

ALLOCATING WATER USES OF THE MISSOURI RIVER: THE SEARCH FOR LEGAL PROCESS

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The growth in the use of Missouri River for water supply as an authorized purpose has, like recreation, exceeded all original expectations.

--Master Water Control Manual ¹

I. INTRODUCTION

In 1997, and with particular acuity, Dan Tarlock observed that “the Missouri River is a paradox: the amount of water available to support existing and future demands is inverse to the number of potential users. . . .”² More than seventeen years later the paradox remains, and the “conflict in the midst of abundance” grows.³ Tensions between the upper and lower basins have increased as new issues emerge. Indian tribes continue to see their *Winters* Reserved Rights ignored. Protection of the River’s natural flora and fauna is barely recognized as an issue and ecosystem management is undertaken only at the minimum required by law. Increased amounts of water are being diverted in the headwaters for irrigation, energy, municipal and industrial purposes, including the diversion of flows from the basin. In the lower basin, steady increases in tributary irrigation

¹ U.S. Army Corps of Engineers, Northwestern Division, Missouri River Mainstem Reservoir System, Master Water Control Manual, Parag. 7-11-2, Page VII-46 (Rev. Mar. 2006)

² A. Dan Tarlock, “The Missouri River: The Paradox of Conflict Without Scarcity,” 2 Great Plains Nat. Res. J. 1 (1997).

³ *Id.* In fact, river flows are expected to increase. See *Infra.at n. 42*

require augmented releases to the main channel, while municipal and industrial diversions increase regularly.⁴ The U.S. Army Corps of Engineers (Corps), governed by the 71 year-old Flood Control Act of 1944, is applying a management model which displeases most of the basin states, but which the states are incapable of ousting in favor of their own. Recognizing the futility of the current regime, and prodded by a fresh set of extracurricular forces, the Corps is exploring its administrative options for reallocating reservoir waters.⁵ Meanwhile, the likelihood that out-of-basin users will look to the Missouri River reservoirs for relief increases. In the still resonant words of the 1973 Report of the National Water Commission:

As economic demand for water increases, as available water supplies in areas of shortage shrink, as technological capability improves, and as national income grows, the feasibility of interbasin transfers increases and the scale of proposals grow larger.⁶

This essay focuses attention on the use and allocation of Missouri River waters as demand changes in favor of municipal and industrial uses both within and without the basin, all brought into the open for the first time by the emergence of an allocation process. Although there has never been legal doubt that Missouri River legislation authorizes diversions from reservoirs for municipal and industrial

⁴ Master Water Control Manual, *supra* note 1 at E-07, page E-12: "Dependence on the System as a source for water supply is continually increasing."

⁵ *Infra* n. _____. Generally, see John H. Davidson, "Marketing Missouri River Water: Competing Plans for Commoditizing A Natural Resource," 89 N.D.L.Rev. 1 (2013)

⁶ *Water Policies for the Future*, Final Report of the National Water Commission 329-30 (1973)

(“M&I”) uses,⁷ issues of process have been unattended, simply because of an abundance of supply. The essay arrives at a surprising, if tentative, conclusion that a centralized basin-wide management system is being realized,

II. MISSOURI RIVER DEVELOPMENT IN THE 20TH CENTURY

A. The Conventional Outline

The modern history of the River basin is rooted in the Flood Control Act of 1944 (FCA), which was enacted in response to a diverse list of national concerns, most of which are unrelated to river basin management. The national economy was in collapse, and a federal policy of sponsoring large public works projects was central to the recovery plan. A prolonged drought combined with a history of destructive agricultural practices left many rural dwellers in economic and social distress. In the early 1940s the River flooded, bringing substantial harm to downstream cities and industry, and leading to a demand for flood controls. Finally, Congress anticipated the need to provide employment for the soldiers who would be returning from the battlefields of Europe and Asia.⁸

The resulting FCA was a broad compromise between the competing interests of the upper and lower basins. The lower basin states were principally concerned

⁷ The Flood Control Act of 1944 (FCA), in Section 6, states: “The Secretary . . . is authorized to make contracts with States, municipalities, private concerns, or individuals at such prices and on such terms as he may deem reasonable, for domestic and industrial uses for surplus water that may be available at any reservoir” 66 Stat. 93; 33 U.S.C. Sec. 708 (2006)

⁸ The standard legislative history is: Marian E. Ridgeway, *The Missouri Basin’s Pick-Sloan Plan: A Case Study in Congressional Policy Determination*, (Urbana, 1955)

with the construction of dams upstream in order to hold back flood waters while simultaneously assuring ample reserves to supply the downstream navigation channel, construction of which was also a feature of the law.

The upper basin states viewed this with suspicion. Not only would large upstream dams consume considerable stretches of farm and range land, holding waters in reserve in order to support navigation was potentially inconsistent with the principal goal of upstream states -- irrigation. The goals of the lower basin were associated with a "Pick Plan," proposed by the Corps, while those of the upper basin with a "Sloan Plan," prepared by the Bureau of Reclamation. In a wholesale political compromise, the two plans were merged into the FCA which has since served as something like a constitution governing management of the basin. The principal purposes of the FCA are clear -- flood control, navigation, irrigation, municipal and industrial ("M & I") water supply, and hydropower. Beyond those general goals, a "law of the Missouri River" is evolving, responding to time and circumstance.⁹

In 1944, the FCA was a political arrangement that met the needs of two dam building agencies. It satisfied some short-term national needs by injecting money into the economy, providing jobs, controlling some floods, and delivering

⁹ For additional background, see John P. Guhin, *The Law of the Missouri*.30 S.D.L. Rev.350 (1985)

electricity to an energy-short Midwest. Whether the FCA serves the long-term needs of a changing nation, the tribes or the states remains an open question.

B. The Absence of Basin-Wide Planning

Construction of the principal engineering features was completed successfully: dams on the main channel, a downstream navigation system, and hydropower generating plants. Moving forward from the construction phase, however, the basin has been compelled to deal with the reality that the FCA was a hasty political compromise unsupported by serious basin-wide planning. The big dams were built without hydrologic data, and what little information that was in hand was not shared among the competing agencies and the public. In the words of the Corps' official history, the project was developed "very nearly backward," and "[a] detailed and systematic inventory of the resources of the basin was not available in the planning stages."¹⁰ From the start there was conflict over jurisdiction and over the allocation of reservoir capacities for various functions.¹¹

An example of the effect of building and spending without a plan is provided by the complete failure of upstream irrigation. The FCA contemplated a vast system of canals which would deliver irrigation water to the largest parts of eastern North and South Dakota. This scheme was at a nearly unprecedented scale and

¹⁰ John R. Ferrell, *Big Dam Era: A Legislative and Institutional History of the Pick-Sloan Missouri Basin Program* 90 (Missouri River Division, U.S. Army Corps of Engineers, Omaha 1993)

¹¹ *Id.*

was central to the original political compromise. As it turned out (much later), irrigation in the eastern Dakotas was not feasible, and attention to soil, drainage and economic studies would have established this fact well before 1944.¹² The FCA was a plan without planning. In the absence of a plan and any sort of comprehensive data base, the Corps has been piecing it together on an *ad hoc* basis, with some not always welcome push from NEPA and the Endangered Species Act.¹³

C. The Absence of Process

In addition to a coordinated plan, conservation and development of large river basins requires coordinated decision-making processes, with every use and user accountable to the requirements and capacities of the basin. It also requires an open process resulting in authoritative decision-making in the face of conflict among the various basin interests. Such a process has been absent from the Missouri basin, where the consistent goal of each state is the protection and advancement of state prerogatives and interests.

The long history of this resistance to integrated basin planning and decision-making began prior to enactment of the FCA when a strong political effort was

¹² See Peter Carrels, *Uphill Against Water: The Great Dakota Water War* (1999)

¹³ See, *E.g.*, John R. Seeronen, "Judicial Challenges To Missouri River Mainstem Regulation," 16 *Mo. Env'tl. L. & Pol'y Rev.* 59 (2009) and Sandra B. Zellmer, "A New Corps of Discovery for Missouri River Management," 83 *Neb. L. Rev.* 305 (2004)

made toward a Missouri Valley Authority, following the model of the Tennessee Valley Authority. It proposed an agency controlled by a three-member commission, appointed by the President, with headquarters in the basin and broad powers to manage all facets of the River, including development and implementation of a comprehensive plan for all water resource in the basin.¹⁴ A vigorous debate led to defeat of the Authority idea and final adoption of the FCA compromise.

In retrospect, proponents of a Missouri Valley Authority anticipated most of the planning and procedural issues that trouble the basin today. Looking beyond the construction stage, an Authority would have established a single administration of project benefits in order to overcome sectionalism and the pursuit of selfish interests. A corporate authority with a 3-person board would assume control of all works in the basin and exercise full control over policy.¹⁵ The governing board was to be charged with developing a program for the entire basin. In the words of a basin newspaper: “one big plan for one big basin,”¹⁶

Rejection of the Missouri Valley Authority in favor of the FCA compromise meant a set of engineering projects without a plan. As Ridgeway wrote in 1955:

¹⁴ Ridgeway, *supra*, n. 9 at 93-95

¹⁵ *Id.* At 93-94

¹⁶ *Id.* At 95

The agreement left to Congress the problem of determining how and by whom the valley's development should be administered. . . . {N}othing was said in the [FCA] compromise report about the allocation of water to navigation, flood control, power, irrigation, and other uses, nor was anything said about which dams were to be built by which agency. As in the separate reports, the myriad questions of land use, equitable distribution of economic benefits, and integration of all aspects of regional development were ignored. Navigation had won in the lower basin and irrigation in the upper, . . . even though no one yet knew whether there was enough water in the entire basin to take care of every demand even for the projects the agencies had agreed upon.¹⁷

With the FCA came informal promises by the Senate that Congress would decide on a management structure for the basin during the next legislative session.

¹⁸ At the same time the states offered assurances, also informally, that they would cooperate to develop a basin-wide governance system. In fact, Congress did not return to the question of the sort of basin-wide management plan it wants. What followed instead was a series of failed experiments, too numerous to list completely, although several are exemplary.

A Missouri Basin Inter-Agency Committee (MBIAC) comprised of federal agencies and the states was established to coordinate implementation of a comprehensive program. In the words of the Corps' history: "The MBIAC was never granted the power to make policy decisions. It was a voluntary confederation of federal agencies and states, constrained by conflicting laws and

¹⁷ *Id.* At 99

¹⁸ John E. Thorson, *River of Promise, River of Peril: The Politics of Managing the Missouri River* 99 (1994)

practices of its members. The committee had no statutory basis, authority, budget or staff. Its conclusions and recommendations could be implemented only by the agencies or states responsible for the issues concerned.”¹⁹ Not only did the MBIAC lack decision-making authority, it lacked a base of data about the resources of the basin, which made effective planning impossible. With no mandate the MBIAC faded from the scene.

During the 1950s the states considered the idea of a negotiated compact as an alternative to some sort of federally-sponsored basin agency. The general thought was that the compact would create a commission with power to develop an integrated plan for the basin. The essential ingredient was that “[m]ember governments would be required to submit to the commission all plans for [projects.] . . . that might substantially affect interstate uses of water.”²⁰ As with the MBIAC, the compact approach fizzled.

In the 1960s a federal Missouri River Basin Commission was created which did pursue hydrological studies and planning, but it had no regulatory authority and was bound by the existing FCA. It was quietly buried by Executive Order in the 1980s.²¹

¹⁹ Ferrell, *supra*, n. 9 at 89

²⁰ Ferrell, *supra*, n. 9 at 108

²¹ Thorson, *supra* n.17 at 102-104

Today, the basin states cooperate in only the most superficial ways, assembling annually to dutifully receive Power Point presentations from the Corps, thus giving meaning to the words of a 2002 report by the National Research Council: “The inability of basin stakeholders to reach consensus has made it difficult to arrive at an approach to river operations that will meet contemporary and future needs of the basin.”²² In the face of the impasse among the states, central administration by the Corps is not only inevitable and necessary, it may be the only feasible approach, particularly because the Corps can fold a greater national interest into the parochial demands of the states and tribes.²³

D. At Century’s End

At the beginning of the 21st Century, the developed Missouri River Basin is operated as a Commons. Every new use and user is accommodated without limit, beyond the constraints of basin-wide considerations, and free of any form of central decision-making. Due to the sheer abundance of water, most of the users and proposed users find that this Commons portends no Tragedy. But, the unfettered system has led to a first example of the Tragedy of the Commons²⁴ in the damage to the River ecosystem, loss of native habitat for plants and animals,

²² Nat’l Research Council, Comm. On Missouri River Ecosystem Science, *The Missouri River Ecosystem: Exploring the Prospects for Recovery* 53 (2002)

²³ Generally, See John H. Davidson, “Missouri River Reservoirs in a Century of Climate Change: National or Local Resource?”, 20 *Mo. J. Env’tl & Sustainability* L. 1 (2014)

²⁴ Garrett Hardin, “The Tragedy of the Commons,” 121 *Science* 1243 (1968)

and severe impact on threatened and endangered species.²⁵ In the words of a National Research Council Report:

Degradation of the natural Missouri River ecosystem is clear and is continuing. Large amounts of habitat have been transformed in order to enhance social benefits, and the ecosystem has experienced a substantial reduction in biological productivity as a result. Natural riverine processes, critical to providing ecosystem goods and services, have been greatly altered. The ecosystem has been simplified and its production of goods and services has been greatly compromised.”²⁶

Whether this loss could have been mitigated had there been a basin-wide management system in place is speculative, but we can imagine that it might at least have received some serious consideration. But, even an abundant commons reaches a point where additional uses cannot be tolerated, and, moving into the 21th Century, the challenge of developing a basin-wide system of goals and limitations remains.

III. CHANGING DEMAND AND THE EMERGANT BASIN-WIDE ALLOCATION PROCESS: MISSOURI RIVER DEVELOPMENT IN THE 21ST CENTURY

(A). Changing Demand

The conventional outline of the FCA is changing. We live in an era of engineering mega-projects which magnify scale, collapse time and distance, and

²⁵ U.S. Fish & Wildlife Service, Missouri River Biological Opinion (Nov. 2001)

²⁶ Nat'l Research Council, *supra* n. 21 at 3

create new economic and physical possibilities. In particular, the technology for high volume, long distance water supply transfers is now established, as exemplified by China's South to North pipeline.²⁷ We are entering a new phase in water policy, one in which water pipelines are the new dams. In the 20th Century, states and private businesses sought dams, always preferring dams paid for by the federal taxpayer; the Bureau of Reclamation *alone* built some 337 dams.²⁸ In the 21st Century, it is water supply pipelines that are sought, again always preferring financing by the federal taxpayer. And, of course, the perfect water pipeline originates in an abundant source that has reliable water rights to spare; the Missouri River reservoirs are ideal, particularly as the River is an augmenting stream.

Demand is increasing in several places. Obvious and more immediate is energy production where hydraulic fracturing generally requires 2.3 to 3.8 million gallons per well,²⁹ and a Bakken formation well can call 1 to 1.5 million gallons.³⁰ Emerging energy production extends across the entire center of the nation.³¹

More speculative but nonetheless predictable is the prospect for pipelines that will carry water from one river basin to another, or to points within the basin

²⁷ http://www.water-technology.net/projects/south_north/

²⁸ See Daniel P. Beard, *Deadbeat Dams* (2015)

²⁹ <http://www.usgs.gov/newsroom/article.asp?ID=4262#.Vko40E3lvcs>

³⁰ N.D. State Water Comm'n, *Facts About North Dakota Fracking and Water Use* (Feb. 2014)

³¹ <http://midwestenergynews.com/2015/04/24/study-oil-and-gas-drilling-consuming-millions-of-acres/>

but distant from the River. Three smaller projects already carry Missouri River water from the basin, so the precedent is established.³² What has yet to appear is a specific proposal for a mega-project pipeline, although many are under discussion. An example is the proposal for an aqueduct to move surplus water from the Missouri River in northeast Kansas to western Kansas in order to compensate for the low recharge rates and depletions in the Ogallala Aquifer. The idea was first studied formally by the Corps pursuant to a 1977 directive from Congress, and a feasibility report issues in 1982. In July 2015 the State of Kansas and the Corps issued a detailed report on the same proposal. Although the project costs are high, and Kansas does not intend to move forward at present, the idea remains under active discussion in the Kansas legislature.³³

Another example is from the Colorado River Basin where recent studies conclude that without augmented supplies “the long-term projected imbalance in future supply and demand is about 3.2 million acre maf by 2060.”³⁴ Among the listed options for potential relief from this shortfall is importation from the Missouri.³⁵

³² Lewis & Clark Regional Water System, Northwest Area Water Supply Project and Red River Valley Water Supply Project

³³ John C. Peck & Leland E. Rolfs “Governor’s Long-Term Vision for the Future of Water Supply in Kansas,” in Rocky Mountain Mineral Law Foundation, XLVIII WATER LAW NEWSLETTER 19 (No. 2, 2015)

³⁴ U.S. Bureau of Reclamation, Colorado River Water Basin Water Supply and Demand Study, Executive Summary at ES-6 (December 2012)

³⁵ *Id.* at ES-10. For a general discussion, see, John H. Davidson, “Adapting to Climate Change: Transbasin Water Diversions and an Example from the Missouri River Valley,” 11 *Vt. J. Envtl L.* 757 (2010)

In the face of increased demand for a new generation of projects, issues that were ignored in the 20th Century will be sharpened and require resolution. Among these is that of process for allocating uses in and diversion from the River and its reservoirs.

(B). Accounting For *De Facto* Allocations: The Manitoba Litigation and Why It Matters

In North Dakota, a Northwest Area Water Supply Project pipeline will withdraw Missouri River water from Lake Sakakawea and deliver it eastward across the Continental Divide into the Hudson Bay Basin, after meeting municipal supply needs in eastern North Dakota. From the outset the Province of Manitoba objected to the deposit of return flows in the Hudson Bay system. The State of Missouri objected to the removal of water which it believes should be sent downstream for its use. When the U.S. Bureau of Reclamation issued an Environmental Assessment and Finding of No Significant Impact, the Province sought judicial review of the agency decision. Missouri, which subsequently joined, was concerned that “the out-of-basin transfers of Missouri River Basin water to the Hudson Bay Basin [were objectionable] generally because water that leaves the basin cannot be used by Missourians.”³⁶ The Bureau of Reclamation’s

³⁶ Letter from K.A. Stetzler, Dep’t of Natural Resources, State of Missouri to U.S. Bureau of Reclamation, Oct. 8, 2010.

Environmental Assessment concluded in essence that the amount of the diversion was *de minimis* and “will not be measurable below Lake Sakakawea.”³⁷

The reviewing court disagreed, and, applying the doctrine of cumulative impacts,³⁸ remanded to the agency with instruction that it take a hard look at the issue, stating:

: , , , Reclamation provided no data regarding other existing Missouri River water withdrawal projects and conducted no analysis of other reasonably foreseeable projects expected to withdraw Missouri River water. . . . * * * Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”³⁹

In response to the Court’s order, a detailed Supplemental Environmental Impact Statement (SEIS) was issued, revealing useful information for Missouri River managers and potential users.⁴⁰ First, it disclosed that climate change will lead to *increasing* flows in the basin.⁴¹ Thus, for the immediate Northwest Area pipeline project, there is no impact on downstream water supplies; the increases in flow will, in the words of the SEIS, “dwarf” any withdrawals for the pipeline.⁴²

³⁷ Government of the Province of Manitoba v. Salazar, 691 F. Supp.2d 37 (D.D.C. 2010)

³⁸ “Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taken over a period of time.” 40 C.F.R. Sec. 1508.7 (2014)

³⁹ 691 F.Supp.2d 37 at 47

⁴⁰ U.S. Bureau of Reclamation, Northwest Area Water Supply Project, North Dakota, Final Supplemental Environmental Impact Statement (April 2015)

⁴¹ *Id.* at 20

⁴² *Id.* at 20-21

More generally, water planners should now assume that they are dealing with a gaining (augmenting) river, and the potential that historic uses can be achieved while providing excess water for new or remedial purposes.

A second revelation of the SEIS is the existence of a detailed process for calculating and recording “depletions” from the basin on a region-by-region basis.

⁴³ This process, which extends back at least 28 years,⁴⁴ identifies various categories of off-stream uses and diversions which are then drawn into a depletion account, including, as just one example, state-permitted groundwater from sources that are hydrologically connected to basin tributaries. What emerges is a basin-wide system of water use records, roughly comparable to the traditional records maintained by states and tribes. These record what is in fact a *de facto* allocation and reallocation of the stream, use by use.

One example of basin depletions that are drawn into this account are state-issued groundwater irrigation and industrial water permits for withdrawal from groundwater that is hydrologically-connected to surface waters. As the U.S. Supreme Court has regularly affirmed, the pumping of water that is hydrologically connected to surface water can deplete the surface water as surely as surface

⁴³ *Id* at Appendix D.

⁴⁴ T.C. Wel, W.J. Mellema, & D.L. Ohnstad, “Missouri River Basin Water Accounting System,” in Proceedings, American Soc’y of Civil Engineers 38-43 (1987)

diversions.⁴⁵ Thus, although, for example, the Tongue and Powder Rivers may seem distant from the abundant Missouri, they are headwater streams, and new groundwater withdrawals to support coalbed methane production there has been challenged in the courts.⁴⁶ Similarly, in the lower basin, the Republican River in western Nebraska and Kansas may seem distant, but again the pumping of hydrologically connected groundwater there is in the courts.⁴⁷ To the U.S. Bureau of Reclamation has fallen the task of developing and maintaining a system of calculating depletions of these escalating withdrawals, particularly from the Kansas and Platte River systems.⁴⁸ Each new such use is a permanent *de facto* allocation of the stream.

In addition to calculating the effect of groundwater withdrawals, a depletion analysis must take into account the effect of municipal and industrial uses, particularly those downstream. The electric power industry runs the length of the mainstem downstream, and is dependent on flows for cooling. It is not an FCA “authorized purpose,” but the investment and reliance are irrevocable facts. When

⁴⁵ Kansas v. Nebraska, 530 U.S. 1272 (2000), Kansas v. Colorado, 543 U.S. 86,91 (2004)

⁴⁶ See, Montana v. Wyoming, No. 137 Orig. 131 S.Ct 497 and 1765 (2010)

⁴⁷ Kansas v. Nebraska, 538 U.S. 720 (2003)

⁴⁸ U.S. Army Corps of Engineers, Missouri River Master Water Control Manual E-12:
E-07 Missouri River Basin Depletions

“Dependence on the System as a source for water supply is continually increasing. Increases in the use of the water can result in decreases in the amount of water that is available for use by those downstream from the new users. The Bureau of Reclamation (USBR) prepares estimates of the depletion of river flows for the Missouri River. The USBR also makes estimates of future levels of depletion based on projections of increased water uses along the System. The Corps uses the USBR projections and actual depletions in their forecasting and planning for System regulation.”

new downstream water uses are allowed, however informal the process, they become firmly allocated.⁴⁹ Each historic and new use becomes a *de facto* allocation of basin waters. New developed irrigation and other uses downstream compete with navigation and the ecosystem for flows. The Corps, inevitably, must make up for these depletions when achieving navigation releases (“pass downs”) from the mainstem dams. Together, these allocation decisions are drawn into the depletion analysis.

Records of this type have the potential to play a fundamental role in planning for future uses of basin waters. In the first instance, they provide a basis for a comprehensive, basin-wide management system, should the incentive for that ever arise; the knowledge and planning that was absent in 1944 is, at last, coming together. In a second instance, should states and tribes undertake to allocate (“quantify”) waters among themselves, the records will provide the basis for negotiation. Third, if a proposed diversion project, such as a water supply pipeline, is proposed, these records may serve to establish that that there is adequate excess water available.

⁴⁹ The Missouri River Master Manual candidly recognizes the presence of these uses: Parag. 7-11, P. VII-45 of the Manual states: “Numerous water intakes are located along the Missouri River, both within and below the System. These intakes are primarily for the purpose of municipal water supplies, nuclear and thermal powerplant cooling, and irrigation supplies withdrawn directly from the Missouri River.”

Parag. 7-11.1, P. VII-45 reads: “The minimum daily flow requirements established for water supply are designed to prevent operational problems at municipal and thermal powerplant and intakes at numerous locations along the Missouri River below the System. The lower Missouri River is significant with regard to water supply because 94 percent of the population served and 75 percent of the thermal power generating capacity using the Missouri River for once-through cooling are located below the System.”

What is emerging is a unique river basin system in which the traditional quantitative uses -- irrigation, municipal and industrial uses -- are recognized in conjunction with a managed flow resource -- navigation, hydropower, flood control, ecosystem restoration and recreation. Of course, record-keeping is just one aspect of a basin-wide management process, but until the states and tribes come up with an alternative, the emerging process and decisions are in the hands of the Corps in what is taking shape as something very much like a Missouri Valley Authority.

(C). The Eleventh Circuit Court of Appeals Mandates Process In The ACF Basin

The Chattahoochee River rises in the Blue Ridge Mountains of northern Georgia and flows southwesterly where it forms the southern half of the Alabama and Georgia border, as well as a portion of the Florida border. On its way it traverses the hilly north of Atlanta, the growth of which is dependent on water supplied by the River. In southern Georgia, the River merges with the Flint River to form the Apalachicola River, which in turn flows across the Florida panhandle

into Apalachicola Bay and the Gulf of Mexico. The larger basin is known as the “ACF.”⁵⁰

The ACF has been the object of considerable federal development. The Buford Dam was constructed on the Chattahoochee upstream from Atlanta to form Lake Lanier. Downstream from Atlanta, a smaller Morgan Falls dam was constructed. Development of the Chattahoochee was carried out by the Corps pursuant to express authorization in the 1945 and 1946 Rivers and Harbors Acts. As in the case of the FCA in the Missouri basin, the authorizing legislation incorporated by reference lengthy agency reports from which project detail must be extracted.⁵¹ The primary purposes were hydropower, flood control and navigation.

Over the years, Atlanta’s growth led it to rely for its municipal water supply on ever greater diversions from the Chattahoochee. Although Atlanta also diverted water downstream from Buford Dam, its largest diversions were from the reservoir. The Corps followed its “Buford Manual” in operating the Buford Dam, dividing the reservoir into flood control, power and inactive pools; no storage was identified for water supply. Then, in 1989, the Corps decided that it had the authority to reallocate significant amounts of Lake Lanier storage to water supply.

⁵⁰ In re TRI-STATE WATER RIGHTS LITIGATION, 639 F. Supp. 2d 1308 (M.D. Fla. 2009). A full discussion of the decision is: Joseph Wehr, “The Canary in the Coal Mine: The Apalachicola-Chattahoochee-Flint River Basin Dispute and the Need for Comprehensive Interstate Water Allocation Reform,” 66 Ala. L. Rev. 203 (2014-15).

⁵¹ *Id.* At 1311-1313

The downstream states of Florida and Alabama objected to the diversions by Georgia from the combined flows of the ACF and finally brought suit in federal court to test the question whether the Corps had the legal authority to unilaterally allow Atlanta's increased diversions for its water supply, or, stated in another way, whether the Corps had the statutory authority to reallocate the uses of the River and reservoir.

The district court defined the questions as whether the Corps violated Section 301 of the Water Supply Act of 1958 (WSA) when it made the reallocation decision. That section requires that if the agency modifies a project to include storage for water supply and such modification "would seriously affect the purposes for which the project was authority," then the modification must be approved by Congress.⁵² The district court concluded that the WSA inquiry is academic if water supply was an authorized purpose of the Buford Dam project. After a thorough review of the extensive authorizing legislation, however, it further concluded that water supply was *not* an authorized purpose, and that the Corps' proposal was a "major operational change" that requires prior Congressional approval. The court accepted the lower basin state's characterization of the Corps' actions as "de facto reallocations."

⁵² 43 U.S.C. Sec. 390b(a) (2011)

A panel of the 11th Circuit Court of Appeals reversed and remanded the matter to the Corps to reconsider and, in so doing, issued a final determination of the agency's legal authority to accommodate Georgia's water supply application. The Court held that water supply was an original purpose of the Buford Dam project and not merely a subordinate or incidental benefit.⁵³ It did not undertake, however, to determine the methodology or the amount of storage necessary to accommodate Georgia's water supply request. Instead, it remanded the decision to the Corps, instructing it to complete its analysis of its water supply authority and release its conclusions within one year.⁵⁴ In sum, a reallocation of reservoir storage and flow releases, such as for M&I use, must be the subject of a formal agency process leading to final agency action -- subject to judicial review.⁵⁵

(D). The ACF Decision Mandates Process in River System Management

The ACF decision is important for Atlanta and the downstream states in the ACF basin, but the decision by the 11th Circuit Court of Appeals has a broader import, particularly for the Missouri River system. As we have seen, there has been a steady but informal process of *de facto* reallocations on the Missouri, made possible by the abundant flows in the system. As withdrawals and depletions increase throughout the system, this has resulted in a casual process of transferring

⁵³ In Re: MDL-1824 TRI-STATE WATER RIGHTS LITIGATION, 644 F. 3d 1160, 1189-92 (2011)

⁵⁴ *Id.* at 1200-02

⁵⁵ *Id.* At 1205

supplies to off-stream irrigation, power plant support and municipal and industrial use. The 11th Circuit decision, however, poses challenges to the *status quo* on the Missouri. First, it draws into question the legal status of uses now being accommodated by the Corps but which are not the result of specific allocation decisions. Second, it holds that the Corps has an obligation to provide process when future allocation decisions are made, especially for M&I uses, such as water pipelines and energy development. Thus, it is against the backdrop of the ACF litigation that recent initiatives by the Corps in the Missouri River basin can be understood.

(E) The Response

In 2011 the Corps declared that it would make “surplus water” from the Missouri reservoirs available for temporary uses, primarily in the energy fields of the upper basin. Responding to specific requests, it issued “surplus water reports” for each reservoir, specifying an amount available on a temporary basis for each reservoir.⁵⁶ That action appeared on the face to be a reasonable application of existing law, which authorizes the marketing of surplus waters.⁵⁷ (ftn Sec 6)

The surplus water reports go further, however. They declare that surplus water also includes “water that would be more beneficially used as municipal and

⁵⁶ E.g., see, U.S. Army Corps of Engineers, Omaha Dist., Garrison Dam/Lake Sakakawea Surplus Water Report & Environmental Assessment (2012)

⁵⁷ Section 6, FCA, *supra* n. 6.

industrial water than for the authorized purpose and, which, when withdrawn, would not significantly affect authorized purposes over some specified time period.” The regulation then states that the Corps has the authority to :

[M]ake reasonable reallocations between different project purposes. Thus, water stored for purposes no longer necessary can be considered surplus. In addition, the Secretary may use his broad discretionary to reduce project outputs, envisioned at the time of authorization and construction, if it is believed that the municipal and industrial use of the water is a higher and more beneficial use. . . .⁵⁸

Citing the WSA 1958 as authority the Corps has claimed the authority to reallocate the mainstem reservoir system in the absence of Congressional action.⁵⁹

The situation confronted by the Corps on the Missouri is roughly analogous to the facts which led to the ACF litigation. In the ACF, the Corps had been allowing Atlanta, in increments, to increase diversions from the Buford project for municipal water supply. These decisions were not subject to a formal reallocation process, thus confronting downstream states with an accomplished fact upon which a major upstream economy became reliant. With the Missouri, the upstream-downstream example is reversed, with the large, growing economy located downstream. The Corps has, in increments, been passing water downstream in response to increased reliance there by irrigators, power plants and M&I users. As

⁵⁸ Omaha Dist., *supra* n. 55

⁵⁹ U.S. Army Corps of Engineers Regulation (ER) 1105-2-100 Parag. E-557b(2))(a)(2), E-214 (2000).

in the case of Atlanta, these uses become reliant on the new situation; in fact, the Corps, with these incremental decisions, has been reallocating the stream.

Unlike the ACF case, however, there is ample surplus water in the Missouri to accommodate a reallocation. The question is how to formalize the change. The present abundance in the reservoirs was intended originally for large irrigation projects in the Dakotas which will never happen, and, all the Corps needs to do is reallocate a share of reservoir waters in an amount necessary to cover the pass-downs already in effect, with ample surplus for future needs as well. Hence, the need for the reallocation by the Corps. The upstream states will not like it, but they will lack legal standing to complain.

The ACF litigation adds another layer, relevant to the future management of the system, and that is the need for process in the form of final agency action when the Corps responds to a specific request for additional diversions, or simply allows an informal *de facto* reallocation. In each case, a formal decision is required.

IV. A PROCESS FOR BASIN-WIDE PLANNING AND DECISION- MAKING

At present the Corps is supplying a steady and increasing flow of water downstream for. in the words of the WSA 1958, “domestic, municipal, industrial and other purposes.” It’s short-term goal is to protect existing commtments by

creating designated M&I storage in the mainstem reservoirs -- a layer of M&I water for present and future withdrawals. This is necessary because, as was the case with Atlanta, important economic uses have become dependent on prior diversions which were made without the benefit of any kind of decision-making process. The agency is also providing an increasing "navigation" flow downstream to compensate for agricultural depletions, particularly in the Kansas and Platte River systems. In addition, calls for M&I water diversions from the upstream reservoirs are increasing and are expected to continue.

By allocating M&I water for these purposes the Corps will protect established economic uses downstream during long-term drought and diminished or erratic streamflows due to climate change. Finally, navigation currently provides the "cover" for meeting downstream consumption. In the event that navigation is no longer viable, the M&I allocation will protect downstream users who now rely on navigation releases.

The role played by the ACF litigation is to impose a requirement of process. From this process can develop a basin-wide system of water use allocation, which was always known to be an essential requirement of a successful FCA. Once again, the result is something very much like a Missouri Valley Authority.

V. AN OPPORTUNITY TO RESOLVE CONFLICTS IN THE BASIN

In 1944 there was no plan beyond construction, little hydrologic knowledge and no decision-making process. That has changed. The Corps has had to respond to an expanding list of management objectives, including ecosystem restoration, recreation and rapidly increasing demand for M&I water. It has changed because for at least 28 years a detailed knowledge of the Basin's hydrology has been gathered. It has now changed further because the ACF decision compels the Corps to abandon informal allocation to new uses in favor of a formal process. Clearly, decision-making over uses of the basin water and its flows are now concentrated with the Corps. States and tribes may regret the gradual transfer of authority over basin management, but they lack a unified counter-position. Furthermore, new and complicating factors are in play. Climate change requires that river basins be managed flexibly, and within shorter response times. The Missouri River reservoirs contain the last reserves of fresh water in the United States and decisions about their use cannot be managed by the individual states.

There is opportunity here. If the Corps has the power to allocate the River's waters and its flows, it would appear to be in a position to serve as a new type of administrative water court, allocating to each contesting tribe, state and private user its legal entitlement to the River. Subject always to judicial review, these decisions can become final, thus avoiding the endless wrangling seen in the Colorado and other western basins. Such a stark alteration of process seems

radical in a system so tied to the *status quo* and the hackneyed jargon of western water law and the traditional catalog of methods for resolving interstate disputes. It does, however, offer advantages.

This new layer of decision-making does not rise to the level of quantification, but it is just a few steps from it. At some foreseeable future date the Corps will be asked to permit diversions for a mega-project, and the ACF process will provide a forum in which to support or contest the application. The resulting judicial review has the potential to add an unprecedented new layer to the Law of the Missouri River.

Basin management requires some system for “equitable risk-sharing,” integrated water resources management and clear decision-making.⁶⁰ The Missouri River Basin, with its states and tribes, varying climates and economies, as well as new challenges from climate change and increased demand, evades conflict resolution by the usual avenues of compact or judicial decree; The ACF litigation presents an alternative in the form of decision-making in the hands of the Corps, which is now an administrative body with powers resembling those originally envisioned by advocates of a Missouri Valley Authority.

⁶⁰ For a full discussion, see *Federal Rivers: Managing Water in Multi-Layered Political Systems* 5-7 (D. Garrick et al., eds. 2014)

