Congress, said he was concerned about the danger to the internal development program, "the disorganization of the efficient system that we have built up, and the transferring of these functions to less competent, less experienced hands." McClellan asserted that the Hoover Commission's recommendations, as related to reorganizations

Branch of the Government, Reorganization of the Executive Branch of the Government, Reorganization of the Department of the Interior, 81-89; also see U.S. Senate, Reorganization Act of 1949: Hearings before the Committee on Expenditures in the Executive Departments on S. 526, a bill to provide for the reorganization of government agencies, and for other purposes, February 2, 3, 7, 9, 10, and 15, 1949, 81st Cong., 1st Sess. (Washington, 1949). Senator McClellan was chairman of the committee.

de Roos and Maass, "The Lobby That Can't be Licked," 25.

affecting river resource development, was of vital importance because its proposals would "emasculate the civil functions of the Corps of Engineers and do irreparable harm to both our flood control, navigation, and rivers and harbors program and to the Nation."

Clearly, McClellan's primary interest was in dams and reservoirs in the lower Arkansas Valley. The Corps was willing to build these, and McClellan's constituents wanted them without further delay. If another flood like that of 1945 occurred without McClellan doing everything possible to get project appropriations, a political opponent might seriously undermine the support of the incumbent senator. McClellan could back a resource inventory in the Arkansas and White River Basins only if he was assured the status of authorized projects was protected and the Army Engineers maintained their dominant agency position.

Allied with McClellan in this position was Representative Whittington of Mississippi, chairman of the House Public Works Committee and vice-president of the National Rivers and Harbors Congress. These two prominent men in Congress made up what one critic called the "kingpin outfit" in a rivers and harbors "lobby that \(\subseteq \text{could} \subseteq \text{ not be licked."} \)

The attitudes of these congressional waterways

⁴¹ Congressional Record, 81st Cong., 1st Sess., April 10, 1950, A2666-A2668.

⁴²Benton J. Strong, "The Rivers and Harbors Lobby," New Republic, CXXI (October 10, 1949), 13-15.

specialists toward, and relationships with, the Corps of Engineers, could largely determine the type of water resource development that would be approved by Congress for the Arkansas River. However, the first concern of any individual congressman was approval of projects for his own constituents, and he became interested in other proposals only insofar as they involved the projects of his own district and state.

These factors help to clarify the actions taken on the Kerr proposal. On July 6, 1949, committee chairman Whittington submitted an accompanying report to the omnibus rivers and harbors and flood control authorization bill (H.R. 5472) which the House Public Works Committee had been considering along with Kerr's proposed Arkansas, White, and Red River Basins' study commission (S.1576). Neither this report nor any other legislation being considered by the House Public Works Committee included any reference to the Kerr bill. Don McBride believed that Whittington was instrumental in eliminating the Kerr plan in the House Committee since Whittington was "a great admirer of the Corps of Engineers because of the work they had done on the lower Mississippi River" and "was perfectly willing to favor them

^{43&}quot;Report to Accompany H.R. 5472, Authorizing the Construction, Repair and Preservation of Certain Public Works on Rivers and Harbors for Navigation, Flood Control, and Other Purposes," House Report 969, 81st Cong., 1st Sess., July 6, 1949, House Miscellaneous Reports, IV, Serial 11299 (Washington, 1949).

on the basis of wanting to keep them happy."

This explains why the Public Works Committee excluded the Kerr plan but recommended substantial appropriations of approximately \$70 million for the Arkansas, and the House passed the flood control act on August 22, 1949, without a provision for the study commission. 45

The week following the House action, Elmer Staats of the Bureau of the Budget testified on Kerr's proposal before the Senate Committee on Public Works. Staats declared the survey commission was in general accord with the President's program. However, there was some "minor" objection to the chairmanship of the proposed commission. The Bureau believed an independent chairman should be provided, although a modification in the original Kerr bill left that position open. Also, the Bureau wanted the size of the proposed commission reduced to a "manageable form." The Kerr plan was, however, still acceptable to the President, the Bureau representative declared.

On October 7, 1949, Senator Dennis Chavez of New Mexico reported the omnibus rivers and harbors and flood

Letter from McBride, February 26, 1968.

^{45&}quot;Report to Accompany H.R. 5472," House Report 969, House Miscellaneous Reports, IV, Serial 11299.

⁴⁶ U.S. Senate, Flood Control--Rivers and Harbors: Hearings before a Subcommittee of the Committee on Public Works on H.R. 5472, Part 2, August 25-31, 1949 (Washington, 1949), 886-896.

control authorization bill (H.R. 5472) from the Senate Committee on Public Works. The Senate Committee, unlike the House, included a section along the lines of the Kerr proposal providing for the Arkansas, White, and Red River Basins Study Commission. However, several significant modifications of the original Kerr plan were made because of opposition expressed in the Committee hearings. Other changes were made to clarify certain features of the initial bill. According to Section 219 of the Senate Committee version of the omnibus rivers and harbors and flood control bill, (H.R. 5472) the study commission would be composed of five members. One would be a resident of the region and four representatives officially connected with the Departments of the Army, Interior, Agriculture, and the Federal Power Commission. The President would designate the Commission's chairman. The governors of Arkansas, Missouri, Kansas, Oklahoma, Texas, New Mexico, and Colorado would form an advisory committee. Like the Kerr bill, the added section included a statement that there was no intent to create a permanent agency or to alter the duties of existing departments, except as provided in the proposal. Furthermore, it indicated that Congress intended to protect the interests of the states, existing projects and those under construction, use information already collected by existing departments, and require participation in the Arkansas-White-Red

study in compliance with law.47

Despite these similarities, the original Kerr bill and the Senate Public Works Committee proposal differed. Under the Senate version, the geographic area for the study was reduced by omitting Louisiana. Also, the President was to designate one of the federal representatives as chairman. On the advice of the commission, the chairman was to appoint a staff director to carry out commission policies and direct the investigations. Moreover, state participation was to be fundamentally different. According to the Senate modification, the federal members would constitute the full commission. A seven-man advisory committee composed of a representative appointed by each of the governors of the states of the three basins, was to attend the meetings and present the views of the states. Don McBride believed Kerr's original bill was altered by the Senate Public Works Committee "because of the rumors that Senator Kerr was attempting to create an executive position for /him/ and because of the opposition of the Corps of Engineers." McBride also stated that "the change in the Senate language was a compromise, which although we did not feel would make the bill as strong

^{47&}quot;Report to Accompany H.R. 5472, Authorizing the Construction, Repair, and Preservation of Certain Public Works on Rivers and Harbors for Navigation, Flood Control, and Other Purposes," Senate Report 1143, 81st Cong., 1st Sess., October 7, 1949, Senate Miscellaneous Reports, IV, Serial 11294 (Washington, 1949), 74; also see Congressional Record, 81st Cong., 1st Sess., October 17, 1949, 14761-14762.

as the original language, we did feel probably was necessary if we were to secure the enactment. $^{1/48}$

The Senate Committee on Public Works also amended the House project authorizations for the Arkansas by recommending an increase of \$19 million, bringing the total recommended appropriations for the Arkansas for that year to \$89 million. When, some six months later, this section of the 1949 omnibus rivers and harbors and flood control authorization bill (H.R. 5472) was debated on the Senate floor, Senator Paul H. Douglas of Illinois proposed eliminating these project authorizations for the Arkansas. He argued that the Senate had "already authorized \$273,891,000 for the Arkansas River Basin, \$80 million of which had not yet been appropriated. Also, the Senate was proposing another \$104,953,000 of authorizations for the Arkansas River. Therefore, Douglas declared, the federal government was "authorizing enormous amounts of money for this project, for which the economic justification /was/ extremely doubtful." He charged that this was a "case of the potential sound of the steamboat whistle taking away the sanity of men. and asking them to authorize the expenditure by the Federal Government of millions of dollars on a project which . . . /would/ never pay out." Douglas further declared "it would be cheaper to construct a railroad at public expense and

Letter from McBride, February 26, 1968.

carry all freight free than to pour \$650,000,000 into the Arkansas River."

There was no reply on the Senate floor to Senator Douglas' remarks; undoubtedly, the rivers and harbors development advocates knew their exact strength on the appropriations measures in the bill by that time. On October 17, 1949, the Senate approved this appropriations section of the 1949 omnibus rivers and harbors and flood control bill, but withheld action on the rest of it until the next session of Congress.

In April, 1950, when the Senate resumed its deliberations on the omnibus rivers and harbors and flood control bill (H.R. 5472), there was extensive debate. The Senators were, however, mostly concerned with the Columbia and Missouri Rivers and with the cost of developmental programs for which there had been no authorizations since 1946, except for emergency flood control. There was no discussion of Kerr's study commission bill for the Arkansas, White, and Red River Basins which had been amended in committee and included in the omnibus rivers and harbors and flood control bill. On April 17, 1950, the Senate passed the bill as the Public Works Committee had reported it. 51

⁴⁹ Congressional Record, 81st Cong., 2d Sess., April 17, 1950, 5277-5278.

Congressional Record, 81st Cong., 1st Sess., October 17, 1949, 14761-14762.

⁵¹ Congressional Record, 81st Cong., 2d Sess., April 17, 1950, 5283.

The Kerr plan was, however, still not in its final form. Because the Senate had amended some of the House appropriations, and since the Arkansas, White, and Red River Basins Study Commission proposal had not been included in the omnibus flood control bill that passed the House of Representatives, it was subject to action by the conference committee designated to resolve differences between the two houses. Senator Dennis Chavez of New Mexico, floor manager of the bill, moved that "the Senate insist upon its amendments" and the presiding officer appointed Chavez, McClellan, Spessard L. Holland of Florida, Harry P. Cain of Washington, and George W. Malone of Nevada as conferees on the part of the Senate.

On April 20, 1950, Whittington asked consent of the House Speaker "to take from the Speaker's table" H.R. 5472, with the proposed Senate amendments, "disagree" to them and "agree to the conference asked by the Senate."

There was no objection to Whittington's request and the Chairman appointed Whittington, Henry D. Larcade of Louisiana, Clifford Davis of Tennessee, George A. Dondero of Michigan, and Homer D. Angell of Oregon as the House conferees. 53

The Senate and House conferees further modified the Kerr plan and the Senate amendment to the study proposal.

⁵² Ibid.

⁵³ <u>Ibid.</u>, 5462.

By their agreement, the Corps of Engineers virtually became the dominant agency in the Arkansas-White-Red Basins because the Secretary of the Army was authorized and directed to "cause . . . to be made under the direction of the Chief of Engineers" preliminary examinations and surveys in the three basins and the eight states, 54

with a view to developing comprehensive, integrated plans of improvement for navigation, flood control, domestic and municipal water supplies, reclamation and irrigation, development and utilization of hydroelectric power, conservation of soil, forest and fish and wildlife resources, and other beneficial development and utilization of water resources including such consideration of recreation uses, salinity and sediment control, and pollution abatement as may be provided for under Federal policies and procedures, all to be coordinated with the Department of the Interior, the Department of Agriculture, the Federal Power Commission, other appropriate Federal agencies and with the States, as required by existing law.

The conferees also added a proviso that federal projects, at any stage of development or consideration, were not to be in any way impeded. Although the river and harbor amendment of the Senate on the Arkansas was reduced by \$9 million and the Ouachita by \$15,650,000, this seemingly was not in any way connected with the study proposal.

The conference report was adopted by both the House and the Senate on May 3, and May 4, 1950 respectively. 55

^{54&}quot;Flood Control Act of 1949: Conference Report to Accompany H.R. 5472," House Report 1968, 81st Cong., 2d Sess., April 28, 1950, House Miscellaneous Reports, III, Serial 11380 (Washington, 1949), 4-5.

⁵⁵ Congressional Record, 81st Cong., 2d Sess., May 3, 1950, 6265; <u>Ibid.</u>, May 4, 1950, 6329.

Therefore, the basic provisions of the Kerr bill were passed into legislation by the Congress in an omnibus bill of 1950 dealing with flood control and river and harbor activities throughout the nation. 56
But the original Kerr proposal had been significantly modified. In the final version, the bill did not require an inter-agency committee to conduct the study. Rather, it allowed the Corps of Engineers to survey and coordinate its own plan, along with the other federal agencies and the concerned states. There is little doubt that it was the intention of the committee which resolved the disagreements between the two houses in connection with the omnibus rivers and harbors and flood control bill to enable the Corps to proceed in that way. The conferees, in fact, said they eliminated the study commission so that the Corps of Engineers could gather all available data to "perform such studies as necessary to prepare a comprehensive report for the basins included." Furthermore, they felt the Corps could use "the surveys and data available from other federal agencies within their respective spheres of operations as defined by law, and in cooperation with State agencies."57 All that was required by existing law was that certain federal agencies and the states concerned

⁵⁶U.S., Statutes at Large, LXIV, 163, 170-184.

^{57&}quot;Flood Control Act of 1949: Conference Report to Accompany H.R. 5472," House Report 1968, House Liscellaneous Reports, III, Serial 11380, 27.

be given an opportunity to comment on the plans prepared by the Department of the Army before they were submitted to the President and Congress. Clearly, this was no substitute for participation in the original preparation of the plans.

There evidently was little discussion in the conference committee on the Arkansas, White, and Red River
Basins Study Commission proposal. Although Chairman Whittington_elaborated considerably on many aspects of the conferees'
decisions in his statement to the House, he mentioned only
once the Arkansas, White, and Red survey. Shalso, Senator
Holland reported on the Senate floor that the conferees
"felt" that the survey "could be adequately accomplished by
existing agencies and procedures, without getting up a
separate commission." He further explained that "instead of
having the work done by a separate commission, as proposed
in the Senate amendment, it is now transferred to the category of a survey to be handled by existing agencies. The
conference was unanimous in its final action.

Senator Holland specifically referred to Kerr in his remarks. However, Kerr did not openly challenge this change in his proposal. He voted for the omnibus bill, as did all other senators from the region except Schoeppel of

⁵⁸ Congressional Record, 81st Cong., 2d Sess., May 3, 1950, 6274.

^{59 &}lt;u>Ibid.</u>, May 4, 1950, 6330-6332.

Kansas, who was against continued spending for rivers and harbors development at that time. The bill easily passed the Senate and House and, on May 5, 1950, it was sent to the President.

Two weeks later President Truman sent identical letters to the Departments of the Army, Interior, Agriculture, and Commerce and to the Federal Power Commission and the Federal Security Agency (Public Health Service). The President said he was approving the omnibus Rivers and Harbors and Flood Control Act of 1950 but expressed his displeasure that the procedure authorized by the Act for the Arkansas, White, and Red River Basins survey was "in lieu of a special study commission included in earlier versions of the bill, which would have been preferable." However, President Truman did think it significant that for the first time a specific congressional act recognized "the need for a broad-scale study of the multiple uses of the land and water resources of a river basin." He therefore felt it was

ŧ,

^{60&}lt;sub>Ibid.,</sub> 6565.

The President's letter is reproduced in U.S. Senate, Development of Water and Land Resources of the Arkansas-White and Red River Basins: Letter from the Director of the Bureau of the Budget Transmitting a Report on the Conservation and Development of the Water and Related Land Resources of the Arkansas-White and Red River Basins, with Accompanying Papers and Illustrations, Requested in the Flood Control Act of 1950, Senate Document 13, 85th Cong., 1st Sess., January 17, 1957 (Washington, 1957), 2.

"starting with the planning of the investigation itself,"
to realize the potentialities of an integrated study for
the region authorized in the bill.

For these reasons, President Truman requested the agency heads to form an inter-agency committee to "formulate procedure, and map out a joint plan of investigation, indicating specifically the precise responsibilities of each and the prospective allocation of the agency resources to the joint effort." The President then indicated that "because of the language contained" in the 1950 Rivers and Harbors Act, it seemed "desirable that the Department of the Army be designated as the Chairman agency." However, Truman declared "each agency would, of course, make its contribution in accordance with its responsibilities under exist-The final product of such a joint inter-agency investigation should be a single comprehensive report embracing the coordinated views of all agencies concerned." Finally, President Truman further asked that the plans and activities of each agency taking part in the survey, and the group as a whole, be coordinated with the interested states. This close affiliation with the people involved would give the federal agencies the advantage of the ideas and experience of those most directly affected. Furthermore, Truman wanted the comments of each affected state included in the final report.

River Basins study in the President's directive was clearly a legitimate reflection of federalism as it was operative in mid-twentieth century United States. State inability to resolve the region's resource problems did not eliminate these governments from the field and relinquish the resolution of issues to federal hands. It meant, rather, that the states attained the benefits of federal governmental power and authority while retaining their right to participate with the federal government. Thus, the states of the three basins provided a check upon the growth of federal power and at the same time protected interests operative within their boundaries.

and state committee, President Truman was, in effect, supporting Senator Kerr's position that special coordinating legislation and organization were needed in resource planning. However, it was clear in his May 22, 1950, message to Congress approving the omnibus Rivers and Harbors and Flood Control Act that the Corps and the congressional committees had successfully circumvented control by the Executive. Truman charged that Congress had "not adjusted its procedures to the inherent requirements of Federal resource development work." He asserted that Congress was "well aware that the development and use of our natural resources must be carried on in ways that consider the interrelation-

ships between different agencies." However, Truman believed the 1950 Act "was prepared with a primary view to the rivers and harbors and flood-control work of the Army Corps which is only one part of the job that needs to be done." 62

The President then cited the Arkansas, White, and Red survey as the illustration of the failure of Congress to give proper consideration to the resource responsibilities of agencies other than the Corps of Engineers. It was — "clearly inappropriate," Truman declared, that the other agencies should not be included in the initial planning stage. Furthermore, the President asserted that since the states had important responsibilities in resource development work, the inter-agency provision was defective in not requiring their full consultation and collaboration in preparing comprehensive plans.

For these reasons, President Truman believed "the provision originally adopted by the Senate, but omitted from the final act, was far preferable." He explained that "this

Transmitting a Message Relative to Approval of H.R. 5472, an Act Authorizing the Construction, Repair, and Preservation of Certain Public Works on Rivers and Harbors for Navigation, Flood Control and for Other Purposes, House Document 597, 81st Cong., 2d Sess., May 22, 1950, House Miscellaneous Documents, Serial 11425 (Washington, 1950); also see Public Papers of the Presidents of the United States: Harry S. Truman, Containing the Public Messages, Speeches, and Statements of the President, January 1 to December 31, 1950 (Washington, 1965), 427, 430. The President signed the bill on May 17, 1950; see U.S., Statutes at Large, LXIV, 163, 170-184.

would have provided that comprehensive plans for the Arkansas, White, and Red River Basins be prepared by a special interdepartmental commission, under a chairman appointed by the President, with participation by the States."

version of the bill was not accepted by Congress he was taking steps to remedy the defects of the authorized act by issuing instructions to the appropriate executive agencies "to work together in preparing comprehensive plans for these basins, insofar as their existing authority permits, and to invite participation by the States concerned." However, Truman realized "more than this was needed." The President, therefore, urged Congress to "reconsider the matter, and authorize the type of investigation and planning that would be accomplished under the provisions originally adopted by the Senate."

Finally, Truman explained that he was signing the Act because generally the authorized work would "be added to the present backlog of authorizations, and each project would be evaluated in the light of economic, budgetary, and other considerations in preparing and enacting each year's budget." In reality, this was an idle threat because at that time the Bureau of the Budget was inadequately attempting to coordinate public works activities in the entire federal establishment with only two professional em-

ployees. 63

The President indicated his disappointment in the executive weaknesses in this area when he stated in the closing sentences of his message approving the omnibus Rivers and Harbors and Flood Control Act of 1950 that:

We are a long way still, both in the executive and legislative branches, from the kind of comprehensive planning and action that is required if we are to conserve, develop, and use our natural resources so that they will be increasingly useful as the years go by. We need to make sure that each legislative authorization, and each administrative action, takes us toward--and not away from--this goal.

⁶³de Roos and Maass, "The Lobby That Can't be Licked," 25.

[&]quot;Message from the President of the United States Transmitting a Message Relative to Approval of H.R. 5472," House Document 597, House Miscellaneous Documents, Serial 11425; also Public, Papers of the Presidents: Harry S. Truman, 430.

CHAPTER IX

CONCLUSIONS

Study of the various programs, proposals, and demands for resource development and for change in the political-administrative arrangements in the Arkansas Valley from the early nineteenth century to the middle of the twentieth revealed how policy evolved in response to a variety of forces. Clearly, the kinds of development and organizational arrangements depended upon the institutional environ-As Irving K. Fox and Lyle E. Craine have pointed out, "the underlying objective of institutions is to give expression to the values of society and to facilitate their This axiom is fundamental in considering organizational needs for public resource development in a democratic society. When the desires of people living in a particular environment, such as the Arkansas Valley. require some special organized effort to achieve their goals, their demands become inputs of the political system.

lrving K. Fox and Lyle E. Craine, "Organizational Arrangements for Water Development," Natural Resources Journal, II (April, 1962), 3-4.

tant decisions or policies become outputs. 2

In the first half-century of settlement in the Arkansas Valley, the inputs and outputs of the institutional environment were relatively simple. In the undeveloped Basin, the need for social overhead capital was greater than local and state institutions could supply. Needing some sort of transportation system, but lacking the funds to develop one, organized interest groups, such as the navigation boosters at Little Rock, Fort Smith, and Muskogee requested federal funds to aid riverboat transportation. These vested interests put their demands before the electorate, legislators, and administrators.

The result was very limited developmental activities carried out by certain federal agencies, such as the pulling of snags by the Corps of Engineers in a relatively simple political-economic environment. In fact, the first half century of federal improvement in the lower Arkansas River had consisted of the removal of snags to aid navigation, along with various surveys. With increased population, encouraged in part by improved transportation facilities, local interests asked for federal assistance to build

For generalizations concerning the conceptual structure of the political system, the writer is indebted to David Easton's trilogy on empirically oriented political theory, The Political System: An Inquiry into the State of Political Science (New York, 1953); Framework for Political Analysis (Englewood Cliffs, New Jersey, 1965); and A Systems Analysis of Political Life (New York, 1965).

levees which would protect cities and valuable river-bottom farm areas.

In this milieu, the basic framework of public policy was established. Water resources development emphasized local aspects of individual water projects. Congressmen proposed specific items for inclusion in omnibus rivers and harbors bills in response to the requests of local interests in their districts. Elected representatives and spokesmen of organized interest groups appeared before the appropriate congressional committees seeking approval for projects in their districts which had received favorable Corps' reports. After a favorable survey recommendation from such an agency as the Army Corps of Engineers, Congress usually authorized an individual single-purpose project. By the turn of the century, some critics called this procedure the "pork barrel." While this pattern of public policy emerged in the lower Arkansas Basin, new vested interests appeared in the upper Valley, resulting in an extended web of expectation and privilege. The upper portion of the watershed was occupied by a socio-economic group which had different problems from those occupying the downstream part. In the lower half of the Basin, where rainfall was greatest and cities largest, flood control and navigation

For an interesting history of the term, see Hans Sperber and Travis Trittschuh, Dictionary of American Political Terms (New York, 1964), 331-333.

were primary concerns; in the semiarid upstream half of the Valley, the settlers were mostly concerned with the scarcity of water.

In the upper Arkansas Valley in the late nineteenth century, individuals, localities, and states evolved a system of water law, developed irrigation works, and carried on piecemeal river improvements. Because of the limitations of private enterprise and state fiscal resources, the need for federal aid became apparent. Those who visualized continued development of the upper Valley were simply unable to undertake the vast program they believed was necessary. Upstream interest groups, therefore, demanded federal funds to build irrigation works.

The activities of these vested interest groups, carried out in isolation in the upper and lower parts of the Arkansas Valley in the first decades of the twentieth century, were usually limited in purpose and scope. There was virtually no awareness of the interrelatedness of the various natural resource programs of the Basin. Also, the fragmented pattern of organizational entities brought these activities into little mutual contact; thus, few conflicts resulted. Moreover, the federal water resource agencies were originally limited by statute to the pursuance of a specialized program. These limitations which Congress put upon the executive bureaus prevented conflicts until about the third decade of the twentieth century, but, at the same

time, resulted in only piecemeal development of the whole watershed region. Apparently, the various purposes for which water was used were not yet developed enough to arouse a Valley-wide "consciousness."

During this period, each federal agency made its alliances with a particular clientele. The Bureau of Reclamation and Corps of Engineers were supported by effective and well-organized special interests in the Valley and outside These included various chambers of commerce in the lower Basin and a combination of special interests in the National Rivers and Harbors Congress, the National Reclamation Association, and various farm groups interested in reclamation in the upper Valley. These organizations established effective relations with Congress and the Executive -The federal bureaus maintained their informal working arrangements through policies generally acceptable to these organizations and to their special clientele. established a tendency for the federal agencies to respond to the wishes of these organized vested interests in planning and undertaking single-purpose engineering projects. The specialized interest group, therefore, took an active role in behalf of the particular program which would directly benefit the group and its membership and for the agency which performed the specific kind of functional service it wanted.

Strategically-placed elected representatives, who

reflected local and vested interests, established an apparatus of political control over the special-purpose agencies. They emphasized services desired by interest groups in their home districts and states. Also, these elected representatives were interested chiefly in securing federal funds for the bureaus engaged in that particular type of water development. Furthermore, the specialized committee structure of Congress made legislation on a basin-wide level difficult if not impossible. Out of this framework emerged a pattern of public and private vested interests which provided opposition to any broader policy of development which was later proposed. The association and accommodation of special interest, federal agency, and Congress was thus complete.

Expanding desires and needs were, however, destined to impinge increasingly upon this relatively simple political and economic arrangement. With the expanded programs growing out of increased technology, the 1927 floods, and the drought and dust storms of the 1930's, the executive agencies planned and undertook multi-purpose water and land-use programs which conflicted with one another on the basis of engineering, economic, and social criteria. As the number of projects multiplied, as their size and complexity increased, and as the view of their social and economic effects broadened, federal participation in resource development was enlarged by a series of authorizations of

which the Flood Control Acts of 1936 and 1938, and the 1937 Water Facilities Act were representative. These and other legislative acts brought the existing agencies into mutual contact, conflict, and competition for funds, projects, and programs as they increasingly extended the scope of their activities.

Public and private interests proliferated, and the rate of project planning was sharply accelerated. The criteria of administrative coordination were ignored in this expanded program. Desirous of retaining old prerogatives, the agencies strengthened their alliances without changing their methods appreciably. The executive agencies, with their allies in federal chambers, state capitols, and interest group headquarters, consolidated their web of accommodation.

The President tried to establish some coordination among the executive agencies, the vested interests and the Congress by using the power of the Bureau of the Budget.

He required that survey reports be submitted to the Executive Office prior to submission to Congress, so that the agencies could be informed of the relationship of the reports to the program of the President. The President endeavored to prepare broad programs and assume responsibility for placing them before the electorate. This was primarily why in 1937 Roosevelt called for a National Resources Planning Board with a Water Resources Com-

mittee.4

The President, however, met intense opposition from Congress and from some of the executive agencies. Corps of Engineers was especially uncooperative with the Water Resources Committee in the efforts to develop a broad Valley-wide policy. The Army Engineers dissented from the important 1941 Report on National Water policy. Moreover. when the Executive Office informed the Corps that a project did not conform with the President's program, the Engineers paid no heed. In many cases, they recommended to Congress that the projects be adopted. Congress more often than not approved the recommendations of the Chief of Engineers and disregarded those of the President. Also, Congress failed to abide by policy recommendations of the Water Resources Committee, which was supported by the President. In fact, Congress abolished the National Resources Planning Board in 1943 by denying it appropriations. Arthur A. Maass has accurately stated that "the single most important reason for congressional opposition to the Board was probably resentment on the part of the so-called rivers and harbors bloc in Congress

Legislative clearance by the Bureau of the Budget is the oldest and most institutionalized of the President's coordinative tools. See Richard E. Neustadt, "Presidency and Legislation: The Growth of Central Clearance,"

American Political Science Review, XLVIII (September, 1954),
668-671; also, see Charles E. Merriam, "The National Resources Planning Board: A Chapter in American Planning Experience,"

American Political Science Review, XXXVIII (December, 1944),
1075-1088.

to any effort by the President to interfere with the direct relations between Congress and the Corps."5

After a full century of resource development in the Arkansas Basin, divisions and duplications of authority restricted comprehensive planning, pitting agency against agency in jurisdictional disputes and in contention for executive and legislative approval. Each federal department active in resources planning in the Arkansas Valley used different methods for computing costs and estimating potential benefits from proposed projects; each viewed the activities of the others with suspicion. Most important, the compartmentalized efforts of federal agencies such as the Bureau of Reclamation in the Department of the Interior and the Corps of Engineers in the War Department, under their traditional functional arrangements, did not provide the administrative machinery for comprehensive water programs built around the whole Arkansas Valley watershed as the logical unit for development. The overlapping of agency responsibilities and interests led to complicated and cumbersome machinery for water resource development.

By the early 1940's, this arrangement revealed

American Political Science Review, XLIV (September, 1950), 507-500. Mass has incisively analyzed the civil works functions of the Corps of Engineers in Muddy Waters: The Army Engineers and the Nation's Rivers (Cambridge, Massachusetts, 1951).

several things. First, at least three generally singlepurpose, separate agencies -- the Corps of Engineers,
Bureau of Reclamation, and the Soil Conservation Service -were the "empire builders" in the Basin struggle. Each of
these bureaus was oriented toward responsibilities that embraced major portions of the Valley; each also had been historically concerned with particular resource uses. All three
were concerned with producing functional services from water
resources. Moreover, their decisions were usually dominated
by clientele-oriented organizations, and two of them (the
Corps and the Bureau) emphasized large engineering projects.

Most significantly, although the president and executive agencies played influential roles in the planning of water projects, Congress was the key participant in the making of water resource policy for the Arkansas Valley. Congress was not only responsible for reacting to, endorsing, modifying, or rejecting the proposals initiated by the President, but it also participated directly in decisions about individual projects. Furthermore, Congress authorized and appropriated funds for these specific projects, to be drawn from what was called the "pork barrel." Thus, for the most part, the closely linked executive agencies and Congress by-passed the President. Congress was directly concerned, therefore, with survey reports and individual projects rather than with the major issues of national water policies.

The history of resource legislation and development in the Arkansas Valley between 1940 and 1950 constitutes very largely the history of efforts by Presidents Roosevelt and Truman to break down this direct agency responsibility to Congress and to substitute for it a pattern of project responsibility to the Chief Executive. goal was a comprehensive planning and policy program and coordinative administrative arrangement in the executive organization. Presidents Roosevelt and Truman believed unified treatment of the entire Valley as a hydrologic unit, rather than separate projects within the Basin, was necessary. Such complex hydrologic interrelations would make it impossible to evaluate the full costs and benefits of a separate project without exploring fully its possible effect upon other projects in the entire watershed; this would require study of all practicable projects and agency programs. Furthermore, these Presidents viewed the Arkansas Valley as a region where resources should be regarded as a totality to be developed, with the welfare of the entire population as the major objective. They felt that the appraisal of a new water project, therefore, should be based on its possible effects upon the economy of the Arkansas Basin and of the nation.

In 1941, President Roosevelt asked for a Tennessee Valley Authority type arrangement to uplift the Arkansas Valley's economy and alleviate its resource problems. But

an authority would do more than coordinate those several purposes; it was a drastic alternative to current policies and called for a sweeping organizational transformation.

Sporadic efforts to transplant the TVA idea into the Arkansas Valley failed as various committees of Congress tabled each Arkansas Valley Authority proposal without a hearing. Failures of the AVA proposals indicated strong support in the Basin for the established federal agencies functioning there. An authority would change considerably the established policy procedure of specialization, expectation, privilege, and accommodation which ran from the pressure groups through the federal agencies and up to the congressional power-center in the Senate and House committees.

This executive attempt to integrate organizations and coordinate planning and development failed primarily because Congress would brook no interference in its direct relationship with the executive agencies. Friends in congressional halls, state capitals, and interest group head-quarters helped the federal bureaus resist the reorganization, which would result in a loss of power and prestige. They claimed that the historic mission of the agencies must be protected. Although the vested interest groups were not universally satisfied with existing policies and programs, they believed they could better achieve their objectives with their established access to the federal bureaus and congressional committees rather than through a new adminis-

trative mechanism. So Congress and the established agencies effectively used the process of "cooptation," gaining support at the grass roots. 6 In this way, federal bureaus absorbed strong and viable Basin leadership to avert threats to their stability and existence.

Many other factors, however, affected this functional accommodation. Extensive commitments abroad. the increased demands for raw materials, an unstable agriculture in the upper Valley, uncompetitive railroad freight costs, high electric rates, a low industrial level, and the 1943 floods and droughts prompted individuals and groups to press continuously toward a solution centering around the rational distribution and usage of the water resources of the Arkansas Basin. Varied interests charged that an unnecessarily complex, confusing, and complicated array of agencies, offices, and departments developed and administered public policy toward the Valley's natural resources. dissenters maintained that large amounts of money, talent, ideas, and ability were being directed toward developing and conserving the Basin's resources; however, the concrete results of all this effort were minimal.

At the core of the problem was the fact that the

⁶Philip Selznick, TVA and the Grass Roots (Berkeley and Los Angeles, 1949), 13; also see ibid., 259-261. Selznick defines cooptation as "the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence."

water policy of the Arkansas Valley had been formulated by group politics. In part, the lines of vested interest politics had been functional, i.e., business and industry, and agriculture. At the same time, the controversy had been geographical or sectional. Claims on water for upstream uses and developmental funds for irrigation had conflicted with downstream interests who wanted funds for navigation and flood control. Upstream interests wanted money for watershed development and irrigation; downstream interests emphasized the need for large dams for flood control and navi-Those lower Basin interest groups, which were gaining most under the status quo, opposed reorganization proposals in the policy-making mechanism for Arkansas Valley development. Upper Basin groups, who benefited less under arrangements existing around 1948, felt they had more to gain from a change.

Robert S. Kerr responded to the expanding demands for coordination. He weighed alternatives through long hours of discussion with such downstream interest-oriented leaders as Newton Graham, and with Don McBride, who essentially represented the upstream interests. These men convinced Kerr that developmental decisions in the Arkansas Valley involved complex political, economic, social, and engineering considerations, many of which were of a quite technical nature. Organized interest groups examined these considerations and articulated their desires, but this left a

major sector of the public under-represented in the decision-making process. The Basin public did not have the leadership or facilities for examining the ramifications of the Valley's resource problems. The effective opinions in the choice of policies and managerial machinery depended on the relative strengths and techniques of the existing clientele groups. Each of these provided organizational structure and leadership for the more amorphous "publics" desirous of such objectives as flood control and added reclamation programs. There was no Basin-wide public opinion or leadership. Kerr, therefore, tried to fill this vacuum and made the matter of resource development a personal and political issue. He decided to tell the vast unorganized sector of the Valley's public about the implications of alternative development possibilities.

Any reorganization plan to be accepted had to include all the Valley interests, provide for consultation with state and local governments, recognize western water law, use federal agencies already at work within the Basin, and complete projects already studied, proposed and under construction. The Kerr Plan did this. McBride and Kerr visualized the unity of the Arkansas Valley's resources and demanded some sort of administrative arrangement along geographical rather than functional lines. McBride drafted and Kerr introduced legislation for a long-range, comprehensive plan of the area resources, based on systematically

appraising data to analyze and determine causes, effects, impacts, and interrelationships. Kerr wanted to establish an adequate set of standards to be met by any proposed water project, with a broadened criteria for establishing regional priorities among approved water and related land-use projects. The process of approving multiple-purpose resource developments would be more uniform, and they would be based on coordinated planning of the whole watershed as a hydrologic unit.

Kerr's leadership and policy proposal provided potential advantage to some groups seeking increased access to legislative machinery, especially those in the upper The history of his public life and the position he took on the resource development issues in the Arkansas Valley support the generalization that public policy programs "reflect particularized responses to the demands of those who have access to points of decision." The working of a democratic process depends upon the representation of group ideas and attitudes in the halls of power. the actual author of the "Kerr Plan" was an executive officer of the National Reclamation Association. After Kerr's governorship expired and he decided to run for the Senate, he and McBride concluded that McBride should take the position with the National Reclamation Association in order to

⁷ Norman Wengert, "The Politics of River Basin Development," Law and Contemporary Problems, XXII (Spring, 1957), 259.

"become more personally acquainted with the people in the resource field . . . all of whom were needed if /they/ were to be successful" with a reorganized water and land use program in the Arkansas Valley.

Essentially, Kerr and McBride were not identified with close partisan support of any existing public agencies. They increasingly criticized accommodation because it appeared to fail in crucial tests. Most of all, he and Kerr wanted to bring together the diverse interests of the Arkansas Valley into a coalition group that would have more power in the national and regional political arenas.

Kerr tried to mobilize more effective state action by organizing the governors of the Basin states into an extragovernmental organization to deal with Arkansas Valley water developmental problems. This organization integrated the governments of the eight basin states into a regional bloc, unified on certain basic principles. They opposed a regional authority, insisted on state inclusion in the planning and programmatic process, and determined to maintain and protect state water laws and existing water rights. The states' representatives within Congress recognized and acceded to these state demands, furnishing amendments sufficiently strong to allow state participation in Basin water administration without encroaching upon federal governmental

⁸Letter from Don O. McBride to the writer dated February 26, 1968.

jurisdiction.

In fact, the Kerr Plan sought to coordinate plans and programs under the President by supervising, not replacing, existing federal agencies. In this way, Kerr and McBride hoped to broaden the base for support of their policy proposal, and represent the entire picture of Basin sentiment on resource issues. With a few exceptions, groups who favored such an approach were not organized. Those who opposed such Basin-wide emphasis, unified groups who had long supported only flood control structures, and who could get support of related organizations, were the ones who demanded alteration of Kerr's original proposal.

The long-standing formal and informal relationships among congressional committees, certain congressmen,
federal agencies and private organizations forestalled any
radically different policy-making process and administrative
organization. Those accustomed to operating within a status
quo situation and enjoying the greatest rewards from it,
were the Corps of Engineers and their allies. Representative Whittington, as Chairman of the House Public Works
Committee and Executive Vice-President of the National Rivers
and Harbors Congress, expressed full confidence in the Corps
and omitted Kerr's proposal from consideration. Senator
McClellan, a member of the Public Works Committee of the
sub-committee of the Committee on Appropriations which
handled appropriations for the Corps of Engineers, chairman

ments, and Executive President of the National Rivers and Harbors Congress, calculated the political consequences of pursuing alternative courses and got Kerr to make adjustments. This dual role of these key congressmen -- that of playing both the lobbyist and the lobbied simultaneously -- revealed the strength of overlapping membership between groups and legislators. These vested interests, which had secured access to the power structure, exerted great effort to maintain their advantageous positions. The strategic committee locations of congressional friends of the Corps, especially McClellan and Whittington, gave advantage to the interest groups of the lower Arkansas Basin, who wanted to maintain the established authority of the Corps of Engineers.

On the other hand, interest groups with little stake in maintenance of the status quo strengthened their efforts to achieve coordination and reorganization. Hoping that certain objectives of their own would be given a place in the new pattern of resource investigation and planning, spokesmen for public and private interests, especially from the upstream part of the Arkansas Basin, staunchly defended the Kerr proposal.

As the challenge to Kerr's original proposal intensified, supporters of the relatively informal accommodation mechanism, adopted in the 1944 Flood Control Act, defensively increased their efforts to regularize and

legalize their own loose existence. Realistically appraising the political inadequacies of their earlier proposal in the face of the powerful Corps' position, the politically astute proponents of the original Kerr bill altered that proposal in an effort to broaden its base of appeal. Kerr, for example, recognized that he had insufficient congressional strength to ameliorate the powerful influences of committeemen closely affiliated with the Corps of Engineers. He recognized that virtually any policy proposal regarding vast water resources development must have complete support of the Corps and the congressional committees on Public Works.

Thus, the efforts of Kerr, McBride, and their supporters did not fully succeed. Failure of the forces of accommodation to thwart completely the plans for change in policy-making and administration, however, brought the process of limited coordination and reorganization into operation. The newer organizational mechanism survived insofar as it was able to serve as a forum for opposing political points of view, while giving the appearance of effectively aiding the reconciliation of the older, basic conflicts.

The congressional committees were able to change the original intent of Kerr's proposal because leadership in behalf of the survey commission came from a relatively narrow source. The unorganized public seemingly played an insignificant role in the legislative maneuvering. Undoubtedly, very little public understanding existed regarding the

alternative presented. Moreover, no consensus emerged as to the alternative means and ends of this significant water-shed development. Virtually the only effective opinion came from the organized groups and the "ready made publics" which clustered around the existing development agencies.

Evidently, the general public saw no need for The need for political invention was seemingly limited. Probably the average citizen could not really understand the implications and the choices of policies were not actually before him. Undoubtedly, the broader and more technical the issues became, the less the degree of public comprehension. Moreover, even the average informed citizen could not have any real knowledge or understanding of the various alternatives until he had seen the actual effect on his socio-economic well being. The Corps' activities, however, must have been generally satisfying to the people of the lower Basin, or at least the Army's special clientele was satisfied. Likewise, the Reclamation Bureau and Department of Agriculture's functions seemingly were approved by their supporters in the upstream watershed of the Arkansas. Few signs of enough serious political, economic, and social unrest appeared on the horizon to even make a complete appraisal of policies, programs, and decision-making machinery an immediate likelihood.

There was very little discussion regarding broad objectives in this policy process on the proposed Arkansas,

White, Red study commission. The congressional committees were not set up to deal with the alternatives of Basin-wide development. The committee members were primarily interested in projects, not programs.

The power of standing committees in the formal legislative process was significant. Refusal to report a bill from committee usually means legislative death for a measure, and an unfavorable report from a committee upon a pending bill is normally tantamount to death. Powerful groups opposed to the Kerr proposal prevented consideration of the bill in the House and the resultant conference of the two houses changed the original intent of the legislation.

Failure of the Executive Branch to integrate and reorganize departmental administration along watershed lines was also revealed by Kerr's Arkansas, White, Red Basins' proposal. The legislation which President Truman signed into law in 1950 for the Arkansas Valley fell short of presidential demands. A primary reason for this was that the several issues of resource development had to be resolved in terms of existing federal policies and agencies which administered them as they had evolved for approximately 120 years within the Basin and in Washington. Long-term congressional-Corps relationships were primary obstacles that kept the President from consolidating these important

resource functions in the manner he deemed necessary. Congress, expressing full confidence in the Army Engineers, failed to implement Truman's recommendations, and essentially forced him to accede to continued Corps' dominance in the Arkansas Valley. The resultant legislation failed because group interest influences upon Congress were stronger than presidential influence. President Truman, in his efforts to cope with the power of the Army Engineers, was dealing with a force that his predecessors had unsuccessfully battled on numerous occasions.

To Truman, the core of Senator Kerr's original policy proposal was to give the President more power over the executive agencies dealing with water resources. To Senator Kerr and many other Arkansas Valley leaders, however, such a policy-making arrangement was only a means to an end. Apparently, the real stakes were the policies and programs which might redound to their area, and the problem of political control over the benefits flowing from any future Valley development program. Those groups enjoying access to the existing policy-determining machinery generally favored the status quo. For example, Senator McClellan and the National Rivers and Harbors Congress and the occupants of the lower Arkansas Valley flood plains threw their support behind the Army Engineers, and allowed just enough administrative reshuffling to assure as much autonomy for the Army Corps of Engineers as possible.

The commission idea advocated by Senator Kerr and President Truman appeared to be the most promising means for altering the long-established dominance of the Corps of Engineers in the Arkansas Basin. It would give the other but less powerful agencies and their special clientele, such as the Bureau of Reclamation and the National Reclamation Association, greater access to the political decision-making machinery. The many friends of the Corps could accept Kerr's proposal as it was modified along the conservative lines of the Arkansas, White, Red Basins Inter-Agency Committee because it preserved the benefits accruing to the Army Engineers, and their flood control, navigation clientele. Essentially, all the agencies and their vested interest allies found the Inter-Agency Committee acceptable because it ended the threat of a more radical reorientation, such as a valley authority plan.

This loose confederation of federal agencies joined with the local interests of the Arkansas, White, Red River Basins to thwart radical reorganization in water resource development. The resultant AWRBIAC was an attempt to unify through compromise. It was a recognition of the power of the Army Engineers and a means of avoiding their bare-knuckled pressures. The Inter-Agency's strength, however, was still no greater than the mutual good will of its principal members, the Army Engineers, designated as chair-

man by Congress, and the Departments of Agriculture and Interior. The AWRBIAC was a confederation of autonomous federal agencies possessing separate and sometimes conflicting authority and responsibilities. Lacking any central cabinet authority, it left unresolved the real problem of comprehensive water management coordination. Even granted the greatest good will of all the participants in AWRBIAC, that was no substitute for authority and responsibility in one cabinet officer.

The agencies and states in the Basin, however, became aware of water and land resource problems, the solutions to which had been beyond their authority to deal with directly. The new administrative and planning organization forced each of them to consider plans and programs of other agencies dealing with related problems in greater detail than they had previously in the three river basin region. In this way, they reached a new_degree of inter-agency and state accord and, in part, acquired harmony. The existing agencies, state governments, and private interests were forced to begin thinking and planning for the Basin as a whole. Senator Kerr had elicited some willingness from the status quo forces to consider the region and its resources as an integrated whole.

For an evaluation of the Arkansas, White, Red Basins Inter-Agency Committee, see Robert H. Pealy, Comprehensive River Basin Planning: The Arkansas-White-Red Basins Inter-Agency Committee Experience (Ann Arbor, 1959).

BIBLIOGRAPHY

Manuscript Collections

Robert S. Kerr Papers. Manuscripts Division. University of Oklahoma Library, Norman, Oklahoma.

Government Decuments

- American State Papers, Documents, Legislative and Executive of the Congress of the United States from the 1st Session of the 22d to the 1st Session of the 24th, Inclusive, March 15, 1832-January 5, 1836, Military Affairs, V. Washington: Gales and Seaton, 1860.
- Arkansas-White-Red Basins, Inter-Agency Committee. Minutes of the Meetings, from July 28, 1950 to July 26-27, 1967. (mimeographed)
- Commission on Intergovernmental Relations. A Study Committee Report on Federal Aid to Agriculture Submitted to the Commission on Intergovernmental Relations. Washington: Government Printing Office, 1955.
- Commission on Organization of the Executive Branch of the Government. Reorganization of the Department of the Interior. Washington: Government Printing Office, 1949.
- sources and Power. Report on Water Resources and Power. 3 vols.; Washington: Government Printing Office. 1955.
- . Task Force Report on

 Natural Resources, Appendix L. Washington: Government Printing Office, 1949.
- . Task Force Report on Water Resources Projects, Appendix K. Washington: Government Printing Office, 1949.

- Congressional Record, 59th Cong., 1st Sess., 1906 to 81st Cong., 2d Sess., 1950. Washington: Government Printing Office. 1906-1950.
- Great Plains Committee. The Future of the Great Plains. Washington: Government Printing Office, 1936.
- National Resources Committee. <u>Drainage Basin Problems and Programs</u>. Washington: Government Printing Office, 1937.
- Programs, 1937 Revision. Washington: Government Printing Office, 1938.
- Planning. Washington: Government Printing Office, 1938.
- Government Printing Office, 1938. Washington:
- National Resources Planning Board. <u>Development of Resources</u>. Washington: Government Printing Office, 1941.
- mission. Washington: Government Printing Office,
- . Regional Planning, Part XII--Arkansas Valley. Washington: Government Printing Office, 1943.
- Public Works Administration. Report of the Mississippi Valley Committee of the Public Works Administration. Washington: Government Printing Office, 1934.
- Presidential Advisory Committee on Water Resources Policy.

 Water Resources Policy: A Report by the Presidential Advisory Committee on Water Resources Policy.

 Washington: Government Printing Office, 1955.
- President's Water Resources Policy Commission. A Water
 Policy for the American People. Washington: Government Printing Office, 1950.
- Future. Washington: Government Printing Office, 1950.

- Public Papers of the Presidents of the United States: Harry
 S. Truman, Containing the Public Messages, and
 Statements of the President, January 1 to December
 31, 1950. Washington: Government Printing Office,
 1965.
- Smithsonian Institution. Annual Report of the Board of Regents of the Smithsonian Institution. 1903, 1904, 1910. Washington: Government Printing Office, 1904, 1905, 1911.
- U.S. Bureau of the Census. <u>Twelfth Census of the United</u>
 States Taken in the Year 1900, VI, Agriculture,
 Part 2, Crops and Irrigation. Washington: Government Printing Office, 1902.
- U.S. Commissioner of Patents. Report of the Commissioner of Patents for the Year 1861. Bliss, Edward. "Territory of Colorado: Its Soil, Its Climate, Its Mineral Products and Resources," 154-157. Washington: Government Printing Office, 1862.
- U.S. Department of Agriculture. Annual Report of the Department of Agriculture. 1901 to 1910. Washington:
 Government Printing Office, 1901-1910.
- Bulletin 512. Ramser, C.E.

 Prevention of the Erosion of Farm Lands by Terracing. Washington: Government Printing Office,
 1917.
- . Bureau of Soils Bulletin
 71. McGee, W.J. Soil Erosion. Washington: Government Printing Office, 1911.
- . Miscellaneous Publication 301. McDonald, Angus. Erosion and Its Control in Oklahoma Territory. Washington: Government Printing Office, 1938.
- . Office of Experiment Stations Bulletin 104. Mead, Elwood. Report of Irrigation Investigations for 1900. Washington: Government Printing Office, 1901.
- . Office of Experiment Stations Bulletin 73. Ulrich, J.C. Irrigation in the Rocky Mountain States. Washington: Government Printing Office, 1899.
- Bureau of Agricultural Engineering. 1933 to 1935.
 Washington: Government Printing Office, 1933-1935.

- U.S. Department of Agriculture. Report of the Chief of the Soil Conservation Service. 1937 to 1940. Washington: Government Printing Office, 1937-1940.
- Report of the Secretary of Agriculture. 1889 to 1896. Washington: Government Printing Office, 1889-1896.
- . Technical Bulletin 837.

 Daniel, H.A. Investigations in Erosion Control and Reclamation of Eroded Land at the Red Plains Conservation Experiment Station, Guthrie, Oklahoma, 1930-1940. Washington: Government Printing Office, 1943.
- Technical Bulletin 36.
 Fortier, Samuel. Irrigation Requirements of the Arid and Semi-arid Lands of the Missouri and Arkansas River Basins. Washington: Government Printing Office. 1928.
- U.S. Department of the Interior. Annual Report of the Secretary of the Interior. 1941 to 1950. Washington: Government Printing Office, 1941-1950.
- Geological Survey, Second Annual Report of the Reclamation Service, 1902-1903. "Investigations in Kansas and parts of Colorado, Oklahoma, New Mexico, and Texas."
 Washington: Government Printing Office, 1904.
- United States Geological and Geographical Survey of the Territories Embracing Colorado and Parts of Adjacent Territories, Being a Report of the Explerations for the Year 1876. Washington: Government Printing Office, 1878.
- . Tenth Census of the U.S.:

 Statistics of the Population of the United States

 By States, Counties, and Minor Civil Divisions.

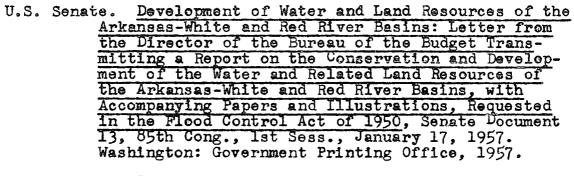
 Washington: Government Printing Office, 1881.
- U.S. Department of War. Annual Report of the Chief of Engineers, United States Army, to the Secretary of War. 1867 to 1950. Washington: Government Printing Office. 1867 to 1950.
- U.S. Executive Documents. "Report from the Engineer Department, November 23, 1833, to Lewis Cass, Secretary of War," 23d Coog., 1st Sess., 1833-1834, Executive Documents, I, Serial 254. Washington: Gales and Seaton, 1834.

- U.S. Executive Documents. "Report of T.S. Brown to the Chief of Engineers, May 8, 1833: Arkansas River Survey," 23d Cong., 1st Sess., 1833-1834, Executive Documents, I, Serial, 254. Washington: Gales and Seaton, 1834.
- U.S. House of Representatives. Arkansas River and Tributaries, Heuse Document 308, 74th Cong., 1st Sess., August 24, 1935, Serial 9936. 3 vols.; Washington: Government Printing Office, 1936.
 - . Arkansas River and Tributaries: Arkansas and Oklahoma, House Document 758, 79th Cong., 2d Sess., July 30, 1946. Washington: Government Printing Office, 1947.
 - . Arkansas River and Tributaries, Arkansas and Oklahoma--Navigation: Hearings before the Committee on Public Works, May 10-11, 1949, 81st Cong., 1st Sess. Washington: Government Printing Office, 1949.
 - . Committee on Public Works.

 "Flood Control Act of 1949: Report to Accompany
 H.R. 5472," House Report 969, 81st Cong., 1st
 Sess., July 6, 1949, House Miscellaneous Reports,
 IV, Serial 11299. Washington: Government Printing
 Office, 1949.
 - . "Flood Control Act of 1949:
 Conference Report to Accompany H.R. 5472," House
 Report 1968, 81st Cong., 2d Sess., April 28,
 1950, House Miscellaneous Reports, III, Serial
 11380. Washington: Government Printing Office,
 1950.
 - Flood Control Act of 1949:

 Hearings before the Committee on Public Works on
 H.R. 5472, May 16-January 2, 1949, 81st Cong.,
 Ist Sess. Washington: Government Printing Office,
 1949.
 - . Flood Control: Hearings
 before the Subcommittee on Flood Control, November
 7-23, 1927, 69th Cong., 2d Sess. Washington:
 Government Printing Office, 1927.
 - Projects: Hearings before the Committee on Flood Control, June 8, 1943, 78th Cong., 1st Sess., Washington: Government Printing Office, 1943.

- U.S. House of Representatives. Flood Control Plans and New Projects: Hearings Before the Committee on Flood Control on H.R. 4485, May 13, June 1 to 11, 1943, 78th Cong., 1st Sess. Washington: Government Printing Office, 1944.
 - "Message from the President of the United States Transmitting a Message Relative to Approval of H.R. 5472, an Act Authorizing the Construction, Repair, and Preservation of Certain Public Works on Rivers and Harbors for Navigation, Flood Control and for Other Purposes," House Document 597, 81st Cong., 2d Sess., May 22, 1950, House Miscellaneous Documents, Serial 11425. Washington: Government Printing Office, 1950.
 - . Relations of Forestry to Control of Floods in the Mississippi Valley, House Document 573, 70th Cong., 2d Sess., February 11, -1929, Serial 9018. Washington: Government Printing Office, 1929.
 - "Report of Survey of Washita River Watershed in Oklahoma and Texas," House Document 275, 78th Cong., 1st Sess., September 17, 1943, House Documents, II, Serial 10793. Washington: Government Printing Office, 1943.
 - . "Report on the Lands of the Arid Regions of the United States," by John W. Powell, House Executive Document 73, 45th Cong., 2d Sess., April 3, 1878, Serial 1805. Washington: Government Printing Office, 1878.
 - "Report to Accompany H.R.
 5472, Authorizing the Construction, Repair and
 Preservation of Certain Public Works on Rivers and
 Harbors for Navigation, Flood Control, and Other
 Purposes," House Report 969, 81st Cong., 1st
 Sess., July 6, 1949, House Miscellaneous Reports,
 IV, Serial 11299. Washington: Government Printing
 Office, 1949.
- U.S. Senate. Committee on Public Works. "Report to Accompany H.R. 5472 Authorizing the Construction, Repair, and Preservation of Certain Public Works on Rivers and Harbors for Navigation, Flood Control, and for other purposes," Senate Report 1143, 81st Cong., 1st Sess., October 7, 1949, Senate Miscellaneous Reports, IV, Serial 11294. Washington: Government Printing Office, 1949.



- . "Documents Accompanying the Report of the Chief of Engineers," No. E, "Arkansas River," 26th Cong., 2d Sess., 1840-1841, Senate Documents, I, Serial 375. Washington: Blair and Rives, 1841.
 - . "Extracts from a Preliminary Report on the Improvement of the Western Rivers, By Lieutenant Colonel S.H. Leng, Topographical Engineers," 28th Cong., 1st Sess., 1843-1844, Senate Documents, I, Serial 431. Washington: Gales and Seaton, 1844.
 - The Final Report of the Artesian and Underflow Investigations of the Irrigation Inquiry. Senate Documents, IV, Part I, 52d Cong., 1st Sess., 1891-1892, Serial 2899. Washington: Government Printing Office, 1892.
- Flood Control -- Rivers and Harbors: Hearings before a Sub-committee of the Committee on Public Works on H.R. 54272, a bill for the construction, repair, and preservation of certain public works on rivers and harbors for navigation, flood control, and other purposes, Part 1, July 12-26, 1949 and Part 2, August 25-31, 1949, 81st Cong., 1st Sess. Washington: Government Printing Office, 1949.
- "Irrigation, Artesian and Underflow Investigation," Senate Documents, I, Part 2, 51st Cong., 2d Sess., 1890-1891, Serial 2818. Washington: Government Printing Office, 1891.
- . "Irrigation in the United States: Progress
 Report for 1890," Senate Documents, I, Part 1,
 51st Cong., 2d Sess., 1890-1891, Serial 2818.
 Washington: Government Printing Office, 1891.

- U.S. Senate. Reorganization Act of 1949: Hearings before the Committee on Expenditures in the Executive Departments on S. 526, a bill to provide for the reorganization of government agencies and for other purposes, February 2, 3, 7, 9, 10, and 15, 1949, 81st Cong., 1st Sess. Washington: Government Printing Office, 1949.
- U.S., Statutes at Large, XLIX (1936), LII (1938), LVIII (1944), LXIV (1950).

Books

- Bancroft, Hubert Howe. The Works of Hubert Howe Bancroft, History of Nevada, Colorado, and Wyoming, 15401888. San Francisco: The History Company Publishers. 1890.
- Baskin, O.L. History of the Arkansas Valley. Chicago: O.L. Baskin & Company, 1891.
- Bennett, Hugh H. Elements of Soil Conservation, 2d ed.; New York McGraw-Hill, 1955.
- Benson, Oliver, et al. Oklahoma Votes, 1907-1962. Norman: University of Oklahoma Bureau of Government Research, 1964.
- Carter, Clarence Edwin, compiler and editor. The Territory torial Papers of the United States: The Territory of Arkansas, 1819-1825, XIX. Washington: Government Printing Office, 1953.
- . The Territorial Papers of the United States: The Territory of Arkansas, 1825-1829, XX. Washington: Government Printing Office, 1954.
- States: The Territorial Papers of the United States: The Territory of Arkansas, 1829-1836, XXI Washington: Government Printing Office, 1954.
- Dale, Edward E. and Morris L. Wardell. History of Oklahoma. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955.
- Davis, Clyde B. The Rivers of America: The Arkansas. New York: Farrar and Rinehart, 1940.
- Droze, Wilmon H. High Dams and Slack Waters: TVA Rebuilds a River. Baton Rouge: Louisiana State University Press, 1965.

- Easton, David. A Systems Analysis of Political Life. New York: John Wiley and Sons, Inc., 1965.
- . Framework for Political Analysis. Englewood Cliffs, New Jersey: Prentice-Hall, 1965.
- State of Political Science. New York: Alfred Knopf, 1953.
- Eno, Clara B. <u>History of Crawford County Arkansas</u>. Van Buren, Arkansas: Press-Argus, (no date).
- Farnham, Thomas J. Travels on the Great Western Prairies.
 London: Richard Dentley, 1843.
- Fite, Gilbert C. The Farmers' Frontier, 1865-1900. New York: Holt. Rinehart and Winston, Inc., 1966.
- Foreman, Grant. A History of Oklahoma. Norman: University of Oklahoma Press, 1942.
- University of Oklahoma Press, 1936.
- Norman: University of Oklahoma Press, 1943.
- Fox, Irving K. and Isabel Picken. The Upstream-Downstream
 Controversy in the Arkansas-White-Red Basins Survey. University, Alabama: University of Alabama
 Press. 1960.
- Frank, Arthur De Witt. The Development of the Federal Program of Flood Control on the Mississippi River.

 New York: Columbia University Press, 1930.
- Golze, Alfred R. Reclamation in the United States. New York: McGraw-Hill, 1952.
- Harding, T. Swann. Two Blades of Grass. Norman: University of Oklahoma Press, 1947.
- Haver, Cecil B., W.B. Block, and L.A. Sjaasted. An Economic Analysis of the Navigation Proposal for the Arkansas River. Chicago: Cecil B. Haver and Associates, 1959.
- Herndon, Dallas T. Annals of Arkansas. 4 vols.; Hopkinsville, Kentucky: no publisher cited, 1947.

- Herndon, Dallas T. Centennial History of Arkansas. Chicago: S.J. Clarke Publishing Company, 1922.
- History of Bents, Washington, Carroll, Maclinn, Crawford,

 Franklin, Sebastian Counties, Arkansas: From the
 Earliest Time to the Present, including a Department Devoted to the Preservation of Sundry Personal, Business, Professional and Private Records;
 Besides a Valuable Fund of Notes, Original Observations. Chicago: The Goodspeed Publishing Company, 1889.
- Hoyt, William G. and W.B. Langbein. Floods. Princeton: Princeton University Press, 1955.
- Hunter, Louis C. Steamboats on Western Rivers: An Economic and Technological History. Cambridge: Massachusetts: Harvard University Press, 1949.
- Johnson, Emory. History of Domestic and Foreign Commerce of the United States. Washington: Government Printing Office, 1915.
- Johnson, Vance. Heaven's Tableland: The Dust Bowl Story.
 New York: Farrar and Straus Publishers, 1947.
- Kerr, Robert S. Land, Wood and Water. New York: Fleet Publishing Company, 1960.
- Krutilla, John V. and Otto Eckstein. Multiple Purpose River Development. Baltimore: Johns Hopkins Press, 1958.
- Lampen, Dorothy. Economic and Social Aspects of Federal Reclamation, Johns Hopkins University Studies in Historical and Political Science. Baltimore: Johns Hopkins University Press, 1930.
- Lewis, Anna. Along the Arkansas. Dallas: The Southwest Press, 1932.
- Maass, Arthur A. Muddy Waters: The Army Engineers and the Nation's Rivers. Cambridge, Massachusetts: Harvard University Press, 1951.
- McReynolds, Edwin C. Oklahoma: A History of the Sooner State. Norman: University of Oklahoma Press, 1954.
- Morgan, Robert J. Governing Soil Conservation: Thirty Years of The New Decentralization. Baltimore: Johns Hopkins University Press, 1965.

- Morris, Lerona R., ed. Oklahoma Yesterday, Today, Tomorrow.
 Guthrie, Oklahoma: Co-operative Publishing Company,
 1930.
- Nixon, Edgar B., ed. Franklin D. Roosevelt and Conservation, 1911-1945. 2 vols.; Washington: Government Printing Office, 1957.
- Pabor, William E. Colorado as an Agricultural State: Its
 Farms, Fields, and Garden Lands. New York: Orange
 Judd Company, 1883.
- Richardson, James D. A Compilation of the Messages and
 Papers of the Presidents. 11 vols.; Washington:
 Government Printing Office, 1908.
- Roberts, Roy, et. al. Arkansas' Natural Resources, Their Conservation and Use. Fayetteville: Arkansas University Press, 1941.
- Rosenman, Samuel I., ed. The Public Papers and Addresses of Franklin D. Roesevelt. 9 vols.; New York: Random House, 1938-1941.
- Selznick, Philip. TVA and the Grass Roots: A Study in the Sociology of Formal Organization. Berkeley and Los Angeles: University of California Press, 1949.
- Sperber, Hans and Travis Trittschuh. Dictionary of American Political Terms. New York: McGraw-Hill Book Company, 1964.
- Steinel, Alvin T. History of Agriculture in Colorado.

 Fort Collins, Colorado: State Agricultural College,
 1926.
- Truman, David B. The Governmental Process: Political
 Interests and Public Opinion. New York: Alfred
 A. Knopf, 1951.
- Wengert, Norman. Natural Resources and the Political Struggle. New York: Random House, Inc., 1955.

Articles and Periodicals

Ames, Glen R. "Bound for Oklahoma--The Frontier Dream of a Navigational Arkansas River Will Soon Become A Reality," American Scene, IV (Spring, 1961), 3-4.

- Bennett, Hugh H. "Waste By Land and Water," Scientific Monthly, XLII (February, 1936), 172-176.
- Blalock, H.W. "Arkansas Valley Authority," <u>Public Utilities</u>
 Fortnightly, XXVIII (August and September, 1941),
 195-205, 279-286, 341-349.
- Childs, Marquis W. "The Big Boom from Oklahoma," Saturday
 Evening Post, CCXXI (April 9, 1945), 22-23, 118-120.
- -Cory, H.T. "Some Engineering Aspects of the Water Facilities Program," Soil Conservation, IV (January, 1939), 172-174, 177.
- Cross, Whitney R. "Ideas in Politics: The Conservation Policies of the Two Roosevelts," Journal of the History of Ideas, XIV (Winter, 1953), 421-438.
- DeRoos, Robert and Arthur A. Maass, "The Lobby That Can't Be Licked," <u>Harpers Magazine</u>, CXCIX (August, 1949), 21-30.
- Dunbar, Robert G. "The Significance of the Colorado Agricultural Frontier," Agricultural History, XXXIV (July, 1960), 119-125.
- "Fight for Water: West Begins Its Attack on Arkansas Valley
 Authority With An Old Battlecry, 'First in time,
 first in right,' "Business Week (February 1, 1941),
 16-18.
- Finnell, H.H. and Theodore A. Neubauer. "Farmer Evaluation of Conservation Practices in Southern Plains,"

 Soil Conservation, VI (January, 1941), 172-173.
- Foreman, Grant. "River Navigation in the Early Southwest," Mississippi Valley Historical Review, XV (June, 1928), 34-55.
- Fox, Irving K. and Lyle E. Craine. "Organizational Arrangements for Water Development," Natural Resources

 Journal, II (April, 1962), 1-44.
- Ganoe, John T. "The Beginnings of Irrigation in the United States," Mississippi Valley Historical Review, XXV (June, 1938), 59-78.
- cy, Mississippi Valley Historical Review, XVIII (June, 1931), 34-52.

- Hargreaves, W.M. "Dry Farming Alias Scientific Farming,"
 Agricultural History, XXII (January, 1948), 39-55.
- Hockley, Hale and Herman Walker. "1937 State Legislation for Control of Soil Erosion," The Journal of Land and Public Utility Economics, XIV (May, 1938), 214-215.
- Kerr, Robert S. "Land, Wood, and Water," Lawyers Title
 News (August, 1960). Monthly publication without
 volume number or page numbers.
- Knapp, George S. "The Kansas--Colorado Water Controversy,"

 Twenty-Second Biennial Report of the Kansas State

 Water Commissioner, 1919-1920, XXVII (1920), 246254.
- Lindley, J.G. "Protecting Colorado's Range Lands," Soil Conservation, IX (August, 1940), 12-13.
- Lowdermilk, W.C. and F.F. Barnes. "Stock Ponds in the Great Plains Drought Area," Soil Conservation, II (September, 1936), 44-47, 58.
- Maass, Arthur A. "Congress and Water Resources," American Political Science Review, XLIV (September, 1950), 576-593.
- Mass, Arthur A. and Lawrence I. Rodway. "Gauging Administrative Responsibility," Public Administrative Review, IX (Summer, 1949), 182-193.
- McBride, Don O. "State and Federal Government Participation," American Society of Civil Engineers, Transactions, CXV (1950), 880-887.
- "Waterways Can Be Dollarways to Oklahoma Farmers," The Farmers--Stockman, LVIII (December, 1945), 1, 41.
- McConnell, Grant. "The Conservation Movement--Past and Present," Western Political Quarterly, VII (September, 1954), 463-478.
- Merriam, Charles E. "The National Resources Planning Board:
 A Chapter in American Planning Experience,"

 American Political Science Review, XXXVIII (December, 1944), 1075-1088.
- Neustadt, Richard E. "Presidency and Legislation: The Growth of Central Clearance," American Political Science Review, XLVIII (September, 1954), 641-671.

- "Oklahoma's Stairway to the Sea," Business Week (April 22, 1967), 186-193.
- Peel, W.F. "The Soil Conservation Service Drought Program of 1936," Soil Conservation, II (March, 1937), 204-207.
- "Plans Revemped--Resources Planning Board Agrees to Delete All Portions of Report Dealing with the Upper Arkansas River Valley," <u>Business Week</u> (June 12, 1943), 37-38.
- "Pork Barrel Outrage: Too Much Money Spent Foolishly; Now--See the Innards of a Fat Pig," Life, LV (August 16, 1963), 21-26, 55-61.
- "Pork Lovers Are No Credit to Our Democracy," Life, LV (September 6, 1963), 4, 19.
- Richardson, Rupert N. "The 'Summary forward' of The Future of the Great Plains," Mississippi Valley Historical Review, XXX (1943-44), 49-68.
- Sageser, A. Bower. "Editor Bristow and the Great Plains Irrigation Revival of the 1890's," Journal of the West, III (January, 1964), 75-89.
- Schoewe, Walter A. "The Geography of Kansas," Transactions, Kansas Academy of Science, LVI (1953), 171-189.
- "Seaports for Oklahoma," U.S. News and World Report, LIV (February 11, 1963), 66-69.
- Seligman, Daniel. "Senator Bob Kerr, The Oklahoma Gusher," Fortune, LIX (March, 1959), 136-138, 179-188.
- Smalley, Harrison S. "Rate Control Under the Interstate Commerce Act," Annals of the American Academy of Political and Social Science, XXIX (March, 1907),
- Steele, Annie Laurie. "A History of the Sandstone Creek Area Up-Stream Flood Prevention Project," Chronicles of Oklahoma (Winter, 1965-66), 432-442.
- Stone, Clifford H. "New and Pending Water Legislation," Reclamation Era, XXXII (February, 1942), 42-44.
- Strong, Benton J. "The Rivers and Harbors Lobby," New Republic, CXXI (October 10, 1949), 13-15.

- Teagarden, E.H. "Control of Wind Erosion," The Journal of
 Land and Public Utility Economics, XIII (November,
 1937), 420-421.
- Van Hook, Joseph O. "Irrigation in the Arkansas Valley," Colorado Magazine, X (1933-34), 3-11.
- Waksman, Selman A. "Humus and Soil Conservation," Soil Conservation, III (April, 1938), 250-254.
- Wehrwein, George S. "Wind Erosion Control Legislation in Texas and Kansas," The Journal of Land and Public Utility Economics, XII (August, 1936), 312-313.
- Wengert, Norman. "The Politics of River Basin Development,"

 Law and Contemporary Problems, XXII (Spring, 1957),

 258-275.
- "Where the Death of Senator Kerr Will be Felt," U.S. News and World Report, LIV (January 14, 1963), 34.
- Wright, Muriel H. "Early Navigation and Commerce Along the Arkansas and Red Rivers in Oklahoma," Chronicles of Oklahoma, VIII (Spring, 1930), 65-88.

Newspapers

Denver, The Rocky Mountain News, 1859-1910.

Fort Smith Southwest Times Record, 1882-1910.

Fort Smith Southwestern American, 1907-1950.

Garden City (Kansas) Herald, 1886-1912.

Little Rock Arkansas Democrat, 1941-1945.

Little Rock Arkansas Gazette, 1820-1950.

Muskogee Times Democrat, 1897-1907.

Muskogee Evening Times, 1900-1903.

New York Times, 1944-1950.

Oklahoma City Daily Oklahoman, 1941-1950.

Oklahoma City Times, 1941-1950.

Pueblo Colorado Chieftain, 1868-1910.

Tulsa Daily World, 1941-1950.

Tulsa Tribune, 1941-1950, 1960-1963.

Van Buren (Arkansas) Press-Argus, 1859-1880.

Other Sources

- Interview with Charles Border, John H. Barhydt, and Francis O. Wilson, Tulsa Chamber of Commerce, Tulsa, Oklahoma, May 22, 1967.
- Letter from Don O. McBride, February 26, 1968.
- The States of Arkansas and Oklahoma Present Additional Benefits in the Proposed Comprehensive Improvement of the Arkansas River Basin: Submitted to Major General Eugene Reybold, Chief of Engineers, U.S. Army and The Board of Engineers for Rivers and Harbors. Tulsa, Oklahoma, May 4-5, 1945; Little Rock, Arkansas, May 7, 1945.
- Tulsa Chamber of Commerce, Minutes of the Board of Directors, 1910-1955.
- Van Hook, Joseph Orlando. "Settlement and Economic Development of the Arkansas Valley From Pueblo to the Colorado-Kansas Line, 1860-1900." Ph.D. Dissertation, University of Colorado, 1933.
- Written statement of Don O. McBride on March 17, 1967, regarding watershed resource development in western Oklahoma.