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**ADDRESSING MISSOURI'S
DOMESTIC CONFLICT OF INTERESTS
IN THE MISSOURI RIVER:
A SUGGESTED APPROACH FOR RESOLUTION**

by Craig A. Street

I. INTRODUCTION

After the United States purchased the Louisiana Territory from France in 1803, the Missouri River played a vital role in the development of the American West, particularly as a means for transporting people, animals, and goods.¹ The Missouri and Mississippi Rivers, together with their tributaries, served as natural traffic ways that connected southern and eastern states to the western frontier and helped tie a young nation together. A little over a century later, states within the Missouri River basin would begin quarreling over utilization and management of the river, and the river would become a wedge between the states in a sustained interstate dispute. This dispute continues to loom over the Missouri River basin and has

sparked analogous intrastate struggles that, to date, have largely been overshadowed and overlooked.

In the 1930s and 1940s, severe flooding prompted Congress to enact legislation authorizing the construction of six mainstem dams along the Missouri river. Generally, the responsibility of managing the river, including operation of the dams and reservoirs authorized by Congress, lies with the U.S. Army Corps of Engineers. The Corps of Engineers is responsible for orchestrating the release of flows from the mainstem reservoirs, and it manages the river to produce benefits for various purposes, including flood control, navigation, irrigation, hydro-power, water supply, water quality, recreation, and fish and wildlife resources.² Even before Congress au-

thorized the construction of five of the six mainstem dams and reservoirs, however, states within the Missouri River basin had begun arguing over the management of the river.³ Each state sought to protect interests important to its citizenry and campaigned to the federal government in an effort to influence the federal government's plans for the river. Upper basin states, including Montana, North Dakota, and South Dakota,⁴ generally argued that the river and its tributaries should be developed to promote irrigation interests in the northwestern range of the basin. Lower basin states, including Iowa, Kansas, Missouri, and Nebraska, fought to promote navigation and flood control. The conflicting nature of the interests the states sought to protect in this pre-dam era incited a dispute over allocation of water resources in the Missouri River basin and management of the river which endures to the present. Even today, the interstate dispute shows few signs of resolution. Ironically, perhaps, the very river that, in the years after the Louisiana Purchase, helped bind a young

¹ U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIVISION, *THE DEVELOPMENT AND CONTROL OF THE MISSOURI RIVER I* (1947); JOHN L. FUNK & JOHN W. ROBINSON, *CHANGES IN THE CHANNEL OF THE LOWER MISSOURI RIVER AND EFFECTS ON FISH AND WILDLIFE* 8 (1974).

² U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER DIVISION, *MISSOURI RIVER MASTER WATER CONTROL MANUAL REVIEW AND UPDATE STUDY, DRAFT ENVIRONMENTAL IMPACT STATEMENT 2-1* (1994) [hereinafter *MASTER MANUAL REVIEW AND UPDATE DEIS*].

³ A number of Native American groups within the Missouri River basin have also participated in the interstate dispute, but the states have been the principal players. Historically, the claims of Native Americans to water resources in the Missouri River basin were largely disregarded. See generally MICHAEL L. LAWSON, *DAMMED INDIANS* (1982). Early in this century, the Supreme Court held that Native American reservations are benefited by reserved water rights which guarantee sufficient water to enable Native American groups to occupy and use the land for a number of purposes. *Winters v. United States*, 207 U.S. 564, 576-77 (1907). Just as with federal reserved water rights, the Native Americans' reserved water rights are exempt from appropriation under state water laws. *Id.* Native American reserved rights have played an increasingly important role in water appropriation in the upper Missouri River basin as well as in the interstate dispute. Because the interstate dispute is not the main focus of this Comment, however, the specific claims of states (other than Missouri) and Native Americans are largely irrelevant and are, therefore, generically treated together. Consequently, references to "states" with regard to the interstate dispute should also be inferred to mean both states and Native American groups where appropriate.

⁴ Note, portions of Colorado, Minnesota, and Wyoming also fall within the upper portion of the Missouri River basin, but the mainstem of the Missouri River does not touch any part of these three states. To the extent this Comment considers the dispute between upper and lower basin states, it principally centers on the dispute surrounding the management of the mainstem Missouri River. Thus, while Colorado, Minnesota, and Wyoming have had some involvement in the Missouri River dispute, their roles are negligible in the context of this Comment.

America together now divides the states within its basin.

For many years, representatives from the Missouri River basin states have attempted to reconcile their differences via countless negotiations, but these talks have done little to diffuse the situation. Litigation among the states has proven equally ineffective. Although the Corps of Engineers has made efforts in recent years to better address and accommodate states' interests in its operation of the river,⁵ it has consistently met with disapproval and criticism. In part, at least, the elusiveness of resolution can be blamed on the complexity of the problem.⁶ The interests at issue are not wholly matters of state concern. Instead, many are matters of local, regional, and interest-group concern. Individual states have, themselves, experienced tremendous difficulty identifying and determining which interests they should assert in the interstate dispute. As a result, intrastate disputes—which reflect the predominant interstate dispute—have erupted. In this, the State of Missouri is no exception.

The purposes of this Comment are fourfold. First, it will offer a brief history of the development of the Missouri River and the ensuing interstate dispute. Second, it will briefly introduce legal limita-

tions on state and local governments with respect to regulating and managing federal navigable waters as well as limitations imposed upon the Corps of Engineers in its management and operation of the river. Third, it will discuss, in general, the domestic interests of the State of Missouri with regard to the use and management of the river. Finally, it will propose a goal of ascertaining, examining, and weighing the various interests of its people in order to identify and promote the interest or interests that, alone or in combination with one another, presumptively would yield optimum benefits for Missouri.

II. HISTORY OF THE MISSOURI RIVER AND THE INTERSTATE QUARREL

A. 1800s to 1920s: Early History of the River

The Missouri River's history is as rich as the soil lining its banks,⁷ and to fully appreciate and understand the dispute surrounding the Missouri River, it is important to examine the river's past. Since the United States acquired it from France in 1803 as part of the Louisiana Purchase, the Missouri River has been altered in many ways. The changes have been implemented primarily for purposes of navigation, flood control, and, to a much lesser

extent, irrigation. It has been straightened, shortened, deepened, narrowed, and confined. These alterations have changed the dynamics of the river in many respects, some of which have become subjects of debate within the Missouri River basin. The biggest changes along the river—particularly general navigational improvements and the construction of six mainstem reservoirs—merit discussion.

The basin drains some 529,350 square miles in the U.S. and approximately 9715 square miles in Canada.⁸ The river is approximately 2316 miles long,⁹ winding from its mouth near St. Louis, Missouri, to its headwaters near Three Forks, Montana, where it originates at the confluence of the Gallatin, Jefferson, and Madison Rivers.¹⁰ While pre-development records are incomplete, the shortening of the river has been well documented. In 1879, the river from Rulo, Nebraska, to its mouth was 544 miles.¹¹ In 1972, the same stretch was only 498.4 miles long.¹² It should be noted that the entire stretch between Rulo and the mouth was channelized, and most of the channelization had been completed by 1972.¹³ Perhaps more significantly, the river's shortened length was accompanied by a drastic reduction in surface area. In its natural

⁵ For example, the Corps has been investigating alternatives to its Master Control Manual for the past several years. See generally MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2.

⁶ See, e.g., JOHN E. THORSON, RIVER OF PROMISE, RIVER OF PERIL 18-55 (1994).

⁷ See, e.g., CHARLES P. DEATHERAGE, STEAMBOATING ON THE MISSOURI RIVER IN THE SIXTIES (1924); HENRY C. HART, THE DARK MISSOURI (1957); STANLEY VESTAL, THE MISSOURI (1945).

⁸ H.R. Doc. No. 238, 73d Cong., 2d Sess. 70 (1934).

⁹ U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM, RESERVOIR REGULATION MANUAL, MASTER MANUAL II-1 (1979) [hereinafter MASTER MANUAL].

¹⁰ See *A Chronology of Selected Events in the Missouri River Basin*, CONF. PROC.: THE PICK-SLOAN MO. BASIN PLAN, August 10-11, 1983, at iv [hereinafter *A Chronology*].

¹¹ FUNK & ROBINSON, *supra* note 1, at 3.

¹² *Id.*

¹³ *Id.*

state, the river was shallow and meandering, with abundant backwaters, chutes, sloughs, oxbows, sandbars, and islands.¹⁴ In 1879, the river's total surface area was 121,739 acres.¹⁵ By 1972, this area had been reduced by roughly 50%, to fewer than 61 thousand acres (not including the mainstem reservoirs).¹⁶

Early changes along the Missouri River were intended to take advantage of the river's expansive reach and its potential for carrying commerce. In the years following the Louisiana Purchase, the Missouri River hosted any number of brave navigators who journeyed up and down the river in small watercraft such as canoes, mackinaws, bullboats, and keelboats.¹⁷ While these Missouri River pioneers undoubtedly carried goods and engaged in trading up and down the river, it was only after steamboats first entered the river in 1819¹⁸ that people began to realize the river's potential to support a significant amount of commerce. By 1860, steamboats moved as far upstream as Fort Benton, Montana,¹⁹ but this

was accomplished only after years of governmental efforts to improve the river's navigability.

Prior to 1824, federal government officials desired to promote navigation on all of the nation's waterways, but national leaders of the day questioned the federal government's power to act in furtherance of that goal. In 1818, the United States House of Representatives passed a resolution in which it declared Congress' power to appropriate money for the improvement of the nation's water courses,²⁰ but its bold statement lacked complete conviction. There persisted some degree of doubt as to whether Congress' Constitutional powers extended to regulation of waterways. Thus, while Congress proceeded to enact legislation which appropriated federal funds for the survey of the Mississippi and Ohio Rivers in 1819 and 1820, it did little else to advance its goal of increased navigation.²¹ This changed in 1824 when the U.S. Supreme Court handed down a landmark decision in which it validated Congress' power to directly regulate

navigable waters pursuant to its authority to regulate commerce under Article I, Section 8, of the U.S. Constitution.²² Later that year, Congress embraced the Supreme Court's decision by enacting the first River and Harbor Act, which was described as "an Act to improve the navigation of the Ohio and Mississippi Rivers."²³ Then, in 1832, Congress authorized the President to extend the provisions of the River and Harbor Act of 1824 to the Missouri River.²⁴ For several decades thereafter, the federal government intermittently appropriated modest sums of money to fund "examinations, surveys, and reports; improvement of navigation through removal of [sand] bars, snags, wrecks, and other obstructions; the protection of banks at specified locations; and construction and repair of vessels, operating equipment, and machinery required for the work."²⁵

Between the 1850s and 1880s, steamboat navigation flourished on the Missouri River.²⁶ During this period, roads and land vehicles were inadequate for carrying

¹⁴ See Larry W. Hesse, *Taming the Wild Missouri River: What Has it Cost?*, FISHERIES, March-April 1987, at 2.

¹⁵ FUNK & ROBINSON, *supra* note 1, at 3.

¹⁶ *Id.*

¹⁷ HIRAM M. CHITTENDEN, HISTORY OF EARLY STEAMBOAT NAVIGATION ON THE MISSOURI RIVER; LIFE & ADVENTURES OF JOSEPH LA BARGE 91 (1962).

¹⁸ *Id.* at 90.

¹⁹ WILLIAM E. LASS, A HISTORY OF STEAMBOATING ON THE UPPER MISSOURI RIVER 5 (1962). Although there are accounts of small steamboats navigating the river above Fort Benton, for all intents and purposes, Fort Benton was the head of steamboat navigation. *Id.* at 1, 5.

²⁰ 32 ANNALS OF CONG. 1382-86 (1818) (15th Cong., 1st Sess.). See WILLIAM J. HULL & ROBERT W. HULL, THE ORIGIN AND DEVELOPMENT OF THE WATERWAYS POLICY OF THE UNITED STATES 12 (1967).

²¹ JOHN R. FERRELL, SOUNDINGS: ONE HUNDRED YEARS OF THE MISSOURI RIVER NAVIGATION PROJECT 5 (1996) [hereinafter FERRELL, SOUNDINGS].

²² See *Gibbons v. Ogden*, 22 U.S. 1, 246 (1824). See also THORSON, *supra* note 6, at 56.

²³ See River and Harbor Act of 1824, ch. 139, 4 Stat. 32 (1824); FERRELL, SOUNDINGS, *supra* note 21, at 5.

²⁴ See River and Harbor Act of 1832, ch. 153, § 1, 4 Stat. 551, 552-53 (1832); FERRELL, SOUNDINGS, *supra* note 21, at 5.

²⁵ FERRELL, SOUNDINGS, *supra* note 21, at 5.

²⁶ FUNK & ROBINSON, *supra* note 1, at 8; Bert Schneiders, *The Myth of Environmental Management: The Corps, the Missouri River, and the Channelization Project*, 70 AGRIC. HIST. 337, 338 (1996).

significant commerce, and railroads had not yet penetrated the entirety of the Missouri River basin.²⁷ As a result, steamboats were the preferred means of transportation for commerce in the Midwest. By the late 1860s and throughout the 1870s, railroads rapidly expanded into the Missouri River basin and began competing with steamboats.²⁸ By some accounts, wherever the railroad met the river, steamboat commerce essentially died downstream from the railroad-river junction.²⁹ The steamboats—because of the dangers the river continually posed to boats and their crews, as well as the steamboats' unpredictable schedules and limited capacities to carry cargo—simply could not compete.³⁰ By 1869, the railroad ran alongside the river from its mouth at the Mississippi River to Sioux City, Iowa.³¹ By the early 1880s, it was clear that steamboat commerce on the river was destined to collapse.³²

With competition from steamboats eliminated, railroads became monopolistic and dominated commerce in the Midwest.³³ Believing the railroads were unfair

and exploitative, residents of the Missouri River basin began efforts in 1880 to persuade the federal government to intervene and reestablish commerce on the river in order to compete with the railroads.³⁴ The basin residents' ultimate goal was to create a competitive midwestern shipping market that would reduce shipping rates and stimulate the economy of the entire region.³⁵ These proponents of river commerce were aware, however, that steamboats would still be incapable of competing with railroads, so they also sought to develop deep-draft barge navigation on the river.³⁶ This would require that the naturally shallow, sinuous, braided, and free-flowing Missouri River be altered to develop a deep, stable channel that could accommodate the deep-draft barges.³⁷ Knowing that implementation of the plan would be expensive, advocates asserted that "pegging down" the river in a stable channel and stabilizing the river's banks would have benefits beyond recreating river commerce. They contended that a stabilized channel and banks would increase property values, reclaim land along the river,

and generate additional tax revenues by adding reclaimed real estate to property tax roles.³⁸

In 1881, the Army Corps of Engineers joined the basin residents' campaign to reestablish commerce on the Missouri River.³⁹ The Corps presented to Congress a plan proposing a number of river improvements which it believed would stabilize the river as needed to accomplish the objectives of the basin residents.⁴⁰ Congress appropriated money to fund the Corps' plan in 1882.⁴¹ In a further step, Congress created the Missouri River Commission in 1884 to oversee and direct river improvements authorized by Congress and to assess and develop new plans to improve the river's navigability.⁴² The Commission desired to implement a systematic approach to the river's development, and navigation improvements were among the Commission's initial goals in its plan for the river.⁴³ In a few short years, however, basin residents grew dissatisfied with the efforts of the Corps and the Commission because they perceived the Commission as overly focused on developing the navigational channel,

²⁷ Schneiders, *supra* note 26, at 338.

²⁸ *Id.* at 338-39; FERRELL, SOUNDINGS, *supra* note 21, at 3.

²⁹ Schneiders, *supra* note 26, at 338.

³⁰ *Id.* at 338-39.

³¹ FERRELL, SOUNDINGS, *supra* note 21, at 3.

³² Schneiders, *supra* note 26, at 339.

³³ *Id.*

³⁴ *Id.*; FERRELL, SOUNDINGS, *supra* note 21, at 21.

³⁵ FERRELL, SOUNDINGS, *supra* note 21, at 21.

³⁶ Schneiders, *supra* note 26, at 339.

³⁷ *Id.*

³⁸ FERRELL, SOUNDINGS, *supra* note 21, at 21.

³⁹ *Id.*

⁴⁰ *Id.* at 9; FUNK & ROBINSON, *supra* note 1, at 8.

⁴¹ FERRELL, SOUNDINGS, *supra* note 21, at 21.

⁴² See River and Harbor Act of 1884, ch. 229, § 1, 23 Stat. 133, 144-45 (1884); *A Chronology*, *supra* note 10, at vii, viii.

⁴³ FERRELL, SOUNDINGS, *supra* note 21, at 23.

neglecting their other goals of bank stabilization and land reclamation.⁴⁴ To some extent, the basin residents' focus had shifted from the common goal of navigation—the furtherance of which residents had anticipated would produce incidental private benefits—to goals that would yield greater private benefits.⁴⁵ To that end, the residents lobbied Congress, asking that it compel the Corps and the Commission to diversify their improvement efforts to include projects that would produce such benefits.⁴⁶ Consequently, during the late 1880s and 1890s, Congress' appropriations for river improvements were largely ear-marked for projects intended to benefit particular constituencies and interest groups rather than improvement of the river as a whole.⁴⁷ These appropriations severely limited the Commission's ability to implement systematic development of the river as it desired, and by 1900, the Commission called for its own dissolution.⁴⁸ Accordingly, Congress abolished the Missouri River Commission in 1902 and transferred its duties and responsibilities to the Corps of Engineers.⁴⁹

The net effect of the Missouri River Commission's efforts was a forty-five-mile stretch of improved river, beginning approximately five miles above Jefferson City, Missouri.⁵⁰ Along that reach, the river's width had been substantially reduced, adding about 5500 acres of reclaimed land to property tax roles and increasing the river's depth to over six feet for the length of the reach.⁵¹

During the early 1900s, after the dissolution of the Missouri River Commission, Congress drastically curbed its appropriations for construction of new improvements on the river and made few appropriations for the maintenance of existing improvements.⁵² Still seeking relief from high shipping costs and monopolistic railroads, basin residents again formed interest groups and lobbied Congress to continue development of the river, chiefly for navigation.⁵³ Urban interests seeking to develop navigation on the river were bolstered by the unusual and unexpected support of agricultural interests in the lower basin,⁵⁴ as the railroads had proven incapable

of efficiently shipping the increasing supply of agricultural products, resulting in waste and losses to farmers.⁵⁵ While agricultural and other rural interests maintained their belief that development of the river would yield private benefits, navigation prevailed as the predominant interest.⁵⁶

In 1910, Congress responded to the lobby by appropriating \$1 million to establish a permanent six-foot-deep, 200-foot-wide navigational channel between Kansas City, Missouri, and the mouth of the Missouri River.⁵⁷ In 1912, Congress appropriated an additional \$800 thousand in furtherance of the project and expressed its desire for the project to be completed within ten years.⁵⁸ After World War I erupted in 1914, however, Congress' appropriations lagged and, as a result, the development of the navigational channel did not progress as quickly as expected.⁵⁹ In 1915, the Corps of Engineers submitted a report to Congress in which the Kansas City District Engineer recommended that the project be scrapped because the fed-

⁴⁴ *Id.* at 24-26. Statements made by the Commission leave little doubt that improved navigation was, indeed, one of its foremost goals. See, e.g., FUNK & ROBINSON, *supra* note 1, at 8.

⁴⁵ FERRELL, SOUNDINGS, *supra* note 21, at 24.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.* at 26.

⁴⁹ *A Chronology*, *supra* note 10, at viii.

⁵⁰ FERRELL, SOUNDINGS, *supra* note 21, at 25.

⁵¹ *Id.* at 25, 27.

⁵² *Id.* at 27.

⁵³ *Id.* at 32.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ See River and Harbor Act of 1910, ch. 382, § 1, 36 Stat. 630, 660 (1910); FERRELL, SOUNDINGS, *supra* note 21, at 35.

⁵⁸ See River and Harbor Act of 1912, ch. 253, § 1, 37 Stat. 201, 219 (1912); FERRELL, SOUNDINGS, *supra* note 21, at 41.

⁵⁹ FERRELL, SOUNDINGS, *supra* note 21, at 44.

eral government was spending approximately \$1.1 million per year to save only about \$10 thousand per year in shipping costs.⁶⁰ Basin residents successfully fought to save the project, but, before World War I ended in 1918, Congress' appropriations were nominal, at best.⁶¹ In addition, many of the Corps' resources were rededicated elsewhere to aid in the war effort.⁶² Not surprisingly, progress on the navigational channel was severely limited.

B. 1920s to 1960s:

The Construction Boom

In the early to mid 1920s, navigational interests once again banded together and successfully lobbied Congress for appropriations to continue the channelization effort.⁶³ Persistent navigational interests won a major victory in 1927 when Congress authorized the Missouri River Navigation and Channelization Project, which would extend the six-foot by 200-foot navigational channel upstream to Sioux City, Iowa.⁶⁴ The project was destined to become one of the most important elements in the "physical and ecological transformation of the Missouri River."⁶⁵ In addition to this project, Congress

commissioned a study to determine the feasibility of creating a nine-foot-deep navigational channel from the mouth of the river to Kansas City.⁶⁶ Although authorization of the Missouri River Navigation and Channelization Project was a victory for navigation advocates, Congress failed to dedicate funding for the project for subsequent years. Consequently, interested Congresspeople from the Midwest were forced to seek renewed funding for the project annually.⁶⁷ It was not until Franklin Roosevelt assumed the Presidency in March 1933 that the project received adequate, steady funding.⁶⁸ That occurred when, during the Great Depression, President Roosevelt sought to stimulate the economy by implementing a number of federally funded public-works projects pursuant to the power Congress granted him in the National Industrial Recovery Act of 1933 ("NIRA").⁶⁹ Although the Missouri River Navigation and Channelization Project is not one for which President Roosevelt is particularly well remembered, it served the same primary purpose as other, more popular public-works projects at the time.

That is, it provided jobs for unemployed laborers.⁷⁰ But the channelization project also had other purposes, most of which echoed the objectives of the basin residents who had sought to reestablish navigation on the Missouri River in the 1880s. National leaders believed development of the river would spur economic growth in the Midwest by facilitating navigation and commerce on the river.⁷¹ They also believed that a stable river channel would help prevent the erosive action of the uncontrolled river, thereby preserving the rich bottomland soil for agricultural and industrial uses.⁷² Finally, they speculated that a stable channel would improve the value of real estate in the river valley, which was thought to be depressed by the constant threat of flooding and erosion.⁷³

During the 1930s and until 1941, the river downstream from Sioux City was alive with activity. Numbering in the thousands, workers dredged the channel and constructed levees, rock revetments, and wooden piling dikes. As the course of the river began conforming to the Corps' expectations, it appeared that humans would ultimately tame the

⁶⁰ *Id.*

⁶¹ *Id.* at 46.

⁶² *Id.*

⁶³ *Id.* at 52.

⁶⁴ See River and Harbor Act of 1927, ch. 47, § 1, 44 Stat. 1010, 1013 (1927) (adopting H.R. Doc. No. 1120, 60th Cong., 2d Sess. (1908)); FERRELL, *SOUNDINGS*, *supra* note 21, at 54; Schneiders, *supra* note 26, at 340.

⁶⁵ Schneiders, *supra* note 26, at 337.

⁶⁶ River and Harbor Act of 1927, *supra* note 64, § 4, 44 Stat. at 1020; FERRELL, *SOUNDINGS*, *supra* note 21, at 54.

⁶⁷ Schneiders, *supra* note 26, at 340.

⁶⁸ *Id.*

⁶⁹ National Industrial Recovery Act, ch. 90, 48 Stat. 195 (1933); Schneiders, *supra* note 26, at 340-41. The Act gave the President the power to authorize the construction of public-works projects "[w]ith a view to increasing employment quickly." National Industrial Recovery Act, *supra*, § 203(a), 48 Stat. at 202.

⁷⁰ Schneiders, *supra* note 26, at 341.

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

wild Missouri.⁷⁴

The river was busy upstream as well. In 1933, President Roosevelt had formally approved a plan to construct a dam across the Missouri River in eastern Montana.⁷⁵ This project, which came to be known as the Fort Peck Project, would become the first of six dams across the mainstem of the Missouri River. While the project's immediate purpose was to create jobs, its ultimate purposes were to provide flood control and promote navigation.⁷⁶ The project's limited purposes would lead to discord in the basin, however, as upper basin residents expected to gain irrigation benefits from the Fort Peck Project as well.

The nation's irrigation needs had heretofore been provided through the Bureau of Reclamation. The Bureau's origins may be traced back to over thirty years before President Roosevelt approved the Fort Peck Project when Congress, in the Reclamation Act of 1902, authorized the Secretary of the Interior to administer programs designed to

develop water storage facilities throughout the West.⁷⁷ The Act failed to designate a federal agency to carry out the Secretary's programs, so the U.S. Geological Survey's Division of Hydrography was reorganized to form the Reclamation Service in order to implement the water storage programs.⁷⁸ In 1907, the Reclamation Service became an independent agency under the Department of the Interior, and the familiar Bureau of Reclamation was born.⁷⁹ The Bureau's primary responsibility was (and still is) to construct and maintain irrigation and water storage projects approved by the Secretary of the Interior, and, as early as 1903, the Secretary of the Interior had approved significant irrigation projects for the upper portion of the Missouri River basin.⁸⁰ These appropriations highlighted the climatic differences between the upper and lower basin states. In the arid upper basin, farmers were largely limited to producing livestock, wheat, and small grains.⁸¹ In the lower basin, where rainfall and water supplies were generally ample,

farmers could produce a wide variety of crops as well as livestock.⁸² As a result, the upper basin states tended to view water more as a commodity than did lower basin states. Construction of the Fort Peck Project made one thing clear: irrigation and navigation interests were on a collision course.

When the Corps constructed the Fort Peck Project, there were few, if any, plans to use water stored in the reservoir to accommodate irrigation needs in the upper basin.⁸³ When this became evident, upper basin interests argued fervently that irrigation was one of the project's express purposes, evidenced by the Public Works Administration's inclusion of the phrase "for water conservation" among the stated purposes of the project's first three fund allocations.⁸⁴ However, lower basin interests countered with the fact that Congress had ultimately omitted the phrase from legislation which appropriated funds for the construction and operation of the Fort Peck Project.⁸⁵ As it turned out, these ini-

⁷⁴ FERRELL, SOUNDINGS, *supra* note 21, at 61.

⁷⁵ JOHN R. FERRELL, BIG DAM ERA 5 (1993) [hereinafter FERRELL, BIG DAM ERA]. The plan was Public Works Project Number 30. *Id.* Section 202(b) of the NIRA limited the President's power to authorize public-works projects with regard to river and harbor improvements by providing that no such improvements could be implemented "unless they shall have heretofore or hereafter been adopted by the Congress or are recommended by the Chief of Engineers of the United States Army." In this case, the dam was recommended by the Chief of Engineers of the U.S. Army.

⁷⁶ See H.R. Doc. No. 238, *supra* note 8 (incorporated into River and Harbor Act of 1935, ch. 831, § 1, 49 Stat. 1028, 1034 (1935)). House Document 238 was a Corps of Engineers' progress report on the development of the Missouri River. In general, it described the Fort Peck Project as a flood-control and navigational improvement. H.R. Doc. No. 238, *supra*, *passim*. But see FERRELL, BIG DAM ERA, *supra* note 75, at 6-7.

⁷⁷ Reclamation Act of 1902, ch. 1093, 32 Stat. 388 (1902); Brian Morris, *Unanswered Prayers: The Upper Missouri River Basin States Take on the U.S. Army Corps of Engineers*, 68 N.D. L. REV. 897, 904 (1992).

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ FERRELL, BIG DAM ERA, *supra* note 75, at 3.

⁸¹ MORRIS, *supra* note 77, at 903.

⁸² *Id.*

⁸³ FERRELL, BIG DAM ERA, *supra* note 75, at 5.

⁸⁴ *Id.*

⁸⁵ *Id.* See *supra* note 76 and accompanying text.

tial debates only foreshadowed the battles to come.

The Corps of Engineers closed the Fort Peck Reservoir in 1937, and it was operational by 1940. However, the Corps was not as fortunate with the Missouri River Navigation and Channelization Project, as United States' involvement in World War II curtailed progress on the project in 1941.⁸⁶ During the War, Congress failed to appropriate enough money to maintain existing improvements;⁸⁷ essentially, the project was on hold for the duration of the war.

Nevertheless, the Corps had managed to complete much of the work on the channelization project, and, even before the project was interrupted by World War II, commercial navigation had been restored to the river.⁸⁸ But in the early 1940s, the river symptomatically demonstrated a very unpleasant side-effect of channelization: flooding. Historically, as the volume of water in the channel increased during periods of abundant precipitation, the river's naturally wide, sinuous, and braided bed would allow the water to expand horizontally across the river, thereby reducing the amount of water that would otherwise overflow the river's

natural banks and spill out onto the flood plain.⁸⁹ Essentially, the river's natural features served as built-in flood-protection mechanisms. But channelization and reclamation of land along the narrowed river largely eliminated the riverbed's horizontal, flood-water buffer zone.⁹⁰

In 1942 and 1943, flood waters moved down the channelized Missouri River, inundating the flood plain and severely damaging property and agricultural lands.⁹¹ The constrained river only exacerbated the severity of flooding because the narrower, channelized river moved faster and caused higher-than-normal water levels in the flood plain.⁹² In 1943, extensive flooding prompted the House of Representatives to hold a special hearing of the Flood Control Committee at which Colonel Lewis A. Pick, the Division Engineer of the Corps of Engineers' Missouri River Division,⁹³ made a presentation.⁹⁴ Soon after the Flood Control Committee's special hearing, Congress passed a resolution in which it asked the Corps to assess the need for flood control on the Missouri River.⁹⁵ The Corps assigned the job to Colonel Pick.⁹⁶

By this time, Congress was also preparing for a wave of eco-

nomical depression that leaders anticipated would envelop the country at the close of World War II. As part of its efforts to identify means to spark economic growth, Congress had instructed the Corps to create a list of flood-control projects that it believed should be implemented at the end of World War II.⁹⁷ To that end, the Corps' Chief of Engineers had directed Colonel Pick to make a schedule of "worthy construction projects" on the Missouri River.⁹⁸ Consequently, by the time Colonel Pick was assigned to respond to Congress' new resolution regarding flood control, he had already begun the task of assessing construction needs in the basin.

Colonel Pick believed that limited-purpose projects, like the Fort Peck Project,⁹⁹ were unworkable because of their inherent controversy and the difficulty of justifying such enormous expense for a limited benefit.¹⁰⁰ Instead, Colonel Pick desired to implement "a comprehensive plan of development for the Missouri River valley that every interested group of people [could] support."¹⁰¹ In essence, he wanted to develop a plan that considered and accommodated all the prevalent river interests to the greatest possible

⁸⁶ Schneiders, *supra* note 26, at 343.

⁸⁷ *Id.*

⁸⁸ FERRELL, *SOUNDINGS*, *supra* note 21, at 79.

⁸⁹ Schneiders, *supra* note 26, at 343.

⁹⁰ *Id.* at 343-44.

⁹¹ *Id.* at 344.

⁹² *Id.*

⁹³ FERRELL, *BIG DAM ERA*, *supra* note 75, at 8.

⁹⁴ THORSON, *supra* note 6, at 63-64.

⁹⁵ *Id.* at 64.

⁹⁶ *Id.*

⁹⁷ FERRELL, *BIG DAM ERA*, *supra* note 75, at 9.

⁹⁸ *Id.* at 8.

⁹⁹ *Id.* at 6. *See supra* note 76 and accompanying text.

¹⁰⁰ FERRELL, *BIG DAM ERA*, *supra* note 75, at 10.

¹⁰¹ *Id.*

extent.

The "Pick Plan," as it was called, emphasized flood control and navigation, but also boasted benefits for other interests as well, including irrigation, power production, domestic and industrial water supplies, wildlife, and recreation.¹⁰² In particular, the plan called for construction of a deeper, wider navigational channel from the mouth of the river to Sioux City, Iowa; development of a series of levees along the river below Sioux City; and, most significantly, construction of five massive mainstem dams and reservoirs.¹⁰³ While the Pick Plan did envision the production of some hydroelectric power, the dams it proposed were designed primarily for water retention, not power production.¹⁰⁴ As a result, the plan compromised power production for flood control.¹⁰⁵ The plan carried an estimated price tag of \$661 million, which included the cost of the five proposed dams and a number of other projects that had already been authorized.¹⁰⁶ The Pick Plan was not

the only one of its kind, however.

In 1939, two years after the closure of the Fort Peck Project, the Bureau of Reclamation had begun generating its own plan for comprehensive development of the Missouri River basin in accordance with the Reclamation Project Act of 1939.¹⁰⁷ The project was headed by William Glenn Sloan, an assistant engineer at the Bureau of Reclamation's office in Billings, Montana.¹⁰⁸ When the Corps announced the Pick Plan, Sloan worked hastily to complete the Bureau's plan.¹⁰⁹ Known as the "Sloan Plan," it emphasized irrigation and reclamation interests and called for construction of ninety dams and reservoirs throughout the upper basin.¹¹⁰ The Bureau proposed to offset the costs of the dams' construction and operation by building seventeen power plants to produce hydroelectric power.¹¹¹ The total cost of the plan was estimated at \$1.257 billion.¹¹²

The stage had thus been set for a political face-off between the

Corps of Engineers and the Bureau of Reclamation. In 1943, eight states—Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming—organized the Missouri River States Committee ("MRSC").¹¹³ Colorado and Minnesota later joined the MRSC to form a powerful lobby of Missouri River basin states.¹¹⁴ Although the states' interests were divergent, they each had an interest in seeing the Missouri River basin's vast water resources developed in some way, and they realized that they could have greater influence in Washington, D.C. by pooling their efforts.¹¹⁵ In February 1944, the Corps submitted the Pick Plan to Congress.¹¹⁶ The plan quickly gained strong committee support in the House of Representatives and was incorporated into the flood-control bill eventually passed by the House.¹¹⁷ In May of the same year, the Bureau presented Congress with the Sloan Plan.¹¹⁸ After its introduction, the flood-control bill, which had passed earlier in the House, was

¹⁰² H.R. Doc. No. 475, 78th Cong., 2d Sess. (1944); Morris, *supra* note 77, at 908-09.

¹⁰³ See H.R. Doc. No. 475, *supra* note 102; Morris, *supra* note 77, at 908. These were not all the projects proposed in the Pick Plan, but they were the most significant.

¹⁰⁴ Morris, *supra* note 77, at 910.

¹⁰⁵ *Id.*

¹⁰⁶ THORSON, *supra* note 6, at 64-65.

¹⁰⁷ Reclamation Project Act of 1939, ch. 418, § 9, 53 Stat. 1187, 1193-94 (1939) (requiring that all such plans submitted to Congress contain particular information); THORSON, *supra* note 6, at 64.

¹⁰⁸ THORSON, *supra* note 6, at 64.

¹⁰⁹ Morris, *supra* note 77, at 909.

¹¹⁰ THORSON, *supra* note 6, at 64.

¹¹¹ *Id.*

¹¹² *Id.* at 64, 66.

¹¹³ FERRELL, BIG DAM ERA, *supra* note 75, at 11.

¹¹⁴ *Id.*

¹¹⁵ *Id.* at 10-11.

¹¹⁶ H.R. Doc. No. 475, *supra* note 102, at v; John P. Guhin, *The Law of the Missouri*, 30 S.D. L. REV. 346, 358 (1985).

¹¹⁷ H.R. 4485, 78th Cong., 2d Sess. (1944); THORSON, *supra* note 6, at 64.

¹¹⁸ S. Doc. No. 191, 78th Cong., 2d Sess. (1944); Guhin, *supra* note 116, at 359.

stalled in the Senate when the National Reclamation Association ("NRA") lobbied against it.¹¹⁹ The NRA backed the Sloan Plan, as did the Department of the Interior and most governors and Congresspeople from the West.¹²⁰ With deadlock appearing eminent, the MRSC and governors of the basin states issued strong appeals to President Roosevelt and Congress, asking that they encourage the Corps of Engineers and the Bureau of Reclamation to compromise and develop a single plan for comprehensive development of the Missouri River.¹²¹ Feeling pressure to reconcile their plans, the Corps and the Bureau hammered out a compromise, the so-called "Pick-Sloan Plan," in which the two agencies essentially agreed to build all the projects they had proposed.¹²² This synthesized plan was presented in Senate Document 247¹²³ and was incorporated by reference in § 9 of the Flood Control Act of 1944.¹²⁴

At the same time Congress was struggling with the Pick and

Sloan Plans, it was considering a new river and harbor bill that would authorize the Corps of Engineers to construct a permanent nine-foot-deep, 300-foot-wide navigational channel from the mouth of the Missouri River to Sioux City, Iowa.¹²⁵ Upper basin interests were concerned that the existing six-foot-deep, 200-foot-wide navigational channel might have already vested a right in lower basin states to sufficient flow to maintain the six-foot depth.¹²⁶ As a result, upper basin interests seized the Pick-Sloan compromise as an opportunity to protect their existing water interests from acquisition by lower basin states in the event the nine-foot-deep navigational channel was authorized and constructed.¹²⁷ To protect their constituents' interests, Western Congresspeople negotiated the O'Mahoney-Millikin Amendment to the Flood Control Act of 1944, which provided that water used for navigational purposes would be limited to "such use as does not conflict with any beneficial consump-

tive 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, or industrial purposes."¹²⁸ The river and harbor bill was enacted into law in 1945, and, as expected, it authorized the construction of a nine-foot by 300-foot navigational channel from the mouth of the Missouri River to Sioux City, a project known as the Missouri River Navigation and Bank Stabilization Project.¹²⁹

Both the Flood Control Act of 1944 and the River and Harbor Act of 1945 were generic legislation designed to deal with issues confronting the entire nation. Consequently, neither Act provided details regarding the implementation of the Pick-Sloan Plan. After negotiations between the Corps and the Bureau in 1949, the two agencies agreed that whichever agency constructed and subsequently maintained a particular project would retain primary responsibility for its operation with regard to all uses other than flood

¹¹⁹ THORSON, *supra* note 6, at 64.

¹²⁰ *Id.*

¹²¹ Guhin, *supra* note 116, at 362; Edward Weinberg, *The Birth Pangs of Pick-Sloan*, 1983 CONF. PROC.: THE PICK-SLOAN MISSOURI BASIN PLAN 13, 22.

¹²² THORSON, *supra* note 6, at 67. Another significant factor compelling the Corps and the Bureau to forge a compromise was the introduction of a bill that called for the creation of a Missouri Valley Authority—which would resemble the existing Tennessee Valley Authority—to oversee the development of the Missouri River basin. Guhin, *supra* note 116, at 362. After the MRSC's appeal to Congress and President Roosevelt, the President drafted a letter to Congress in which he endorsed the Missouri Valley Authority concept. *Id.* Presumably, the Corps and the Bureau realized that the creation of a Missouri Valley Authority would effectively displace both agencies in the development and operation of the Missouri River. *Id.*

¹²³ S. Doc. No. 247, 78th Cong., 2d Sess. (1944).

¹²⁴ Flood Control Act of 1944, ch. 665, § 9(a), 58 Stat. 887, 891 (1944); THORSON, *supra* note 6, at 67.

¹²⁵ H.R. 3961, 78th Cong., 2d Sess. (1944); THORSON, *supra* note 6, at 69. The nine-foot by 300-foot navigational channel was originally part of the Pick Plan, but was not incorporated into the flood-control bill. Instead, Congress included the provision in the river and harbor bill because, traditionally, authorizations for navigational channel improvements had been the province of River and Harbor legislation.

¹²⁶ THORSON, *supra* note 6, at 69.

¹²⁷ *Id.*

¹²⁸ Flood Control Act of 1944, *supra* note 124, § 1(b), 58 Stat. at 889.

¹²⁹ River and Harbor Act of 1945, ch. 19, 59 Stat. 10 (1945). The O'Mahoney-Millikin Amendment was also incorporated into the River and Harbor Act of 1945. River and Harbor Act of 1945, *supra*, § 1(b), 59 Stat. at 11.

control and irrigation.¹³⁰ In two separate subsections of the Flood Control Act of 1944, Congress appropriated \$200 million to each of the two agencies.¹³¹ Despite the evenhandedness of this initial appropriation, after the Corps closed the Sharpe Reservoir—the last of the mainstem reservoirs to be closed—in 1963, funding for new construction became scarce.¹³² The Bureau was then unable to construct a significant number of the irrigation projects authorized by the Flood Control Act of 1944.¹³³ Promises to upper basin interests rang hollow, and hostilities intensified.

In 1967, the Corps began operating all six of the mainstem reservoirs as a system.¹³⁴ Although the Fort Peck Project had originally been approved by President Roosevelt as a public-works project pursuant to the NIRA, Congress subsequently “authorized” the project by appropriating additional funds needed to complete its construction

in the River and Harbor Act of 1935.¹³⁵ Later, in the Fort Peck Power Act of 1938, Congress authorized the Corps to construct and operate hydropower facilities at the Fort Peck Project site.¹³⁶ Then, in keeping with its newly-adopted comprehensive approach to management of the Missouri River basin for multiple purposes, Congress authorized the Corps to manage the Fort Peck Dam and Reservoir for multiple purposes in the Flood Control Act of 1944.¹³⁷ Finally, Congress authorized the Corps to operate the facility as part of the system of reservoirs that would be created on the mainstem of the Missouri River after construction of the five new mainstem reservoirs authorized in the Act.¹³⁸

C. 1960s to Present:

The Interstate Dispute Matures

Over the next several decades, for a number of reasons, the Corps found itself in a constant tug of war between upper and lower

basin interests. Although some of the Bureau’s projects were eventually built, the Corps had managed to construct far more of its own projects, and, by virtue of the agreement between the Corps and Bureau regarding which agency would construct and operate the different projects, the Corps had far more operational control over the river. In particular, the Corps’ operation of the mainstem dams became a focus of debate. As evidenced by the history above, prior to construction of the mainstem reservoirs, the upper basin states fought primarily to protect their irrigation and reclamation interests. While the upper basin’s efforts for irrigation were thwarted, all was not lost. After the reservoirs were closed, the irrigation and reclamation interests shifted to a newly discovered and very significant interest: recreation. At normal pool elevation, the reservoirs covered 990 thousand acres of land with water¹³⁹ and created recreational opportuni-

¹³⁰ FERRELL, *BIG DAM ERA*, *supra* note 75, at 123; Morris, *supra* note 77, at 912. This arrangement apparently had been contemplated by the Bureau while drafting the Sloan Plan. See S. Doc. No. 191, *supra* note 118, at 11 (“The agency with primary interest in the dominant function of any feature proposed in the plan should construct and operate that feature, giving full recognition, in the design, construction, and operation, to the needs of other agencies with minor interests”). Moreover, in its comments on the Pick Plan, the Bureau stated that the “main-stem reservoirs . . . because of their peculiarly close relationship with flood control and navigation below Sioux City, should be constructed, operated and maintained by the Corps of Engineers.” H.R. Doc. No. 475, *supra* note 102, at 7. However, the Bureau did expect to retain power over “any feature [in a Corps-constructed and -operated dam and reservoir] in which the functions of irrigation, restoration of surface and groundwater levels, and power are dominant.” *Id.*

¹³¹ Flood Control Act of 1944, *supra* note 124, § 9(d) and (e), 58 Stat. at 891.

¹³² Morris, *supra* note 77, at 912.

¹³³ *Id.*

¹³⁴ The six mainstem dams and their respective reservoirs are the Fort Peck Dam and Lake, the Garrison Dam and Lake Sakakawea, the Oahe Dam and Lake, the Big Bend Dam and Lake Sharpe, the Fort Randall Dam and Lake Francis Case, and the Gavins Point Dam and Lewis and Clark Lake. See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 1-1 to 1-2.

¹³⁵ See River and Harbor Act of 1935, *supra* note 75, § 1, 49 Stat. at 1034 (1935) (calling for the “completion of improvement from mouth to Sioux City, Iowa, and construction of Fort Peck Dam”).

¹³⁶ Act of May 18, 1938, Pub. L. No. 75-529, 52 Stat. 403.

¹³⁷ This was part of the Pick-Sloan Plan incorporated into the Flood Control Act of 1944. See S. Doc. No. 247, *supra* note 123, at 2. Interestingly, the Plan called for Fort Peck to “be operated as a multiple-purpose reservoir primarily in the interest of irrigation.” *Id.*

¹³⁸ This, too, was part of the Pick-Sloan Plan. See S. Doc. No. 247, *supra* note 123, at 2.

¹³⁹ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-1.

ties the upper basin states had not fully anticipated. In part, at least, the upper basin states embraced the recreational benefits because many of the projects outlined in the Pick-Sloan Plan that had been intended to benefit upper basin interests (i.e., projects originally proposed by the Bureau in the Sloan Plan) never came to fruition. Understandably, the upper basin states believed the lower basin states and the Corps of Engineers owed them something, and they expected payback in the form of recognition of the importance of recreation to the upper basin.

Perhaps not surprisingly, the recreational interests—like the irrigation and reclamation interests they displaced—were at odds with the navigational interests of the lower basin states. Productive and useful upper basin reservoirs required stable water levels to benefit fish and wildlife and to optimize recreational opportunities,¹⁴⁰ while navigation on the lower river depended on sufficient water releases from the reservoirs to maintain certain minimum depths in the navigational channel.¹⁴¹ In times of sufficient precipitation throughout the basin, the reservoir water levels were not greatly affected, and the debate was largely

academic.

In fact, during the 1970s and early 1980s when precipitation was adequate, active debate centered not on how limited water resources should be allocated between upper and lower basin interests but on how "surpluses" of water in the reservoir could be used.¹⁴² Section 6 of the Flood Control Act of 1944 authorized the Secretary of the Army to enter into contracts for the sale of surplus water to states, political subdivisions, private concerns, and individuals.¹⁴³ Hoping to capitalize on water surpluses in the early 1980s, upper basin states seriously considered proposals to sell surplus water to various potential users. Among the proposed sales was a deal in which the State of South Dakota would sell 50,000 acre-feet of water per year for forty years from Lake Oahe in South Dakota to Energy Transportation Systems, Inc. ("ETSI").¹⁴⁴ ETSI intended to use the water to transport coal to states outside the Missouri River basin in a coal slurry pipeline.¹⁴⁵ The plan proved controversial even within South Dakota¹⁴⁶ and was hotly contested by lower basin states. Nevertheless, after the South Dakota Conservancy District issued a permit to ETSI authorizing it to use water for

the stated purpose, the Secretary of the Interior entered into a contract with ETSI which would allow ETSI to withdraw water from Lake Oahe to be used in accordance with its deal with South Dakota.¹⁴⁷ Missouri, joined by Iowa and Nebraska, filed suit in federal district court to enjoin performance of the contract.¹⁴⁸ The three lower basin states alleged that the Secretary of the Interior's actions were *ultra vires* under the terms of the Flood Control Act of 1944.¹⁴⁹ The district court found that the Secretary of the Interior neither constructed nor maintained the Oahe Dam and Reservoir as an irrigation, reclamation, or power project,¹⁵⁰ and, as a result, concluded that the Secretary had no authority to enter into contracts that authorized the withdrawal of water from Lake Oahe and entered judgment in the plaintiffs' favor, permanently enjoining performance of the contract.¹⁵¹ ETSI appealed the decision, and the Eighth Circuit Court of Appeals affirmed.¹⁵² The U.S. Supreme Court granted certiorari to review the issue, whether the Secretary of the Interior's actions were beyond the authority Congress granted the Secretary in the Flood Control Act of 1944,¹⁵³ and the Court affirmed the Eighth Circuit's decision.¹⁵⁴

¹⁴⁰ See *id.*, *supra* note 2, at 1-3.

¹⁴¹ See *id.*

¹⁴² FERRELL, BIG DAM ERA, *supra* note 75, at 147.

¹⁴³ Flood Control Act of 1944, *supra* note 124, § 6, 58 Stat. at 890.

¹⁴⁴ Missouri v. Andrews, 586 F.Supp. 1268, 1272 (D. Neb. 1984).

¹⁴⁵ *Id.*

¹⁴⁶ FERRELL, BIG DAM ERA, *supra* note 75, at 153.

¹⁴⁷ Andrews, 586 F.Supp. at 1271-72.

¹⁴⁸ See generally Andrews, 586 F.Supp. 1268.

¹⁴⁹ *Id.* at 1272.

¹⁵⁰ *Id.* at 1273-74.

¹⁵¹ *Id.* at 1280.

¹⁵² Missouri v. Andrews, 787 F.2d 270, 287 (8th Cir. 1986).

¹⁵³ ETSI Pipeline Project v. Missouri, 484 U.S. 495, 499 (1988).

¹⁵⁴ *Id.* at 517.

In its decision, the Court examined five provisions of the Flood Control Act of 1944 that it believed defined the jurisdictions of the Corps and Bureau with respect to projects authorized by and constructed pursuant to the Act.¹⁵⁵ The Court noted that Lake Oahe had been constructed, maintained, and operated by the Corps, and that according to the express terms of the Act, "such reservoirs are 'under the control of' or 'under the direction of' the Army Secretary."¹⁵⁶ Thus, the Secretary of the Interior had no power to authorize the withdrawal of water from the Oahe, or any other Corps-constructed, -maintained, and -operated reservoir.¹⁵⁷ The Court's interpretation of the Act was, perhaps inadvertently, in accordance with the 1949 "understanding" between the Corps and the Bureau in which the agencies agreed that whichever agency constructed and maintained a project pursuant to the Act would assume primary operational responsibility for the project. In a sense, the Court's decision validated the legality of that agreement and extended it to grant the Corps *exclusive* control of projects over which the Corps has assumed primary operational responsibility. More importantly, the Court's decision appeared to vest a great deal of power and responsibility to the Corps of Engineers over the management of water resources in the

Missouri River basin since the Corps constructed, maintained, and operated all six of the mainstem reservoirs as well as a significant number of projects on the river's tributaries.

In contrast to the surplus issues that had prevailed a decade before, water resources were limited between 1987 and 1992, when the basin experienced a long, incapacitating drought.¹⁵⁸ The drought aroused passions about the management of the river and fueled the dispute between upper and lower basin states. Suddenly, the debate over limited water resources was more than academic. The issues were very real.

The Corps of Engineers' management practices were at the heart of the dispute. Not surprisingly, the upper basin states fought hard to curtail the amount of water being released from the reservoirs for downstream navigational purposes. And, as expected, lower basin states demanded that the Corps operate the mainstem reservoir system to maintain navigation. The Corps asserted, however, that it had very little discretion to choose between the various interests because its drought management practices were governed by its Missouri River Mainstem Reservoir System, Reservoir Regulation Manual, Master Manual ("Master Manual"), which established the priorities for man-

agement of the river during periods of drought. Because navigation was among the priorities declared in the Master Manual, the Corps released sufficient water to maintain navigation for as much of the regular navigation season as possible.¹⁵⁹ As a result, reservoir water levels dropped to their lowest points since the system had begun operating in 1967.¹⁶⁰ Faced with basin-wide backlash for its drought management practices, the Corps responded by initiating a review of the Master Manual.¹⁶¹

As a general matter, the Master Manual guides the Corps' operation of the mainstem system on the Missouri River.¹⁶² The Corps first prepared the manual in 1960 and subsequently revised it in 1973, 1975, and 1979.¹⁶³ The Master Manual describes the Corps' operating philosophy and outlines basic objectives for "optimum fulfillment" of the goals for the mainstem dams and reservoirs.¹⁶⁴ Day-to-day operations of the system are governed by the Corps' Annual Operating Plan, which is based on the guidelines set forth in the Master Manual.

Early in the drought, various river interests attacked the Corps' operational guidelines as set out in the Master Manual, and, in November 1989, the Corps began reevaluating the Master Manual.¹⁶⁵ Since that time, the Corps has been

¹⁵⁵ *Id.* at 503-05.

¹⁵⁶ *Id.* at 505.

¹⁵⁷ *Id.*

¹⁵⁸ See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 1-3.

¹⁵⁹ *Id.* During the drought, the navigation seasons were, in fact, shorter than normal. *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.* at 1-1.

¹⁶³ *Id.*

¹⁶⁴ MASTER MANUAL, *supra* note 9, at 1-1.

¹⁶⁵ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 1-3.

engaged in a study to review and update the Master Manual and to select a preferred alternative to replace the current Master Manual.¹⁶⁶ Although this author believes that criticism during the drought was the primary reason for the Corps' initiating its review of the Master Manual, the Corps emphasized several factors in addition to the drought as influencing its decision.¹⁶⁷ Primarily, the Corps asserted that changed circumstances—in particular, changes in public attitudes toward and increased awareness of the "importance of recreation and the environment"—since the implementation of the original Master Manual motivated it to commence the study to reconsider its regulations.¹⁶⁸ In its study, the Corps has sought to [s]olicit input from interested parties and determine public concerns/issues; [i]dentify alternatives to the current Water Control Plan; [e]stablish a basis for identifying the plan that best meets the wide variety of contemporary needs served by the Mainstem System; [e]valuate social, economic, and environmental impacts of existing and alternative plans; [a]ddress legal constraints on changes to operations; [o]btain the input of the basin States' governors, the Indian tribes, and other interested parties; [i]dentify the best plan for operating the Mainstem System; and [e]xpeditate the process to allow early implementation of recommended operational changes,

¹⁶⁶ *Id.* at 1-3 to 1-4.

¹⁶⁷ *Id.* at 1-3.

¹⁶⁸ *Id.* Others have recognized changes in circumstances concerning demands for and issues surrounding water in the Missouri River basin. See, e.g., Warren Viessman, Jr., *Changing Water Needs and Issues in the Missouri River Basin*, 1983 CONF. PROC.: THE PICK-SLOAN MISSOURI BASIN PLAN 54.

¹⁶⁹ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 1-3 to 1-4.

¹⁷⁰ *Id.* at 1-5.

¹⁷¹ *Id.*

¹⁷² For more thorough treatment, see UNIVERSITY OF MO. - COLUMBIA SCHOOL OF LAW, MISSOURI RIVER FLOOD PLAIN LEGAL AND INSTITUTIONAL FRAMEWORK STUDY (1981); Guhin, *supra* note 116; Gene Olson, *The O'Mahoney-Milliken Amendments: The West Sinks the Navigation Power*, 65 N.D. L. REV. 91 (1989).

if existing constraints will allow.¹⁶⁹

After completing several phases of the study, the Corps identified a number of public concerns regarding the operation of the mainstem system.¹⁷⁰ Considering the foregoing history of the river, it was no surprise that flood control, navigation, and recreation were among the interests most ardently advocated. Other predominant concerns included the practice of sacrificing other beneficial uses to meet hydropower demands; maintaining minimum flows in dam tailwaters; effects of operations on the national, regional, and local economies; shoreline erosion on the reservoirs; fish and wildlife, especially endangered species; wetlands; effects of releases on lower channel configuration (because channel configuration affects navigation, fish and wildlife habitat, wetlands, etc.); lower river icing (because icing affects domestic and industrial water supplies, channel configuration, fish and wildlife habitat, flooding, etc.); public safety; water supplies (both in the reservoirs and along the river); and water quality.¹⁷¹ As may be seen, many concerns are interrelated, which contributes to the Corps' problem of developing a universally satisfactory management plan.

The Corps has not completed its study, but it has made significant progress toward selecting an alternative water control plan. The Corps' review and update study has

presented many groups with an opportunity to urge the Corps to adopt a plan that will protect their interests. This has included many interest groups that heretofore have not been particularly active in the interstate dispute. Missouri's interest groups are no exception. While certain Missouri interest groups, most notably navigational and agricultural groups, have traditionally dominated Missouri's voice in the interstate dispute, theirs are not the only interests promoted by Missouri citizens. In fact, many groups in Missouri are opposed to the traditional navigational interests the State of Missouri has advocated the past several decades. These conflicting interests will be developed more fully below. At this point, it is sufficient to understand that the foregoing history of river development and interstate dispute is the stage on which Missouri's intrastate dispute has and will be played out.

III. LEGAL AND OPERATIONAL CONSIDERATIONS

An already complex problem has been further complicated by the entanglement of legal issues surrounding it. Although a complete analysis of the legal framework surrounding the development and management of the Missouri River is not warranted by this Comment,¹⁷² there are a few legal particulars worthy of brief discussion. These include the limitations on state and local gov-

ernments with respect to federal navigable waters and the restraints imposed upon the Army Corps of Engineers in its management and operation of the Missouri River.

A. Limitations on State and Local Governments

Under the Supremacy Clause of the federal Constitution, the rights and powers of state and local governments are limited by the federal government's power with respect to federally navigable waters.¹⁷³ In *Gibbons v. Ogden*,¹⁷⁴ the Supreme Court affirmed Congress' power to directly regulate navigation on navigable waters pursuant to its power to regulate interstate commerce. Since *Gibbons*, the Supreme Court has spent considerable time delineating Congress' so-called "navigation" power over navigable waters. The Court has defined navigable waters to include all interstate waterways that have been used for

commercial interstate navigation in the past;¹⁷⁵ those that could have been used for commercial interstate navigation in the past had reasonable improvements been made (whether or not they could presently be made);¹⁷⁶ those that are presently being used for commercial interstate navigation;¹⁷⁷ those that are presently capable of being used for commercial interstate navigation if reasonable improvements are made;¹⁷⁸ and those that otherwise could be used for commercial interstate navigation in the future.¹⁷⁹ In addition, Congress can regulate activities on non-navigable tributaries if those activities adversely impact the navigable capacity of navigable waters¹⁸⁰ or otherwise affect interstate commerce.¹⁸¹ Congress' navigation power includes the authority to exercise control over both navigable and nonnavigable waters for purposes of navigation.¹⁸² As a result,

Congress may authorize construction of projects designed to enhance navigation.¹⁸³ Likewise, it is within Congress' power to authorize construction of projects that will obstruct navigation.¹⁸⁴ This is true even if the project will effectively destroy the navigable nature of a waterway.¹⁸⁵ When confronted with Congressional authorizations of multiple-purpose projects, the Supreme Court held that so long as navigation was one of the purposes for a project—essentially, no matter how trivial—such projects were valid exercises of Congress' navigation power.¹⁸⁶

One particularly significant derivation from the navigation power has been the navigation servitude, which the Supreme Court first formally recognized in *Gibson v. United States*.¹⁸⁷ Briefly stated, the navigation servitude permits the federal government to impair or in-

¹⁷³ U.S. CONST. art. VI.

¹⁷⁴ 22 U.S. 1 (1824).

¹⁷⁵ *Economy Light & Power Co. v. United States*, 256 U.S. 113 (1921).

¹⁷⁶ *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940).

¹⁷⁷ *The Daniel Ball*, 77 U.S. 557 (1871); *Appalachian Elec.*, 311 U.S. 377.

¹⁷⁸ *The Montello*, 87 U.S. 430 (1874); *Appalachian Elec.*, 311 U.S. 377.

¹⁷⁹ *Appalachian Elec.*, 311 U.S. 377.

¹⁸⁰ *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899). This is a proper exercise of Congress' navigation power. *See id.*

¹⁸¹ *FPC v. Union Elec. Co.*, 381 U.S. 90 (1965). This is not an exercise of Congress' navigation power but of its power to regulate interstate commerce generally. *See id.*

¹⁸² *Gilman v. Philadelphia*, 70 U.S. 713 (1865); *Oklahoma ex rel Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941) (holding that Congress can exercise control over nonnavigable waters in order to improve the navigable capacities of navigable waters).

¹⁸³ *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53 (1913).

¹⁸⁴ *South Carolina v. Georgia*, 93 U.S. 4 (1876).

¹⁸⁵ *See id.*

¹⁸⁶ *Arizona v. California*, 283 U.S. 423 (1931). Furthermore, Congress' designation of a project as a navigation improvement enjoys a presumption that Congress is making a valid exercise of its navigation power. *See United States v. Twin City Power Co.*, 350 U.S. 222 (1956); *United States v. Grand River Dam Auth.*, 363 U.S. 229 (1960).

¹⁸⁷ 166 U.S. 269 (1897). Although the navigation servitude is a derivative of Congress' navigation power, the two are not coextensive in application. The navigation power extends to all navigable waters as well as nonnavigable tributaries on which activity may impact the navigable capacity of navigable waters, but the navigation servitude generally does not extend to nonnavigable waters. *See United States v. Cress*, 243 U.S. 316 (1917); *United States ex rel TVA v. Powelson*, 319 U.S. 266 (1943), *remanded* 138 F.2d 343 (4th Cir. 1943), *cert. denied* 321 U.S. 773 (1944); *United States v. Kansas City Life Ins. Co.*, 339 U.S. 799 (1950). *But see United States v. Grand River Dam Auth.*, 363 U.S. 229 (1960) (overruled in part by the River and Harbor Act of 1970, § 111, Pub. L. No. 91-611, 84 Stat. 1818, 1821 (1970)).

terfere with private property rights in the water of and land riparian to navigable waterways without incurring liability for compensation under the Fifth Amendment to the U.S. Constitution. Essentially, the federal government's navigation power vests the federal government with dominant rights in the water of and the land riparian to navigable waters. These federal rights constitute a servitude on private owners' titles to the land and water. Thus, federal activities that impair or interfere with certain private property rights traditionally regarded as Constitutionally protected are not necessarily protected if the government's activities are valid exercises of the federal government's navigation power over navigable waterways. For example, the Supreme Court has refused to order compensation when the federal government has destroyed access to navigable waterways,¹⁸⁸ when it has required bridge owners to change the elevations of bridges,¹⁸⁹ when it has constructed or ordered abatement of structures on the beds of navigable waters,¹⁹⁰ and when it has destroyed oyster beds.¹⁹¹ Most importantly, for purposes of this Comment, the Supreme Court has specifically held that the

federal government is not required to pay compensation when it destroys state-created water rights in navigable waters.¹⁹² Consequently, state water rights in navigable waters are subservient to the federal government's power over navigable waters.

By virtue of the Supremacy Clause,¹⁹³ Congress' commerce and navigation powers effectively trump state and local attempts to regulate navigable waters or commerce thereon. Because the Missouri River is a navigable waterway under the test set out above,¹⁹⁴ the federal government effectively controls the river and a significant number of its tributaries. This control forces states to work with the federal government in order to protect their interests in navigable waterways.

B. Restraints on the Army Corps of Engineers

In the Flood Control Act of 1944, Congress authorized construction of the projects proposed in the Pick-Sloan Plan by making reference to Senate Document 247, which embodied the Corps/Bureau compromise.¹⁹⁵ Most significantly, for purposes of this Comment, the Pick-Sloan Plan called for the construction of five new mainstem dams

and reservoirs on the Missouri River and directed that the existing Fort Peck facility be operated in conjunction with the five new projects after they were constructed.¹⁹⁶ The Act declared a number of Congressional policies, two of which are particularly pertinent to this Comment:

[I]t is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control, as herein authorized to preserve and protect to the fullest possible extent established and potential uses, for all purposes, of the waters of the Nation's rivers; [and] to facilitate the consideration of projects on a basis of comprehensive and coordinated development.¹⁹⁷

This passage evinces, first, Congress' desire to establish a comprehensive plan for the development of the nation's water resources and, second, its intent to respect the

¹⁸⁸ See *Gibson v. United States*, 166 U.S. 269 (1897); *Scranton v. Wheeler*, 179 U.S. 141 (1900); *United States v. Commodore Park, Inc.*, 324 U.S. 386 (1945).

¹⁸⁹ See *Union Bridge Co. v. United States*, 204 U.S. 364 (1907); *Hannibal Bridge Co. v. United States*, 221 U.S. 194 (1911); *Louisville Bridge Co. v. United States*, 242 U.S. 409 (1917).

¹⁹⁰ See *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53 (1913); *United States v. Chicago, M., St. P. & P. R. Co.*, 312 U.S. 592 (1941). *But see Monongahela Nav. Co. v. United States*, 148 U.S. 312 (1893); *United States v. Bellingham Bay Boom Co.*, 176 U.S. 211 (1900) (both holding that compensation will be ordered unless Congress' authorization of the obstruction is express and unqualified). See also *Lewis Blue Point Oyster Cultivation Co. v. Briggs*, 229 U.S. 82 (1913).

¹⁹¹ *Briggs*, 229 U.S. 82 (1913).

¹⁹² *Chandler-Dunbar Water Power Co.*, 229 U.S. 53 (1913).

¹⁹³ U.S. CONST. art. VI.

¹⁹⁴ See *Appalachian Elec.*, 311 U.S. 377; see also *supra* text accompanying notes 175-179.

¹⁹⁵ See *supra* notes 123-24.

¹⁹⁶ S. Doc. No. 247, *supra* note 123, at 2-3.

¹⁹⁷ Flood Control Act of 1944, *supra* note 124, § 1, 58 Stat. at 888.

states' rights and interests in water resources within their borders. The Pick-Sloan Plan clearly envisioned construction of numerous multiple-use projects that would be operated to achieve "maximum benefits for flood control, irrigation, navigation, power, domestic and sanitary purposes, wildlife, and recreation."¹⁹⁸ The Flood Control Act, in contrast, did not expressly state all its purposes, although it clearly designated flood control, navigation, and irrigation as its principal purposes.¹⁹⁹ Equally apparent, however, is that the Act's purposes are not limited to just flood control, navigation, and irrigation. In Section 4, for example, the Act authorizes the Corps of Engineers "to construct, maintain, and operate public park and recreational facilities in reservoir areas under the control of the War Department."²⁰⁰ This provision strongly suggests that development of recreational opportunities was also an intended purpose of the Act. However, it is unclear whether Congress' referential incorporation of the Pick-Sloan Plan in the Flood Control Act of 1944 effectively incorporated the purposes stated in the Pick-Sloan Plan with respect to the projects therein out-

lined. Regardless, the Corps of Engineers has essentially adopted the purposes advanced in the Pick-Sloan Plan for its operation and management of the Missouri River Mainstem Reservoir System.²⁰¹ In a sense, the recognition of these multiple purposes limits the Corps' ability to manage the mainstem system freely. Because all of the mainstem projects were designated as multi-purpose facilities, it would appear to violate the Act for the Corps to manage the system to the exclusion of any of the identified purposes, particularly if one believes the Flood Control Act of 1944 did, in fact, incorporate the purposes expressed in the Pick-Sloan Plan. If correct, this limitation is significant because it obligates the Corps to accommodate—to some extent, at least—the competing interests associated with each of those purposes.

It is also significant that Congress declared a policy of giving consideration to states' rights and interests because it forces the Corps, at least perfunctorily, to consult the states affected by its management and operation of the Missouri River and to consider the impacts of its operations on states'

rights and interests.²⁰² Such an unequivocal expression of Congressional policy might be construed as a mandate. Thus, the Corps likely cannot refuse to consider the rights and interests of or to involve states in the planning and decision-making process regarding management of the river. Generally, the Corps has consulted with and accepted the involvement of the affected states in its planning and management of the Missouri River,²⁰³ but it is worth noting that it cannot now choose to disregard the various states' rights and interests in that process.

Furthermore, the Corps' management of the mainstem reservoir system is limited by other federal laws, such as the National Environmental Policy Act ("NEPA")²⁰⁴ and the Endangered Species Act ("ESA").²⁰⁵ An extensive discussion of all federal laws limiting the Corps' ability to freely operate the system, however, is beyond the scope of this Comment. It suffices here to recognize that the Corps does not enjoy unfettered discretion in its management of the Missouri River.

¹⁹⁸ S. Doc. No. 247, *supra* note 123, at 5.

¹⁹⁹ See Flood Control Act of 1944, *supra* note 124, § 1, 58 Stat. at 887-89.

²⁰⁰ *Id.* at § 4, 58 Stat. at 889-90.

²⁰¹ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 1-1 ("These projects were constructed and are operated and maintained by the U.S. Army Corps of Engineers . . . on the Missouri River for flood control, navigation, irrigation, hydro-power, water supply, water quality control, recreation, and fish and wildlife."). This is particularly significant since courts generally give deference to an administering agency's interpretation of a statute. See, e.g., *United States v. Alaska*, 503 U.S. 569 (1992); *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985); *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984).

²⁰² See Flood Control Act of 1944, *supra* note 124, § 1(a), 58 Stat. at 888 (mandating that the Corps share certain information regarding all future plans and/or proposed projects with the states that would be affected thereby and give those states an "opportunity for consultation" with respect to such future plans and proposed projects; the provision does not apply to works authorized by the Act but to all future "plans, proposals, or reports" that the Corps submits to Congress).

²⁰³ Note, the Corps maintains all decision-making authority, but it gives states the opportunity to participate in the process.

²⁰⁴ National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1969).

²⁰⁵ Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 884 (1973).

IV. MISSOURI'S INTERESTS IN THE MISSOURI RIVER

As a State, Missouri is divided by various interest groups promoting different, and to some extent, conflicting interests in the management of the Missouri River.²⁰⁶ The principal interests asserted by these groups are flood control, navigation, fish and wildlife, recreation, and domestic and industrial water supply (including water quality). With such a wide range of concerns, perhaps not surprisingly, Missouri has not uniformly advocated any particular interests in the interstate river management dispute. While certain interest groups have dominated Missouri's voice in the interstate dispute, other groups have also sought to participate, though generally assuming limited roles and acting almost as independent parties to the Missouri River dispute rather than representatives of the people of the State of Missouri. This section will outline the different interests asserted by groups in Missouri.

As history of the Missouri River reveals, Missouri, like most lower basin states, has traditionally

asserted flood control and navigation as its predominant interests. The proponents of flood control were, to a large extent, ultimately satisfied by the passage of the Flood Control Act of 1944. Although the Missouri River basin has been devastated by a number of floods since the closing of the six mainstem dams, the Corps estimates that flood-control measures prevented some \$7 billion worth of flood damage between 1937 and 1993.²⁰⁷ At the time the flood-control projects were constructed, there were some questions whether the savings would ultimately be substantial enough to justify the costs, but such questions have now largely been dispelled. The Corps estimates that in an average year, flood-control projects prevent approximately \$44 million worth of damage, but the annual cost of maintaining and operating those projects amounts to only \$4.4 million.²⁰⁸ In addition, the costs of constructing, maintaining, and operating flood-control projects have been offset by other benefits conferred by the system, such as hydropower production and recreational opportuni-

ties.²⁰⁹ In this respect, the Pick-Sloan Plan has been tremendously successful.²¹⁰

In contrast, Missouri's navigation proponents continue to battle for their interests in Missouri River management as the constant minimum flows needed to support navigation are continually threatened by upper basin interests. Navigation has been the traditional and most prominent interest asserted by groups in Missouri, and agricultural groups have been most notable in backing those navigation rights. Missouri's farming interest in navigation dates back to the late 1800s when railroads were ineffectively meeting shipping needs for crops (as detailed previously in the history section of this Comment) and continues today. Acting predominantly on behalf of the agricultural interests, Missouri's state government officials and federal legislators have been, and still are, the biggest voices in advocating navigation in the interstate and intrastate river management disputes.²¹¹

While navigation interests have traditionally been most promi-

²⁰⁶ See, e.g., Tom Uhlenbrock, *Missouri River's Fortunes; Focus on a Fish Proposal to Manipulate Level Triggers Economic, Environmental Debates*, ST. LOUIS POST-DISPATCH, Jan. 2, 1995, at 01A (Missouri Department of Conservation and Missouri Attorney General's Office at odds over the Corps' proposed management of the river).

²⁰⁷ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-62. In 1993, alone, the Corps estimates that flood-control projects prevented \$4.1 billion in damage. *Id.*

²⁰⁸ U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER MASTER WATER CONTROL MANUAL REVIEW AND UPDATE STUDY, DRAFT ENVIRONMENTAL IMPACT STATEMENT, EXECUTIVE SUMMARY 11 (1994) [hereinafter MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY]; see also MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-6.

²⁰⁹ For example, based on the Corps' estimates, average annual hydropower production yields a net benefit of approximately \$598 million. See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-6 (stating that between 1988 and 1992, the average annual maintenance and operational costs for power production on the mainstem Missouri River were \$22.2 million); MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY, *supra* note 208, at 13 (stating that "long-term average hydropower benefits are valued at \$620 million per year" on the mainstem Missouri River).

²¹⁰ See George S. Mickelson, *My View of the Missouri River*, 36 S.D. L. REV. 1, 3-4 (1991).

²¹¹ See, e.g., Scott Canon, *Argument Over River Heats Up*, THE KAN. CITY STAR, Mar. 13, 1996, at C4 (Governor Mel Carnahan and Attorney General Jay Nixon); Judith Vandewater, *River Plan All Wet, Say Missouri Officials, Farmers*, ST. LOUIS POST-DISPATCH, Oct. 3, 1994, at 01A (Senators Christopher Bond and John Danforth; Governor Mel Carnahan; and David Shorr, then-Director of the Missouri Department of Natural Resources); Julie Anderson, *Federal Court Asked to Ensure Longer Barge Season on River*, THE OMAHA WORLD-HERALD, Jul. 31, 1992, at 13SF (Attorney General William Webster). Note, this is not an exhaustive list.

nently advocated, some Missouri interest groups have argued for fish and wildlife and recreational interests, specifically that the Missouri River system be managed to produce wildlife and environmental benefits and recreational opportunities. As previously indicated, the Corps is now required to consider the impacts of its operations on the environment and wildlife by virtue of federal laws like NEPA and ESA. Environmental groups as well as state and federal agencies have urged the Corps to reevaluate its operations, giving greater consideration to the welfare of wildlife and the environment. Some of these groups promote that the river be managed in a manner that would recreate the river's historical, natural hydrograph, particularly with regard to recreating the "spring pulse" that naturally accompanied spring rain and snow-melt runoff.²¹² Biologists believe these spring rises create essential habitat for fish spawning and foraging.²¹³ Ideally, the elevated water levels would cover some portion of the flood plain and facilitate a nutrient exchange between the flood waters and the soil of the flood plain. Proposals to restore the spring pulse have met with controversy because many people believe the existing levees would restrict the spring pulse to a narrow, deep course and compromise the benefits historically produced. Furthermore, opponents contend that management of the river for a spring pulse could detrimentally impact upper basin reser-

voir levels as well as reduce the volume of water available for lower basin navigation during the drier summer months.

Many environmental groups and government agencies would also like to restore the river, to some extent at least, to its pre-channelization state, with a complex of backwaters, chutes, sloughs, oxbows, sandbars, and islands.²¹⁴ Where they exist, these areas, which were once abundant along the entirety of the Missouri River, provide unique wetland and riparian habitat for various aquatic and non-aquatic plant and animal species. Proponents assert that these areas provide flood-control (e.g., acting as a horizontal buffer zone for flood waters) and sediment-trapping benefits and help to decelerate the rate of degradation of the channel.²¹⁵ Channel degradation is the lowering of the river's bed via erosive forces and is responsible for lowering the river's water levels and the flood plain's water table.²¹⁶ This, in turn, reduces wetland and riparian habitat.²¹⁷ In general, advocates of environmental restoration along the river believe such restoration and development will create additional recreational opportunities, enhance the value of fish and wildlife resources, and restore to the river more intangible values, such as aesthetics.

Relatively minor players in the intrastate dispute over river management, and the last to be examined in this section, include those groups interested in domestic and

industrial water supply. This is an important issue because the Missouri River supplies many Missouri communities with their domestic and industrial water needs.²¹⁸ As yet, however, those interested in protecting Missouri's water supplies have not emerged as a major interest group in the Missouri River dispute because water supplies have not been seriously jeopardized by low flows in the river. The ample supply of water has resulted, in great part, from Missouri's highly successful advocacy of navigation rights, which generally provides sufficient water flows for both navigation and domestic and industrial uses. Nonetheless, if flow in the Missouri River were ever reduced to such a degree that Missouri water supplies were jeopardized, this group could become a significant player in both the intrastate and interstate dispute.

While the interstate dispute continues to rage over management protocol of the river, Missouri faces its own intrastate divisions in river interests. Flood control, a historical and longtime interest, now fades in importance among Missouri groups, as improvements in river management have, overall, successfully curtailed flood damage. Navigation interests, bolstered by a tremendously strong Missouri agricultural lobby, continue to garner federal, state, and local governmental support in their efforts to cultivate river management policy. Interests supporting the further development

²¹² See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 5-9 to 5-10.

²¹³ See Larry W. Hesse & Gerald E. McStl, *An Alternative Hydrograph for the Missouri River Based on the Precontrol Condition*, 13 N. AM. J. FISHERIES MGMT. 360 (1993).

²¹⁴ See Hesse, *supra* note 14.

²¹⁵ See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-41.

²¹⁶ See *id.*; Schneiders, *supra* note 26, at 348-49.

²¹⁷ See MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-41.

²¹⁸ See *Id.* at 3-73.

of wildlife and recreation opportunities face a great foe among navigation groups. Finally, interests focused on domestic and industrial water supply have enjoyed benefits, with little effort, basically on the coattails of navigation proponents. The dominant player in Missouri's intrastate river management dispute lies with the navigation interests, as the other groups are not as powerful, political, or well organized to exert as much policy-making force. Nonetheless, navigation's dominance as Missouri's primary interest is not necessarily indicative of its actual value to Missouri or of its importance to the people of Missouri.

V. COMMENT

To begin, it is important to understand this author's characterization of the ultimate goal for management of the Missouri River: to develop a multiple-use management plan that maximizes benefits for the public at large and as many interest groups as possible. As evidenced by the history of dispute among the states of the Missouri River basin, this will not be easily accomplished, if at all. One particularly troubling aspect of this problem is that different management practices generally yield differential and unequal regional benefits. This is the dilemma vexing states within the Missouri River basin. The general perception among the states is that management practices that benefit other regions within the basin necessarily translate into reduced benefits for themselves. The net effect of this attitude has been that none of the parties to the dispute are focused on maximizing overall benefits to the basin, which would require the mainstem system

to be managed to accommodate a balance of multiple uses and interests that would produce the greatest combined return to all interested parties. Although the Corps has attempted to find workable compromises, its primary focus has been on satisfying various interest groups, rather than maximizing benefits to the basin. This approach presents two problems. First, interest groups are generally preoccupied with maximizing benefits for themselves and fail to adequately calculate or consider the opportunity costs associated with management plans they promote. Second, those groups actively advocating their interests do not represent all the interests involved. In this context, interest groups are generally associations of interested individuals who stand to receive sufficient (and usually concentrated) benefits, or those who feel strongly enough about a particular issue to organize and participate in the dispute. As a result, it is unlikely that the Corps' current approach will ever maximize benefits to the basin as a whole. Because the Corps is vested with primary responsibility for managing the Missouri River, if the Corps does not seek to maximize overall benefits to the basin, it will never be accomplished.

Even if basin-wide reconciliation is never achieved, the ultimate goal of maximizing benefits can and should be adopted at the state level. That is, each basin state should urge the Corps to implement a multiple-purpose management plan that would produce maximum benefits for its state. To that end, the State of Missouri should examine its population's interests in the Missouri River and assess the benefits associated with each. In this

way, the State could determine which interests should be promoted so as to maximize benefits to the people of Missouri. Ultimately, the State must encourage the Corps to adopt a management plan that will maximize benefits to Missouri. While it is unrealistic to expect the Corps to manage the river in a manner that maximizes benefits for Missouri, advocating more valuable interests gives the Corps greater incentive to accommodate at least some of Missouri's interests. In a sense, it then becomes a matter of maximizing Missouri's benefits within the constraints of the Corps' operation. By fully considering all the interests of its people and advancing a combination of those interests that would maximize the river's benefits to the state, Missouri would strengthen its bargaining power in the interstate dispute. The more valuable the interests Missouri identifies and asserts, the stronger its argument will be.

A true commitment to maximizing benefits requires that Missouri go beyond merely accommodating all of its competing interests.²¹⁹ Individuals with competing and conflicting interests have concurrently used the Missouri River for nearly two centuries, so there can be no doubt that, to some extent, these uses may coexist. The issue is not whether the parties involved can find ways for their different uses and interests to coexist but how the river should be managed to maximize benefits for the people of Missouri. This cannot be accomplished if less beneficial uses are accommodated at the expense of more beneficial uses. Thus, it is important to compare the actual benefits of different uses in order to determine which

²¹⁹ Such proposals are not uncommon. See, e.g., *Bond Introduces River Protection Initiative*, Fed. Document Clearing House, Nov. 10, 1997, available in Westlaw, 1997 WL 12104672 (stating that Missouri's conflicting uses of the Missouri River "are not mutually exclusive" and proposing a program to better accommodate such interests).

should be encouraged and protected. Traditionally, the values of different interests are compared according to their economic benefits. At present, however, assessments of economic benefits of interests in the Missouri River are, in many respects, inadequate.

In addition, it is very difficult to assess economic values of interests when, in reality, there may be none, as is often the case with interests in natural resources. For example, many people value or have an interest in the aesthetics of the natural world,²²⁰ but translating aesthetic value into economic terms is impracticable. Unless people have the opportunity and are willing to spend money to enjoy a particular benefit, it has no *economic* value. Even so, that does not mean the benefit has no value whatsoever. For example, there is little doubt that many people would intrinsically value the appearance of the Missouri River as it existed before the Army Corps of Engineers endeavored to channelize it. However, little or no economic value lay in the appearance of the river as it existed prior to channelization. That is, people did not spend substantial sums of money in order to enjoy the benefit of its appearance. On the contrary, the United States spent millions of dollars to alter it. Little doubt exists, however, that the river's appearance was, and perhaps still is, valuable to people on some level. The point is simply that not all values surrounding the Missouri River can easily be converted into economic terms. Despite the difficulty of assigning price tags to intangible ben-

efits, they are, nonetheless, important values to consider when seeking to maximize benefits.

Bearing in mind the concept of maximizing benefits to the state, as hereinabove described, Missouri's predominant and longstanding devotion to navigation as its primary interest deserves reconsideration. Although navigation on the Missouri River has undoubtedly benefited Missouri, the extent of its benefit is debatable. Advocacy of navigation made sense in the late 1800s and early 1900s when railroads were the only real alternative for transportation of bulk goods. At the time, railroads were not only monopolistic, they were unable to transport the quantities of goods required of them. Today, however, railroads are not the only alternative form of transportation; transporting goods via tractor-trailer is now commonplace. Granted that long-distance, tractor-trailer transport is neither the most economical nor the most suitable form of transportation for many goods, it is important to realize that the entire system of transportation is different today. That is, despite the shortcomings of long-distance, tractor-trailer transport, such transport is necessary to some extent. For example, trucks and tractor-trailers often transport goods not to their ultimate destination, but to an intermediate destination at which the goods are transferred to a more economical form of long-distance transport, such as railroads or river barges. Missouri asserts that barge traffic on the Missouri River is essential to its agricultural interests, but the persuasiveness of this asser-

tion is diminished by the fact that Missouri enjoys the benefits of navigation on the Mississippi River as well. It is entirely conceivable that many goods currently transported on the Missouri could, instead, be transported by tractor-trailer or train to the Mississippi River where the goods could then be transferred to barges. Of all the lower basin states that enjoy benefits of navigation on the Missouri River, Missouri (along with Iowa) seems to be in the weakest position to so strongly assert interest in Missouri River navigation because of the availability of navigation on the Mississippi River.

Another factor abating Missouri's continued assertion of the importance of navigation is the fact that not all goods are destined for locales which can be reached by river. Thus, it is necessary that other modes of transportation be employed, and, in fact, other forms of transportation are already being utilized.²²¹ This fact also weakens the argument that navigation is essential to transportation of goods to or from the State of Missouri. A reduction in navigation would simply require that some of the goods currently transported by river be shifted to other forms of transportation.

Some proponents of navigation argue that the navigation industry is of great economic importance to Missouri, and, if the industry were weakened or eliminated, Missouri would lose jobs and experience higher transportation costs as well as sacrifice other economic benefits.²²² Based on the Corps' estimates of the value of navigation on the Missouri River, this seems un-

²²⁰ See John L. Funk & C.E. Ruhr, *Stream Channelization in the Midwest*, STREAM CHANNELIZATION: A SYMPOSIUM 5, 6 (1971).

²²¹ See, e.g., Michael Mansur, *Concern Voiced for River*, THE KAN. CITY STAR, Apr. 16, 1997, at A1 (manager of the American Commercial Marine Service Company terminal in Omaha admitting that "his company now ships by truck and rail as well as the river").

²²² See MISSOURI DEP'T OF AGRIC. AND UNIV. OF MO.-COLUMBIA, THE IMPACT TO MISSOURI AGRICULTURE OF REDUCED WATERFLOW ON THE MISSOURI RIVER (1991) [hereinafter MISSOURI DEP'T OF AGRIC. AND UNIV. OF MO.].

likely, but, even if true, such negative impacts would be mitigated in several ways. First, shifting Missouri's shipping needs to alternative forms of transportation would create new jobs, displacing those lost in the navigation industry. Moreover, if other economic-benefit-producing interests were promoted above navigation, they would almost undoubtedly create new jobs as well. Second, the navigation industry would continue to operate along the Mississippi River, providing river transportation for goods and opportunities for employment in the industry. Finally, this Comment does not suggest that navigation should necessarily be eliminated along the Missouri River. In fact, as previously discussed, the Corps of Engineers, presumably, cannot manage the river to the exclusion of any of the hereinbefore-mentioned purposes, including navigation.²²³ But to the extent more beneficial uses are presently sacrificed in order to accommodate navigation, Missouri should seek to promote the more valuable uses and accept any consequent reduction in navigation.

In essence, Congressional funding of navigational projects is a subsidy to navigational and agricultural interests, as evidenced by the agricultural industry's tremendous support for navigational interests.²²⁴ For each year during the five-

year period of 1988 to 1992, the Corps estimated that \$7.1 million was spent to maintain navigational improvements on the Missouri River.²²⁵ But the subsidy to navigational and agricultural interests actually has a greater price than the \$7.1 million spent per annum to maintain navigation. Proponents of navigation fail to accurately calculate the opportunity cost of navigation, which includes not only the amount spent to support navigation but the value of any benefits foregone as a result of accommodating navigation. Thus, to accurately assess the costs of navigation, one must add to the \$7.1 million spent each year to operate and maintain the river for navigation the value of lost wildlife habitat, associated decreases in fish and wildlife benefits, decreased recreational opportunities, as well as reductions in intangible benefits (e.g., aesthetics), the values of which, as already discussed, may be difficult to assess. It is this author's opinion that, if a realistic opportunity cost were calculated, the price would far outweigh the benefits of navigation on the Missouri River, even within Missouri.

Navigation on the Missouri River peaked in 1977, at approximately 3.3 million tons of commerce, after which it declined and leveled out at about half that rate, at approximately 1.5 million tons of commerce,

where it still remains.²²⁶ The Corps of Engineers now estimates that navigation on the Missouri River is an \$18-million-a-year industry.²²⁷ No increase in navigational revenues is presently anticipated,²²⁸ and the Corps estimates that Missouri is currently receiving maximum attainable economic benefits from navigation with \$6.2 million in revenues per year.²²⁹ The Corps estimates maximum attainable economic values as those benefits that can be achieved for a specific use by varying the operation and management of the river system under present conditions. As a general matter, this author does not find the Corps' "maximums," which it estimates for navigation, flood control, hydropower, recreation, and water supplies in its Master Manual Review and Update,²³⁰ particularly compelling because they are based on the current conditions of the system and not on what might be achieved with new or additional planning and development. In this respect, navigation certainly has an advantage in the calculation of maximum attainable economic benefits. For well over 100 years, navigation has consistently been one of the driving purposes for development of the Missouri River basin, and virtually the entirety of the mainstem river has been altered in some way to advance it. These improvements have

²²³ Note, however, that prohibiting the Corps from managing the river to the exclusion of navigation does not ensure that navigation could or would remain a viable industry if Missouri and the Corps shifted their focus from navigation to other interests. Even so, the most valuable interest or set of interests ultimately should prevail. This, of course, requires that Missouri *know* which uses and interests would ultimately be the most valuable.

²²⁴ See, e.g., MISSOURI DEP'T OF AGRIC. AND UNIV. OF MO., *supra* note 222.

²²⁵ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-6.

²²⁶ Michael Mansur, *Working on the River*, THE KAN. CITY STAR, May 19, 1997, at A1.

²²⁷ MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY, *supra* note 208, at 16.

²²⁸ Ann Toner, *Tide of Uncertainty: Barges on Missouri Cling to Role*, THE OMAHA WORLD-HERALD, Nov. 4, 1996, at 1 (quoting economist at University of Nebraska-Lincoln as stating "I see nothing but diminished needs for barge transportation on the Missouri [River]").

²²⁹ MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY, *supra* note 208, at 54.

²³⁰ *Id.*

made the Missouri River as favorable to navigation as it can be made, short only, perhaps, of constructing a system of locks and dams as exists on the Mississippi River above St. Louis. These factors certainly affect estimation of the maximum attainable economic values for navigation on the river and can be somewhat misleading.

In 1991, the Missouri Department of Agriculture and University of Missouri-Columbia conducted a study in which they attempted to assess the impacts of a complete loss of Missouri River navigation on Missouri's agricultural interests.²³¹ This study estimated the value of Missouri River navigation for Missouri to be much higher than the Corps' estimates, citing losses of over \$100 million if navigation were totally eliminated.²³² The study has been sharply criticized by C. Phillip Baumel, an economist at Iowa State University.²³³ It fails to offer any support for its assumptions and admittedly projects a "worst-case scenario."²³⁴ Mr. Baumel points out that, in the calculations, the study

fails to follow its own, "unrealistic and naive" assumptions regarding the impact of eliminating navigation on costs of shipping by truck and train.²³⁵ Consequently, the significance of this study's findings is questionable.

In comparison, the Corps has estimated that the federal government spends approximately \$6.1 million each year for purposes of recreation along the entire Missouri River.²³⁶ As with calculating the amount spent on navigation, the amount spent for recreation purposes should likewise be adjusted to reflect the opportunity cost of promoting recreation. Unlike navigation, however, the overall benefits realized from recreation (which should include values of intangibles and other interests that are enhanced as a result of promoting recreation, even though the Corps' estimates do not) are much more likely to indicate a net benefit, even if a true opportunity cost were calculated. The Corps has estimated that recreation on the Missouri River generates some \$76 million per year along the

entire river.²³⁷ Others have estimated the value of recreation on the entire Missouri River to be much higher, at approximately \$300 million per year.²³⁸ As already mentioned, neither of these estimates includes valuations of fish and wildlife and intangible benefits.²³⁹ Nevertheless, comparing the estimated recreation benefits with the Corps' estimated \$18 million navigation benefits, the gap appears substantial. Based on assessments like the Missouri Department of Agriculture/University of Missouri study cited previously, many might argue that the Corps has grossly underestimated the value of navigation. Even if this is true, it can also be argued that the Corps has underestimated the value of recreation as well. The disparity between the Corps' estimates of recreation and navigation economic values most likely reflects an actual disparity in the value of those uses for two reasons. First, the Corps has generally been pro-navigation,²⁴⁰ and, as a result, there is very little reason to believe it would now undervalue navigation. Second, the Corps' valua-

²³¹ MISSOURI DEP'T OF AGRIC. AND UNIV. OF MO., *supra* note 222.

²³² *Id.* at 12-13.

²³³ See Julie Anderson, *Missouri Flow Plan Could Hurt Shipping*, THE OMAHA WORLD-HERALD, Sept. 19, 1994, at 9SF; Scott Canon, *A River Transformed?*, THE KAN. CITY STAR, Aug. 10, 1994, at A1; *ISU Scholar Disputes Reports on Missouri River Flows*, THE OMAHA WORLD-HERALD, Nov. 6, 1991, at 20; Larry Fruhling, *Expert: Missouri River Used Little for Shipping Grain*, THE DES MOINES REG., Nov. 6, 1991, at 8. Moreover, then-Missouri Attorney General William Webster, himself, conceded that "because the report was prepared by downstream interests, it does not come from the most objective sources." Scott Canon, *Upstream Drought Feared*, THE KAN. CITY STAR, Mar. 27, 1992, at A16.

²³⁴ MISSOURI DEP'T OF AGRIC. AND UNIV. OF MO., *supra* note 222, at 5.

²³⁵ See *ISU Scholar Disputes Reports on Missouri River Flows*, *supra* note 233, at 20. The study asserts that costs of shipping by truck or train would double in the event navigation were eliminated. *Id.* Mr. Baumel asserts that in the calculations, the University actually tripled those costs. *Id.*

²³⁶ MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-6. It is unknown how much individual states spend annually for purposes of recreation on the Missouri River.

²³⁷ MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY, *supra* note 208, at 15.

²³⁸ Julie Anderson, *Group Criticizes Navigation Role*, THE OMAHA WORLD-HERALD, Apr. 16, 1997, at 19SF.

²³⁹ The Corps has not attempted to estimate the value of fish and wildlife benefits on the Missouri River even though fish and wildlife is one of the purposes for which the mainstem system is to be operated. Presumably, the Corps' failure to assess such a value is due to the difficulty of doing so.

²⁴⁰ This is evidenced by the fact that, since the late 1800s, the Corps has repeatedly encouraged Congress to authorize river improvements for purposes of navigation.

tions of recreation and navigation were both calculated during its recent review of the Master Manual. Consequently, it may be inferred that the valuations were derived in a similar manner, and, if one is underestimated, then the other is likely to be as well. The net result is that, whether or not the two valuations are accurate, the disparity between the two estimates most likely reflects an actual difference in values.

Assuming the discrepancy is real, and there is no reason not to do so, it is obvious that recreation is already a much larger industry on the Missouri River than navigation. Although most of the recreational benefits are enjoyed by upper basin states as a result of the reservoirs,²⁴¹ it is reasonable to believe that if Missouri worked to more fully develop recreational opportunities on the Missouri River, as well as to enhance fish and wildlife habitat and to increase intangible benefits, it could realize benefits far exceeding those it presently realizes. An example of this potential is evident in the recreation benefits enjoyed by Iowa, where recreation generates approximately \$4 million per year.²⁴² It is noteworthy that the river travels a longer distance through Missouri than Iowa, and neither state boasts a mainstem reservoir.

The Corps estimates that Missouri is currently receiving "maximum" benefits from recreation on the Missouri River, with receipts of approximately \$2.5 million each year.²⁴³ Unlike navigation, however, recreation has not been

well-developed on the Missouri River in Missouri, which depresses the estimates of recreation's maximum attainable economic values for Missouri. This author believes there is a great potential for planning and developing new recreational opportunities along the river which would increase the "maximum" benefits obtainable from recreation. State and federal agencies have, in fact, worked to develop some recreational opportunities along the river in Missouri, although not extensively.²⁴⁴ Such efforts will increase the maximum attainable economic benefits from recreation and should be encouraged to the extent they will maximize benefits for Missouri.

If Missouri were to adopt a goal of maximizing overall benefits to the state, it would not necessarily mean that navigational and agricultural interests would be abandoned. There is no reason to believe that, in order to maximize benefits, navigation should or must be eliminated from the Missouri River, but, if navigation is not among Missouri's most valuable interests in the river, the state should not continue to revere and assert navigation as its primary interest in the river. Moreover, since the navigation maintenance costs are an indirect subsidization of agricultural interests, it is conceivable that the federal government could directly subsidize agricultural interests and allow the river to be used for other, more beneficial purposes, such as recreation and fish and wildlife. Such an approach would enable Missouri to realize greater benefits and to

mitigate any harmful effects a reduction in navigation might have on agricultural interests.

VI. CONCLUSIONS AND RECOMMENDATIONS

The Missouri River has played an important, albeit frequently divisive, role in the history of our nation. Its vast water resources have provided extensive benefits to the people of the Missouri River basin, but they have also been a source of contention among the basin states. Since the 1940s, the Missouri River basin states have been embroiled in a dispute over the Corps of Engineers' management of the Missouri River. In the dispute, each state has sought to protect and promote interests in the river that are important to its residents. Frequently, however, the interests of the people within each state are, themselves, in conflict. This has resulted in the outbreak of intrastate disputes in which opposing interest groups within each state battle for predominance. The State of Missouri has experienced the same domestic struggles.

In the interstate dispute, Missouri has traditionally asserted navigation and flood control as its primary interests. These interests have enjoyed strong political support from Missouri's state government and federally elected legislators. While flood-control advocates were largely satisfied with the passage of the Flood Control Act of 1944, navigation interests have had to continue battling upper basin states for steady,

²⁴¹ Approximately two-thirds of the estimated \$76 million of recreational benefits realized throughout the Missouri River basin each year are realized by upper basin states. MASTER MANUAL REVIEW AND UPDATE DEIS, *supra* note 2, at 3-79.

²⁴² MASTER MANUAL REVIEW AND UPDATE DEIS EXECUTIVE SUMMARY, *supra* note 208, at 54.

²⁴³ *Id.*

²⁴⁴ See, e.g., *Big Muddy Not Big Enough*, U.S. Says, ST. LOUIS POST-DISPATCH, Nov. 2, 1997, at 08E (discussing the U.S. Fish and Wildlife Service's Big Muddy National Refuge); Jerome B. Robinson, *Urban Oasis: Searching for a Unique Solution to a Common Environmental Problem*, FIELD & STREAM, Sept. 1, 1995, at 28 (discussing the Missouri Department of Conservation's Eagle Bluffs Conservation Area).

minimum flows in the Missouri River and the longest possible navigation season. Other, less-powerful and -influential interest groups in Missouri include proponents of recreation, fish and wildlife, and water supplies. These groups continue to advocate their interests, although not to the same extent as navigation proponents.

Recently, the Corps of Engineers began reviewing and reconsidering its management practices regarding the Missouri River. This review has given states and interest groups a unique opportunity to influence the Corps' management of the river. The period of review is also a good time for state leaders to re-evaluate the interests of their people and to consider whether they are advancing the most appropriate interest or interests on behalf of their citizens. To that end, Missouri should endeavor to inventory the interests of its people, weigh and compare the relative values of the interests, and determine which interests it should advocate in the interstate dispute. The state government and elected state and federal officials, as public servants and representatives of the people, have an obligation to act on behalf of the people of Missouri, and, in so doing, to advocate and protect the best interests of the people. Thus, after identifying all of the state's interests and ascertaining their relative values, the state should urge the Corps to manage the river in such a manner as will promote a combination of Missouri's interests and produce maximal benefits to the people of Missouri.

Admittedly, the notion of maximizing benefits for all of Missouri's people with regard to the management and utilization of the Missouri River is theoretical and idealistic. It would require that Missouri's political leaders escape

political, interest-group, budgetary, and other pressures in order to objectively weigh and balance the state's various interests in the Missouri River. However unlikely this may be, seeking to maximize benefits for Missouri on the Missouri River is, nonetheless, a worthwhile goal. As a state, Missouri should be committed to advancing policies and interests that, if implemented, would secure the greatest possible benefits for all its people. If Missouri's elected officials are incapable of objectively assessing the benefits of the state's various interests in the Missouri River, then the state should employ independent means in order to do so. In fact, Missouri should consider taking a number of actions to better ascertain, assess, and advocate the interests of its people. Missouri should (1) conduct studies to determine the public's attitudes toward and opinions regarding the use and management of the Missouri River; (2) conduct studies to more accurately assess the values of Missouri's different interests, including any non-economic values of the interests; (3) conduct studies to determine realistic opportunity costs associated with pursuing each interest; (4) strive for objectivity and avoid political pressures in identifying and assessing the different interests; (5) disregard history and tradition to the extent they interfere with objectivity; and (6) focus on the best interests of *all* of the state's people.

While this Comment has focused on the activities of Missouri's state government and political leaders, it is important to realize that this issue is not solely the government's burden. Private parties, too, should take action. Persons with any interest in the Missouri River, whether navigation, wildlife, recreation, or otherwise, should seek to organize and partici-

pate in the intrastate debate, if not the interstate debate. At minimum, such parties should offer their opinions to their elected officials. Such officials can respond to public sentiment only if they are aware of what public sentiment is. In addition, private parties should consider conducting the same types of studies proposed above. So long as the party's objectivity is preserved, the studies are no less valid. In the alternative, private parties could employ independent groups to conduct the studies.

Although realistic assessments of costs and benefits are not available, this author is persuaded by the success of other basin states that if Missouri and the federal government would dedicate as many resources to developing recreational opportunities, fish and wildlife habitat, and intangible benefits on the Missouri River as have been dedicated to developing and maintaining the navigation channel over the past several decades, the recreation, wildlife, and intangible benefits would far outweigh the navigation benefits Missouri has heretofore enjoyed. Subsequent to the development of the mainstem dam and reservoir system, the upper basin states gained an extremely profitable recreational resource in the Missouri River. Those states have tapped and profited from the Missouri River's recreational potential, and Missouri can learn a valuable lesson from them. While the Missouri River in Missouri lacks the recreational draw of reservoirs, it does possess appreciable recreational potential along its mainstem, and, if the river were properly developed and aggressively marketed and promoted, recreation along the river could yield substantial economic benefits. Iowa appears to demonstrate this concept, even on a shorter length of the Missouri River

than runs through Missouri. It is important to stress that promotion of recreation, fish and wildlife, and intangible benefits does not, by itself, require exclusion of navigation from Missouri's plans for river management. Advocating that Missouri assert more-beneficial interests over less-beneficial interests, as discussed in this Comment, certainly does not necessitate that one interest be promoted to the exclusion of any other. Rather, Missouri simply should seek to allocate resources to generate the maximum possible benefits to the people of this state.

FEDERAL ENVIRONMENTAL ONLINE SOURCES

EPA HOME PAGE

<http://www.epa.gov/epahome/index.html>

EPA CIVIL CASES AND ADMINISTRATIVE ACTIONS

http://www.rtk.net/www/data/doc_gen.html

EPA PERMIT CONTROL SYSTEM FOR WATER PERMITS

http://www.rtk.net/www/data/pcs_gen.html

EPA ACCIDENTAL RELEASE INFORMATION PROGRAM

http://www.rtk.net/www/data/arip_gen.html

CERCLA SUPERFUND INFORMATION SYSTEMS

http://www.rtk.net/www/data/cer_html

U.S. FISH AND WILDLIFE SERVICE HOME PAGE

<http://www.fws.gov/fwshomep.html>

U.S. FISH AND WILDLIFE SERVICE ENDANGERED SPECIES HOME PAGE

<http://www.fws.gov/~r9endspp/enspp.html>

NATIONAL WILDLIFE REFUGE SYSTEM HOME PAGE

<http://bluegoose.arw.r9.fws.gov/NWRSFiles/Welcome.html>