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The Missouri: River of Promise or River of Peril?

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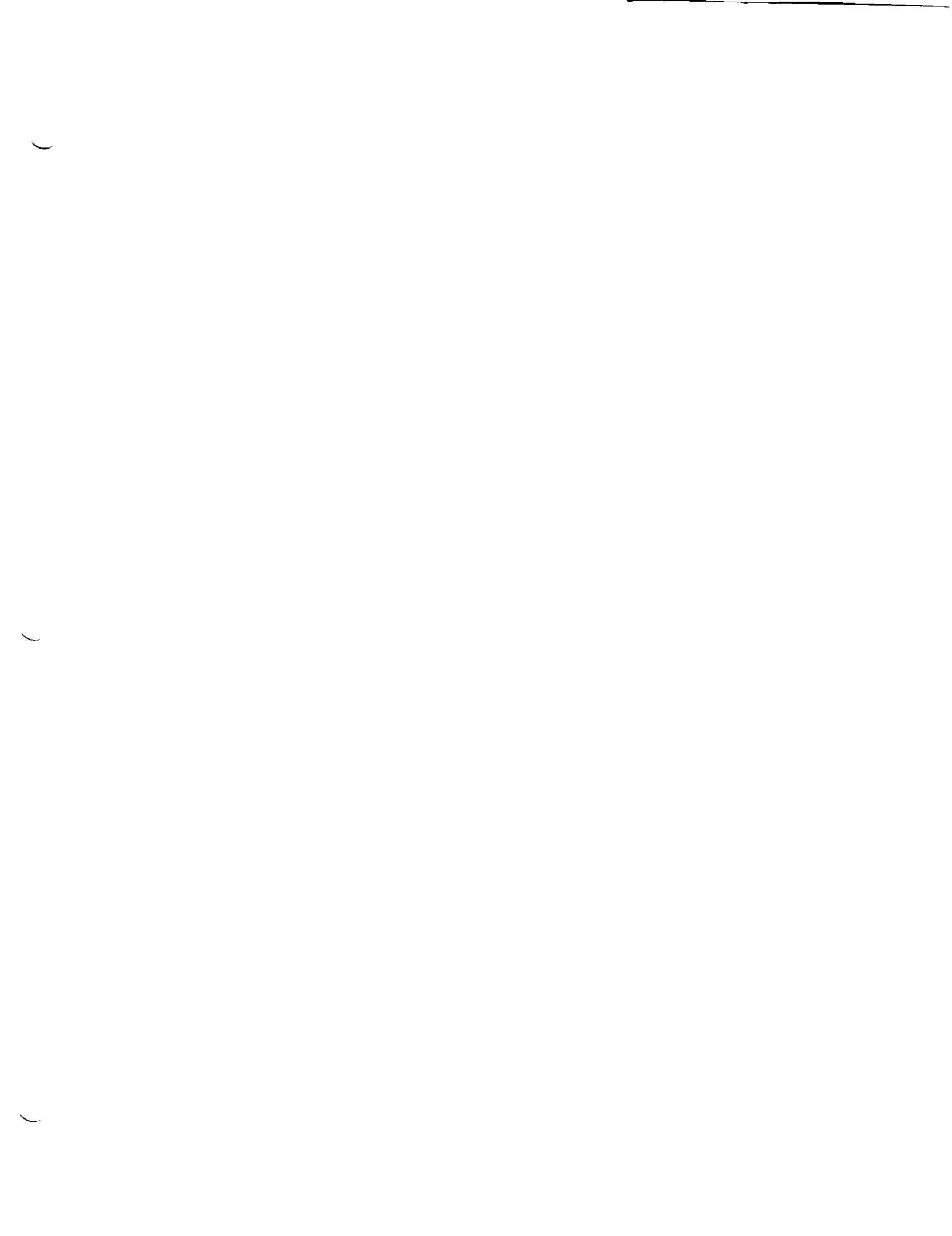
**The Missouri :
River of Promise or River of Peril?**

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Boundaries and Water: Allocation and Use of a Shared Resource

**Natural Resources Law Center
University of Colorado School of Law
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The Missouri : River of Promise or River of Peril?

John E. Thorson

I. Introduction

A. Summary

The Pick-Sloan Plan, authorized by Congress as part of the Flood Control Act of 1944, was the charter for natural resource development in the Missouri River Basin. After 40 years, the promise of that charter has not been fulfilled; and recent controversies--most notably the *ETSI Pipeline Project* litigation--have resulted.

The failure of the Pick-Sloan Plan is the result of deficiencies in substantive public policies and in river management institutions. This presentation reviews the shortcomings of the Pick-Sloan Plan and describes recent efforts among the basin's sovereigns--the ten states, 25 Indian tribes, and numerous federal agencies--to develop new policies and institutions for this "original highway west."

B. General References

1. J. Guhin, *The Law of the Missouri*, 30 S. DAKOTA L. REV. 347 (1985).
2. M. LAWSON, DAMMED INDIANS: THE PICK-SLOAN PLAN AND THE MISSOURI RIVER SIOUX, 1944-1980 (Univ. of Oklahoma Press, 1982).
3. M. O'KEEFE *et al.*, BOUNDARIES CARVED IN WATER: AN ANALYSIS OF RIVER AND WATER MANAGEMENT IN THE UPPER MISSOURI BASIN (Northern Lights Institute, 1986).
4. M. RIDGEWAY, THE MISSOURI BASIN'S PICK-SLOAN PLAN; A CASE STUDY IN CONGRESSIONAL POLICY DETERMINATION (Univ. of Illinois Press, 1955)
5. J. THORSON (ED.), BOUNDARIES CARVED IN WATER: THE MISSOURI RIVER BRIEF SERIES (Nos. 1-14, 1988-89).
6. WESTERN AREA POWER ADMINISTRATION, 1986 ANNUAL REPORT (1986).

II. Background

A. The Missouri River

1. The Missouri River flows 2,540 miles from its headwaters near Three Forks, Montana, to its confluence with the Mississippi River upstream of St. Louis. The basin of this historic river is a 530,000 square mile area, roughly one-fifth of the continental United States. All of Nebraska is located within the basin, along with varied portions of nine other states--Montana, Wyoming, North Dakota, South Dakota, Minnesota, Iowa, Colorado, Kansas, and Missouri. Small portions of southeastern Alberta and southwestern Saskatchewan are also a part of the basin. The river's journey takes it through seven of the basin states; its tributaries drain another three (*see* Figure 1 for a map of the basin).

2. The Missouri River basin is quite diverse, consisting of the ten states, 25 tribes, federal lands and multiple land use patterns ranging from nearly abandoned counties to major cities. The longest straight line distance across the basin is 1,500 miles, which is about half the distance across the United States. The predominant features of the basin are the plains which extend nearly 800 miles from the Canadian boundary to the southern reaches of the basin and from the Rocky Mountains to the Mississippi River. Twenty-seven million acres of the basin (8 percent) are forested including portions of the Rockies, the Black Hills, the Ozarks, and along waterways. The mountain ranges of the basin, including the Rocky Mountains, Big Horn Mountains, the Sand Hills of northwestern Nebraska, the Black Hills of southwestern South Dakota, and the Ozarks of southern Missouri, while dramatic, are only interruptions of this "plain--ness". The elevation of the basin extends from 14,000 foot peaks at its northwestern boundary to about 400 feet as the river joins the Mississippi.

B. The Sovereigns of the Missouri River Basin

1. There are three sovereigns in the Missouri River basin whose boundaries have been carved somewhat arbitrarily across the face of the basin. These governments are the ten states, the 22 various bureaus and agencies that represent the federal government in the basin, and the eighteen different tribes located on 25 Indian reservations throughout the basin.

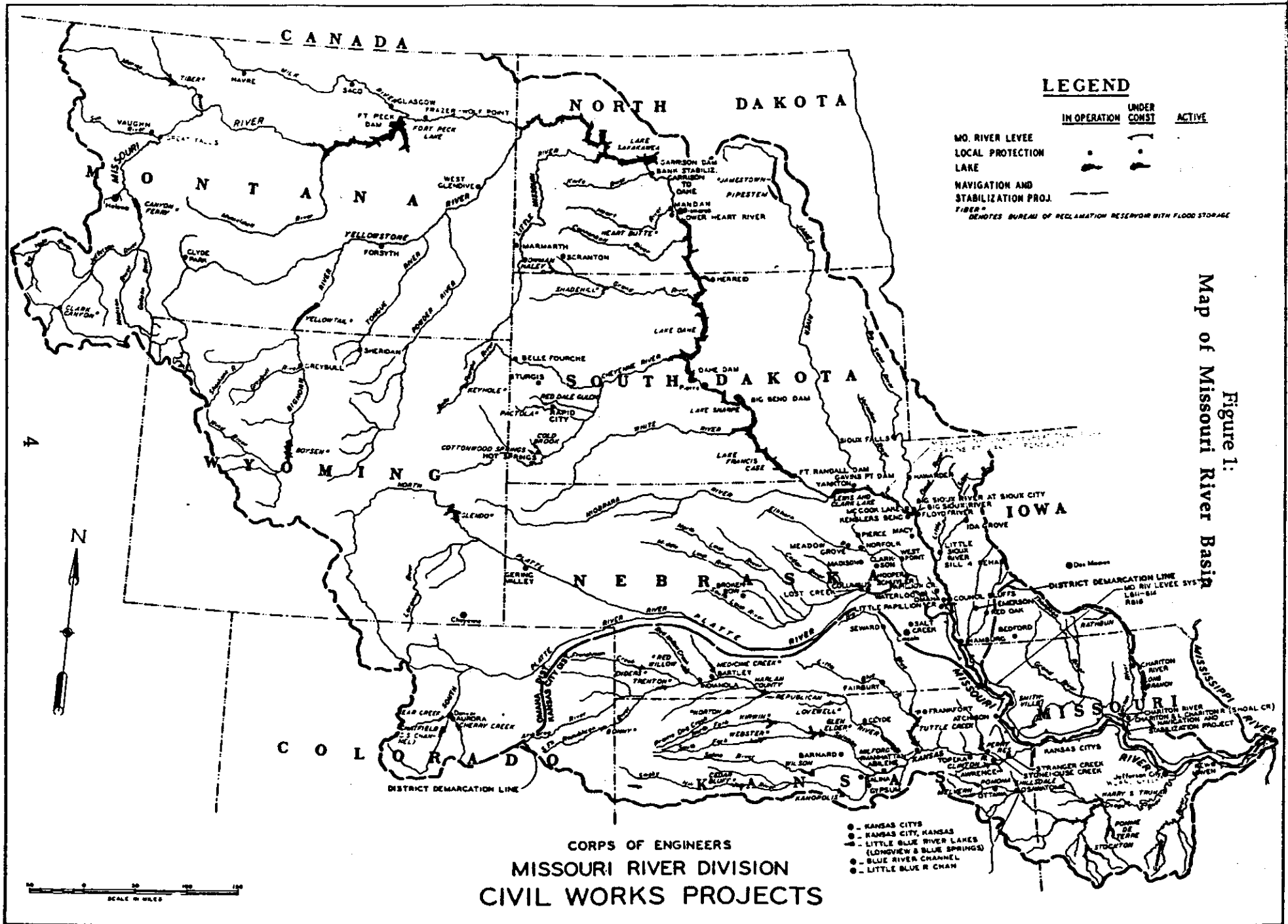


Figure 1:
Map of Missouri River Basin

2. The states are Wyoming, Montana, North Dakota, South Dakota, Nebraska, Iowa, Missouri, Minnesota, Colorado, Kansas, and Missouri.

3. Two federal agencies have signal importance for the management of the Missouri River: the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation. A third principal agency, the Western Area Power Administration (WAPA) has responsibilities for marketing and distributing the hydroelectric power produced at the federally owned dams in the basin.

4. Eighteen different tribes are located on the 25 reservations in the Missouri River basin.

a. The Missouri basin tribes are apart of four major linguistic groups. The Algonkian tribes (Sac and Fox, Kickapoo, Potawatomi, Chippewa, Cheyenne, Arapahoe, and Blackfeet) were originally native to the Great Lakes region, the upper Mississippi valley, and Canada. The Siouan tribes (Winnebago, Sioux [Dakota], Iowa, Omaha, Crow, and Mandan) were originally located in the eastern Great Lakes region, the southeast, the lower Mississippi valley, and the northern plains. The Caddoan tribes (Arikara) came from the lower midwest. The Shoshonean tribes (Shoshone) moved into the Missouri River region from the Great Basin area of Utah, Nevada, Idaho, and Wyoming and the desert region of California. Frequently, separate tribes have had to share a reservation. There are at least 127,000 enrolled members of these tribes.

b. Although information is difficult to obtain and verify, tribal lands in the Missouri River basin are at least 18.4 million acres. South Dakota has the most Indian reservations in the Missouri River basin with nine and Montana follows with six reservations. Only the states of Colorado, Iowa, Minnesota, and Missouri do not have Indian reservations within the basin.

c. Since the tribes were placed on reservations partly in an effort to transform them into agrarian societies, each of these reservations can be expected to assert reserved water rights claims under the holding of *United States v. Winters*, 207 U.S. 564 (1908). The magnitude of these claims is yet undetermined; in fact, tribal rights

have been quantified only for the Fort Peck Reservation in Montana and the Wind River Reservation in Wyoming.

III. The Pick-Sloan Plan

A. Flood Control Act of 1944

1. While Missouri River development traces directly to the passage of the Flood Control Act by Congress in 1944, the roots of comprehensive river basin development go back to the 1800's. It was the severe flooding during 1943 that finally caught the attention of the nation and provided the circumstances necessary to pass federal legislation to address flood control and development in the Missouri River basin. In that year, floods in eight major drainages in the Midwest resulted in 71 deaths, the inundation of more than 7 million acres of land, and damages in excess of \$153 million. Losses in the Missouri River basin were more than \$48 million.

2. As a result of this natural disaster, the U.S. House of Representatives Flood Control Committee asked for a report by the U.S. Army Corps of Engineers concerning flood control needs. By February 1944, the Corps had developed what is now known as the Pick Plan for flood control and navigation. Shortly thereafter, the Bureau of Reclamation completed and released its more comprehensive Sloan Plan for Missouri River basin development. The two plans were eventually merged and appended to the Flood Control Act of 1944 which passed Congress on December 21st of that year.

B. The Great Missouri Compromise

1. The Pick-Sloan Plan is the blue-print by which the large mainstem and tributary dams have been built, levees and a 9-foot navigation channel constructed, hydroelectric turbines and transmission lines installed, and irrigation projects undertaken. One must consult Senate Document 247 [78th Cong., 2d Sess. (1944)], a short 6-page document, for the details of the consolidated plan. This document, developed by two representatives each from the Corps of Engineers and the Bureau of Reclamation, was worked out in Omaha, Nebraska, on October 16 and 17, 1944. It was incorporated in the Flood Control Act which passed Congress in December 1944.

2. In general, the coordinating agreement set forth in Senate Document 247 adopts the plans of both agencies and endeavors to eliminate duplicate projects. The final paragraph of the document indicates that this unified plan "will secure the maximum benefits for flood control, irrigation, navigation, power, domestic and sanitary purposes, wildlife, and recreation."

3. During the 1944 debate in the U.S. Senate on the Flood Control Act (H.R.4485) and the accompanying Rivers and Harbors Act (H.R. 3961), western senators became concerned about the constraints navigation use of the Missouri would place upon upstream consumptive use of water. As a condition of passage, the O'Mahoney-Millikin Amendment, which was drafted by Senator O'Mahoney of Wyoming and Senator Millikin of Colorado, were included in the final legislation. The amendment provides a preference for certain upstream consumptive uses over lower basin navigation. The preference provision of the amendment is found in section 1(b) of the Flood Control Act:

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

33 U.S.C.A. § 701-1.

IV. Evaluation of the Pick-Sloan Plan

The Pick-Sloan Plan has not worn well with the passage of time. In the years following its authorization, not all of the terms of the historic agreement were performed. As importantly, the Flood Control Act and the Pick-Sloan Plan failed to provide the foundation for an interjurisdictional institution to implement the broad policies of the Plan, to manage the river, and to resolve conflicts among the governments of the basin.

A. The Pick-Sloan Plan as Substantive Public Policy

1. Several features of the Pick-Sloan have been very successful. Flood control, which was an important goal of the legislation, has been largely achieved in the basin. The Corps of Engineers estimates that, since integrated operation of some of the mainstem reservoirs began in 1954, \$2.7 million in flood damage has been prevented because of the flood control features. U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIV., 1987-88 ANNUAL OPERATING PLAN 67 (1988). Of course, most of this benefit inures to the lower basin states.

2. Hydroelectric power production was considered a secondary purpose in the original legislation. Hydropower was hardly mentioned in the Army's plan or in the composite plan. One must look to the Sloan plan for any detailed discussion of the proposed power features. In its original submission, the Bureau projected the installation of 758 megawatts of capacity and the annual production of 3.8 kilowatt-hours. At full development, the power was to have a value of \$17.4 million per year. The original Pick-Sloan projects now have a maximum operating capacity of 3,116 megawatts and net generation of 11.2 billion kilowatt-hours. In 1986, annual gross revenues from the plants were \$160 million. WESTERN AREA POWER ADMIN., 1986 ANNUAL REPORT (1986). The distribution of this power, however, is quite skewed. The four states of Montana, Wyoming, North Dakota, and South produce virtually all this power. Yet, two-third's of the hydropower is consumed by Minnesota, Colorado, Iowa, and Nebraska.

3. Another underestimated benefit of the Pick-Sloan Plan is the recreational use of the mainstem and tributary reservoirs. Recreation is mentioned as an incidental use in the original congressional documents. Yet, in 1986, public recreational use at the mainstem reservoirs alone amounted to 11.2 million visitor days. In some areas of upper basin states, recreation has perhaps become the primary benefit local residents have obtained from the Pick-Sloan Plan.

4. In terms of the original purposes of the Pick-Sloan Plan, however, the results have been much less dramatic. Navigation was one of the major features of the plan, but its performance. Estimates in

the 1940's indicated that once the 9-foot channel were dredged in the lower river and other navigation improvements made, annual commercial tonnage would be near 5 million tons. Magedanz, *Historical Perspectives on the Pick-Sloan Plan*, PUB. AFFAIRS 5 (No. 97, Apr. 1988). Yet, in recent years, commercial tonnage in and out of the river has been declining. In 1986, for instance, commercial tonnage was only 2.3 million tons. U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIV., 1987-88 ANNUAL OPERATING PLAN at 73. Farm products provide the largest amount of commercial cargo, followed by chemical products and stone products. More of the combined commercial cargo moves upstream than downstream.

5. It is in the area of irrigation development, the center piece of the Bureau of Reclamation's plan, that the results of Pick-Sloan have been most disappointing. More than 5.3 million acres were to be developed under the features of the Sloan plan that were combined into the composite plan. As of 1987, however, only 501,600 acres (full and supplemental irrigation) or less than 10 percent of the irrigation features have been developed. Although the total irrigated acreage promised to them was small, Wyoming (100 percent) and Kansas (37 percent) have done best in terms of obtaining the irrigated acreage promised under Pick-Sloan. Colorado has done the worst (0 percent) although it was promised only 103,000 acres. North Dakota (<1 percent), South Dakota (2 percent), and Montana (6 percent) were each entitled to more than 1 million acres of irrigated farmland; each of these states lost more than 500,000 acres of land to mainstem reservoirs. They are the big losers under the plan. Having obtained 22 percent of its promised 1 million acres, Nebraska has done better than any other basin state.

6. The Indian tribes of the basin, especially those who had reservations on the mainstem, have benefitted little if at all. At Fort Berthold, North Dakota, for instance, the tribal lands of the Mandan, Hidatsa, and Arikara were inundated by Oahe Reservoir and a seemingly self-sufficient social and economic system totally disrupted. While these tribes were compensated for their lands, recent studies have indicated that the compensation was inadequate. *See, e.g.,*

Cummings, Memorandum for Fort Berthold Tribes 1986); *see also* M. LAWSON, DAMMED INDIANS (1982).

B. The Pick-Sloan Plan as River Management Institution

1. While the water development benefits of the Pick-Sloan Plan for the Missouri River basin have been mixed, in one area the assessment is unambiguous: there has been dismal failure in developing river management institutions for the basin. There is no permanent intergovernmental institution for the shared management of this important water resource. There is no effective forum where the governments of the basin can resolve their water-related conflicts. In the absence of a viable river management institution, the U.S. Army Corps of Engineers runs the river.

2. Basin residents have witnessed an impressive array of efforts to "coordinate" planning and to encourage interstate and federal-state "cooperation." Federal interagency committees, with state observers, originally monitored the progress of the Pick-Sloan program. In the 1970's, there was the Missouri River Basin Commission that had federal and state members and was given a healthy budget. When the river commissions were abolished in 1981, the Missouri Basin States Association (MBSA) was created as a nonprofit corporation with state members and federal observers, but the Association has been dormant for several years. The tribal governments of the basin have rarely been invited or involved in any of these forums.

3. The fundamental differences among the governments of the Missouri River basin are becoming more apparent. Several of the basin's tribes are seeking additional compensation, in the form of hydroelectric power or money, for the sacrifice of land, culture and economy to the Missouri mainstem reservoirs. *ETIS Pipeline Project v. Missouri*, No. 86-939, 56 U.S.L.W. 4137 (U.S. 1988), which went to the U.S. Supreme Court on the narrow question of whether the Bureau of Reclamation could market water from the mainstem dams (thus allowing South Dakota to sell water from Oahe Reservoir for coal slurry pipeline purposes) was really a struggle between the upper and lower basin states over the distribution of Pick-Sloan benefits. While

the Court ruled that the Bureau did not have such marketing authority, the ruling did nothing to address the shortcomings of the Pick-Sloan Plan.

4. Recent efforts by the states to negotiate their differences have been unsuccessful. As a result of the ETSI litigation, representatives of the ten basin governors met monthly for most of 1986 in a effort to resolve their differences. Neither Indian tribes nor federal agencies were parties to these discussions. Early in the negotiations, the delegates abandoned an attempt to develop a formal interstate compact. Rather, the negotiators were exploring ways to build a continuing high-level relationship through which complex problems could be solved short of litigation. They were considering a set of management principles for the Missouri River which were similar in concept to the Great Lakes Charter that was adopted by the five states and two Canadian provinces who share the Lakes.

5. The negotiators had undertaken an enormous task of conflict-resolution--one that had taken years, if not decades on other rivers in North America. Ultimately, they did not have time to accomplish their ends. By the end of 1986, with the ETSI litigation before the Supreme Court and five basin governors leaving office, the negotiations came to an unsuccessful conclusion.

6. Thus, at a time 45 years after the passage of the Flood Control Act of 1944, when water has never been more important to the basin, there is no intergovernmental water management or conflict-resolution capacity. The Pick-Sloan Plan has failed to spawn a lasting, effective river management institution for the basin.

V. Conclusion: Institution-Building in the Missouri River Basin

An institution is an organization fused with values, "a natural product of social needs and pressures--a responsive, adaptive organism." P. SELZNICK, LEADERSHIP IN ADMINISTRATION 5 (1957). Concerning Missouri River water issues, we need a New Pick-Sloan Plan based on different premises for the distribution of water-related benefits in the basin and for participation in decisionmaking concerning the river. We also need a stable, representative forum,

such as a Missouri River Assembly, for the implementation of these policies and for resolving conflicts along the way. The two are indispensably intertwined.

A. Toward a New Pick-Sloan Plan

1. The original Pick-Sloan Plan embodied a set of public values and policies that might have seemed appropriate for the needs of basin residents in the post-World War II decade but which, in fact, were insensitive to many mainstem tribes and to the Missouri River's ecology. Many of the plan's expectations have been unfulfilled or distorted in a way that has resulted in an inequitable distribution of benefits and costs throughout the basin.

2. A New Pick-Sloan Plan should be negotiated among the basin's three sovereigns--the states, tribes and federal agencies. The value premise of these new public policies should be "an ethic of place" which is a contemporary expression of John Wesley Powell's call for integrated watershed management and Aldo Leopold's concept of ecology, "think[ing] at right angles to evolution and examin[ing] the collective behavior of biotic materials." A. LEOPOLD, *A SAND COUNTY ALMANAC* 189 (Ballantine Books ed. 17th printing 1980). "Those other fields include water quality; fish and wildlife; economics; conservation; local land use planning; Indian and federal rights; and soil conservation, both on private and federal lands." Wilkinson, *Aldo Leopold & Western Water Law: Thinking Perpendicular to the Prior Appropriation Doctrine*, 24 *LAND & WATER L. REV.* 22 (1989).

B. Toward a Missouri River Assembly

1. This time around, much more emphasis should be placed on the method of organizing the governments of the Missouri River basin to implement these new watershed policies and to resolve conflicts along the way. This consideration was virtually ignored in the original formulation of the Pick-Sloan Plan although we seen a haphazard array of organizations come and go over the last 45 years.

2. The governments of the Missouri River basin should have the opportunity to express and pursue their distinctive interests and to search for common ground. Thus, the states need an organization, such as the Missouri Basin States Association, to address their unique water interests. The Indian tribes, likewise, need their

own caucus; and recent efforts centered around the Sioux tribes to form such a "tribal commission" are encouraging. The federal agencies also need to fashion an interagency process for coordinating their Missouri River interests.

3. While the three sovereigns of the basin have their separate interests, they have a shared interest in candidly addressing the distribution of Missouri River benefits; fashioning a new set of public policies for the river; ensuring that those policies are implemented; and resolving disputes short of expensive, divisive litigation.

4. A Missouri River Assembly can be the forum for such discussions among the governments of the basin. With representation from the states, tribes, and federal agencies, the Assembly can be the opportunity for basin decisionmakers to share their perspectives, to reach understandings, and thereby to develop new policies for the river. The Assembly *begins* as a process for these discussions. Hopefully, the Assembly *becomes* an institution embodying new understandings among the governments of the basin and new policies for the river.

5. This approach is not unprecedented. Leaders in other parts of the country have forged innovative interjurisdictional agreements concerning natural resources, *e.g.*, the Great Lakes Charter, the Northwest Power Planning Council, and the North Pacific Salmon Intervention Treaty. See Thorson, *Symposium on the Future of the Missouri River*, BOUNDARIES CARVED IN WATER: THE MISSOURI RIVER BRIEF SERIES (No. 14, Feb. 1989).

6. This is an effort that will take basin leaders into the twenty-first century. After spending \$1.2 billion on constructing the Missouri's mainstem dams, it needs that amount of time and effort. In the process, basin leaders will hopefully create policies and institutions for the management of the Missouri that honor the legacy and unleash the promise of America's "original highway west."