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FLOODING ON THE MISSOURI RIVER: HOW THE MISSOURI WATER SYSTEM COULD BENEFIT FROM A RIVER BASIN COMMISSION

ALEXA ROGGENKAMP*

INTRODUCTION

In the summer of 2011, the Missouri River dam system went over capacity. Heavy rains and high snow-melt filled reservoirs that were ordinarily reserved for runoff, and the dams eventually became overwhelmed.¹ The Army Corps of Engineers (“Corps”), managers of the river’s dam system, had to make difficult decisions; not only were reservoirs filling to capacity on the Missouri River system, but the Mississippi River, into which the Missouri flows, was experiencing similar problems.² To keep both systems from being overwhelmed, the Corps took action in several ways, including detonating a levee and flooding several hundred acres of farmland.³

The Corps’s management of the Missouri flooding angered people and businesses in the surrounding states.⁴ The states that border the Missouri River have called for a revision of how the Corps manages the

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¹ See *Who Gets Flooded: A By-the-Book Decision*, NPR (June 18, 2011), <http://www.npr.org/2011/06/18/137266815/who-gets-flooded-a-by-the-book-decision>; see also Lauren Morello, ‘Unprecedented’ Summerlong Flood Threatens Missouri River Dams and Levees, N.Y. TIMES (June 7, 2011), <http://www.nytimes.com/cwire/2011/06/07/07climatewire-unprecedented-summerlong-flood-threatens-mis-68968.html>.

² A. G. Sulzberger & John Schwartz, *A Levee Breached, and New Worries Downstream*, N.Y. TIMES (May 3, 2011), http://www.nytimes.com/2011/05/04/us/04flood.html?_r=1&scp=3&sq=mississippi%20flood&st=cse.

³ *Who Gets Flooded: A By-the-Book Decision*, *supra* note 1; see also Sulzberger & Schwartz, *supra* note 2.

⁴ Ken Newton, *Senators Press Corps over Missouri River Issues*, ST. JOSEPH NEWS-PRESS (June 23, 2011), http://www.newspressnow.com/news/article_b9d68fb0-8274-500c-998d-ebed9f1800cc.html; Cody Winchester, *Army Corps Battles Perceptions in Missouri River Flood*, USA TODAY (July 31, 2011, 2:14 AM), http://www.usatoday.com/news/nation/2011-07-31-army-corps-missouri-river-flooding_n.htm.

water system, because the flooding was unparalleled and caused a great deal of damage to the areas surrounding the Missouri River watershed.⁵ Though this flood damage was unprecedented, federal, local and business criticism of the Corps's management of the Missouri River system is nothing new. The Corps is subject constant criticism, often expressed through litigation,⁶ whether from surrounding states,⁷ from local businesses with a stake in waterway use,⁸ from environmental and other interest groups,⁹ or from enforcers of federal laws like the Clean Water Act and the Endangered Species Act.¹⁰ These interests conflict, and the Corps must balance their importance, often to the detriment of one or more parties.¹¹

To help the Corps balance those interests, the Corps adheres to a Master Manual of Operations, the Missouri River Mainstem Reservoir System Master Water Control Manual ("Master Manual").¹² The Master Manual provides the directives and basic structure of the dam management system.¹³ Though this Master Manual provides overall guidelines and structure to water operations, the day-to-day operations are guided by a process called adaptive management.¹⁴ The Corps uses this adaptive

⁵ *Missouri River Governors Criticize Army Corps for Flooding*, ENVIRONMENT NEWS SERVICE (Aug. 22, 2011), <http://www.ens-newswire.com/2011/08/22/missouri-river-governors-criticize-army-corps-for-flooding/>.

⁶ See, e.g., *ETSI Pipeline Project v. Missouri*, 484 U.S. 495, 498 (1988); *In re Operation of the Mo. River Sys. Litig.*, 516 F.3d 688, 690 (8th Cir. 2008); *In re Operation of the Mo. River Sys. Litig.*, 421 F.3d 618, 624 (8th Cir. 2005); *South Dakota v. Ubbelohde*, 330 F.3d 1014, 1019 (8th Cir. 2003); *Am. Rivers v. U.S. Army Corps of Eng'rs*, 271 F. Supp. 2d 230, 236 (D.D.C. 2003).

⁷ See, e.g., *Ubbelohde*, 330 F.3d at 1019.

⁸ See, e.g., *ETSI Pipeline Project*, 484 U.S. at 498 (regarding a suit by several states to enjoin the completion of a pipeline contract).

⁹ See, e.g., *Am. Rivers*, 271 F. Supp. 2d at 236.

¹⁰ For a more complete discussion of how these two particular Acts interact with the Army Corps of Engineers ("Corps"), see Sandra Zellmer, *Mudslinging on the Missouri: Can Endangered Species Survive the Clean Water Act?*, 16 DRAKE J. AGRIC. L. 89, 95–102 (2011).

¹¹ For instance, in the recent flood, owners of flooded farmland and residents of local towns blamed their flooding on the Corps's directive to protect endangered species. See Matt Bunk, *Without Answers from Corps, Public Blames Flood on Plovers*, GREAT PLAINS EXAMINER (June 9, 2011), <http://www.greatplainsexaminer.com/2011/06/09/without-answers-from-corps-public-blames-flood-on-plovers>.

¹² U.S. ARMY CORPS OF ENGINEERS, MISSOURI RIVER MAINSTEM RESERVOIR SYSTEM MASTER WATER CONTROL MANUAL: MISSOURI RIVER BASIN, I-1 (2006) [hereinafter MASTER MANUAL], available at <http://www.nwd-mr.usace.army.mil/rcc/reports/mmanual/MasterManual.pdf>.

¹³ *Id.* at I-2.

¹⁴ See J.B. Ruhl & Robert L. Fischman, *Adaptive Management in the Courts*, 95 MINN. L. REV. 424, 432, 434 (2010).

management system to work within the framework of the Master Manual to control the waterways;¹⁵ however, there is some criticism that the Corps has fallen into a rigid structure in places where the Master Manual actually allows for more flexibility.¹⁶

With the current push for an overhaul of the water control system,¹⁷ many sources are proposing a revision to the Master Manual itself.¹⁸ In this Note, I propose that instead of revising the Manual, the region adopt a new method of day-to-day management, in the form of a river basin commission.¹⁹ Joint federal and state river basin commissions, notably the Delaware River Basin Commission,²⁰ have enjoyed a relatively high level of success in water management for their individual areas.²¹ These river basin commissions promote cooperation between various interested parties, while disincentivizing lawsuits and negativity by giving the parties motivation to work together.²² By adopting a joint federal and state River Basin Commission to oversee day-to-day management of the Missouri River Basin within the confines of the Corps's Master Manual, the Missouri River water system could involve several of its biggest critics in the water management scheme and encourage cooperative solutions.

Part I of this Note will provide a brief history of the summer's flooding and how it affected the Northwest region. Part II will discuss the Missouri River water system's administration and outline some of the most significant pressures on the Corps's water management from outside sources. Part III will discuss adaptive management and its use by the Corps in the Missouri River and other water systems to attempt to balance these interests.

¹⁵ *Id.* (examining the Corps's use of adaptive management). *But see* Victor B. Flatt & Jeremy M. Tarr, *Adaptation, Legal Resiliency, and the U.S. Army Corps of Engineers: Managing Water Supply in a Climate-Altered World*, 89 N.C. L. REV. 1499, 1547–48 (2011) (arguing in part that the Corps is too rigid in its interpretation of its own rules).

¹⁶ *See* Flatt & Tarr, *supra* note 15, at 1501–02, 1545–47.

¹⁷ *See Missouri River Governors Criticize Army Corps for Flooding*, *supra* note 5.

¹⁸ Newton, *supra* note 4; *see also Missouri River Governors Criticize Army Corps for Flooding*, *supra* note 5.

¹⁹ *See infra* Part V.

²⁰ *About DRBC*, DELAWARE RIVER BASIN COMMISSION, <http://www.state.nj.us/drbc/about/> (last visited Jan. 17, 2013).

²¹ Jeffrey P. Featherstone, *Existing Interstate Compacts: The Law and the Lessons*, 4 TOL. J. GREAT LAKES' L. SCI. & POL'Y 271, 280 (2001).

²² *See* Robert Haskell Abrams, *Broadening Narrow Perspectives and Nuisance Law: Protecting Ecosystem Services in the ACF Basin*, 22 J. LAND USE & ENVT'L. L. 243, 251 (2007) [hereinafter *Broadening Narrow Perspectives*].

Part IV will explore notable litigation in the Missouri system, and how that litigation has defined the parameters to which the Corps, or any other management system, has to adhere. Part V will discuss river basin commissions and their effectiveness in the Delaware River Basin. Part VI will apply the structure of these river basin commissions to the Missouri River water management system and outline some changes that might be necessary for the river basin commission formula to be applicable and functional in the Missouri River Basin.²³

I. OVERVIEW OF THE MISSOURI RIVER FLOODS OF 2011

The floods of the summer of 2011 caused irreparable damage to the Missouri River watershed. In June of that year, unexpected rainfall,²⁴ along with regular snow-melt from the region,²⁵ overwhelmed the Missouri River water system. The unexpectedly high rainfall in the usually arid Northwest led to strained water systems not just on the Missouri River, but also on the Mississippi.²⁶ The Corps, in an effort to keep the Missouri River and its downstream neighbor the Mississippi River from reaching overcapacity, maintained steady and high releases from the dams on the river.²⁷ It even detonated a levee for a controlled release of water into farmland, in an attempt to save other resources in the area.²⁸ Unfortunately, high releases from the dams and controlled detonation did not stave off the inevitable flooding.²⁹

The flooding caused devastation for people across the northwest Missouri River Basin. Bridges were closed, railroads ceased travel, miners were trapped in an underground mine, and levees in various places were

²³ Though the program of the Corps as a whole has often been severely criticized, the question of the validity of the Corps's presence as a decision-making body and its overall potential damage to the environment is a much larger question and will not be discussed here.

²⁴ See Matt Pearce, *Missouri River Takes Farmland, as Nation Watches Fires, Storms*, L.A. TIMES, (Sept. 6, 2011, 6:20 PM), <http://latimesblogs.latimes.com/nationnow/2011/09/missouri-river-flooding-.html>.

²⁵ See *Snowpack Continues to Feed Missouri River Flood*, CNN.COM (June 28, 2011), http://articles.cnn.com/2011-06-28/us/midwest.flooding_1_missouri-river-plant-officials-officials-and-federal-regulators?_s=PM:US.

²⁶ See Sulzberger & Schwartz, *supra* note 2.

²⁷ See David Hendee, *Missouri River Flood Closes 100 Miles of Bridges*, REUTERS (June 20, 2011), <http://www.reuters.com/article/2011/06/20/us-flooding-plains-idUSTRE75H1SX20110620>.

²⁸ Sulzberger & Schwartz, *supra* note 2.

²⁹ See Hendee, *supra* note 27.

breached.³⁰ Farmland was also flooded, and the devastation from that was not revealed until flood waters receded.³¹ Much of the soil's nutrients and microbes were damaged by the water, rendering some farmland completely unusable for the near future.³² Hundreds of thousands of acres of farmland were flooded, and repairs to roads and other infrastructure could cost as much as a billion dollars.³³ This flooding left many people asking what did the Corps do, and what could it have done better?³⁴

II. HISTORY OF MISSOURI RIVER WATER SYSTEM'S ADMINISTRATION AND OUTSIDE PRESSURES AND INFLUENCES

A. *Army Corps of Engineers Management Overview*

The Missouri River Dam system is controlled by the Corps, which is, in turn, governed by the Master Manual.³⁵ This Manual provides the operation procedures for the Missouri River System,³⁶ creating a framework within which the Army Corps can work to achieve balance between the many interests pressing on the Corps.³⁷ The manual was originally developed in 1960, but has been revised several times since.³⁸ Most recently, a 2003 Biological Opinion,³⁹ while not completely revising the Master Manual, altered it and its operations.⁴⁰

The Corps is asked to balance a number of competing interests in order to keep the waterways functional, while remaining within the framework of the Master Manual.⁴¹ The Master Manual that was in effect for

³⁰ *Id.*

³¹ See Josh Funk, *Receding Missouri River Reveals Badly Damaged Land*, NBCNEWS.COM (Sept. 23, 2011), <http://www.msnbc.msn.com/id/44640790/ns/weather/t/receding-missouri-river-reveals-badly-damaged-land/#.UGEkOIFxGVo>.

³² *Id.*

³³ Pearce, *supra* note 24.

³⁴ See *id.*

³⁵ See MASTER MANUAL, *supra* note 12.

³⁶ See MASTER MANUAL, *supra* note 12, at I-1. The System includes six dams, Fort Peck, Garrison, Oahe, Big Bend, Fort Randall and Gavins Point, and the reservoirs behind each dam, Fort Peck Lake, Lake Sakakawea, Lake Oahe, Lake Sharpe, Lake Francis Case, and Lewis and Clark Lake. NORTH DAKOTA STATE WATER COMM'N, TODAY'S MISSOURI RIVER: A NORTH DAKOTA PERSPECTIVE (2008) [hereinafter TODAY'S MISSOURI RIVER], available at <http://www.swc.state.nd.us/4dlink9/4dcgi/GetSubCategoryPDF/201/TodaysMissouriRiver.pdf>.

³⁷ See MASTER MANUAL, *supra* note 12, at I-1.

³⁸ TODAY'S MISSOURI RIVER, *supra* note 36.

³⁹ This is discussed with regards to litigation; see *infra* notes 105–09 and accompanying text.

⁴⁰ See MASTER MANUAL, *supra* note 12, at 2.

⁴¹ Flatt & Tarr, *supra* note 15, at 1511.

the longest period of time, the Manual from 1979 to 2004, listed the priorities of consideration to be: "1) flood control; 2) irrigation and upstream beneficial uses; 3) downstream water supply; 4) navigation and power; and 5) recreation and wildlife."⁴² These priorities have been shifted by advocacy and litigation, with the Corps being forced to consider federal precedent, state pressure, environmental legislation, and business interests.⁴³

To illustrate how competing interests create difficulties in water management, this Note looks to two environmental regulations that come from the same federal body and presumably have similar goals: the Endangered Species Act and the Clean Water Act. The regulations, however, sometimes come into conflict during implementation, revealing a clash between the mandates of the two laws. The Endangered Species Act, in its simplest form, requires government agencies to consider the effect of their actions on endangered and protected species.⁴⁴ The Act "imposes a conservation mission on all federal agencies" and "imposes a specific duty on federal agencies to ensure that 'any action authorized, funded, or carried out by [that] agency . . . is not likely to jeopardize . . . any [listed] species . . . or result in the destruction or adverse modification of the species' critical habitat."⁴⁵ On the Missouri River, three particular endangered species necessitate protection, the interior least tern, the piping plover, and the pallid sturgeon.⁴⁶ To fulfill their obligation to these endangered species on the Missouri River,⁴⁷ the Army Corps has undergone a number of construction projects to restore habitats and provide breeding and hatching grounds.⁴⁸

The sediment runoff from these construction projects, however, may be affecting the integrity of the Missouri River as a waterway.⁴⁹ The runoff may be in violation of mandates of the Clean Water Act which require government agencies to maintain a certain level of water quality in

⁴² Zellmer, *supra* note 10, at 94 (citing U.S. ARMY CORPS OF ENG'RS, MISSOURI RIVER MAIN STEM RESERVOIR SYSTEM RESERVOIR REGULATION MANUAL: MASTER MANUAL, at IX-1 to IX-2 (1979)).

⁴³ See *infra* Part IV.

⁴⁴ Endangered Species Act, 16 U.S.C. § 1531 (1973).

⁴⁵ Zellmer, *supra* note 10, at 98–99 (quoting 16 U.S.C. § 1536(a)(2) (2006)).

⁴⁶ For a more in-depth discussion of these animals and their relationships with the Missouri River, see Brook A. Spear, *The Missouri River: Law, Politics, and Creatures Caught in the Conflicts*, 18 BUFF. ENVTL. L.J. 75 (2010).

⁴⁷ Later this Note will discuss how that obligation rose to the top of the Corps's priority list through litigation. See *infra* notes 105–09 and accompanying text.

⁴⁸ Zellmer, *supra* note 10, at 100.

⁴⁹ See Zellmer, *supra* note 10, at 89–90.

bodies of water.⁵⁰ The main overarching goal of the Clean Water Act is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters;”⁵¹ the sediment runoff may be injuring the Missouri River’s integrity. This is just one of many ways that multiple interests in the Missouri River from multiple sources can cause conflict and difficulty for the Corps.⁵²

B. Criticism of Corps Management

Some criticism of the Corps’s management has been that it has inertia.⁵³ Rather than adapting to changing circumstances or regulations in a timely fashion, “[t]he Corps . . . has a track record of untimely modification of practices for the protection of the environment.”⁵⁴ The Corps also tends “to adhere to longstanding practices in spite of changing circumstances,” being lethargic in changing to new conditions.⁵⁵ This lethargy is also reflected in the criticism of the Corps’s decisions not to reevaluate the priority of uses unless compelled by a court or other body,⁵⁶ and in the fact that it “sometimes seeks to appease multiple interest groups by continuing all existing uses rather than rebalancing beneficial uses.”⁵⁷ The static nature of both the weighing of interests and the response to other stimuli raises serious questions about the efficacy of the Corps to manage the Missouri River System to the satisfaction of interested parties, particularly if this unprecedented flooding happens again in the future.

III. ADAPTIVE MANAGEMENT, AND HOW IT TRIES TO BALANCE THESE INTERESTS

Despite the stagnant reaction of the Corps to change, the Master Manual leaves room for, and in fact encourages, the use of adaptive management in water management systems.⁵⁸ Adaptive management, while

⁵⁰ See Clean Water Act, 33 U.S.C. § 1251(a) (2006).

⁵¹ § 1251(a).

⁵² Zellmer’s article does suggest that the Endangered Species Act’s and the Clean Water Act’s requirements can be harmonized. Zellmer, *supra* note 10, at 107–12. For an all-encompassing look at the pressures faced by the Corps, see Flatt & Tarr, *supra* note 15.

⁵³ Flatt & Tarr, *supra* note 15, at 1511–14.

⁵⁴ *Id.* at 1512.

⁵⁵ *Id.* at 1513.

⁵⁶ *Id.* at 1511–14.

⁵⁷ *Id.* at 1514.

⁵⁸ MASTER MANUAL, *supra* note 12, at VII-53; see also Ruhl & Fischman, *supra* note 14, at 432.

defined a number of ways by various governmental bodies,⁵⁹ is a difficult-to-codify concept that is often shortened to "learning while doing."⁶⁰ In essence, adaptive management is a program intended to allow for flexibility of adjustment and experimentation by administrative bodies, primarily environmentally oriented ones.⁶¹ The Corps describes and endorses adaptive management in this way:

Adaptive Management is . . . commonly used throughout the world to help shape resource management decisions, policies, and approaches. The process involves recognition that all is not known about the impacts, both positive and negative, of changes in System regulation. It also recognizes the likelihood that physical conditions may change in the future, and allows flexibility to meet the challenges of those changed conditions.⁶²

Though this definition seems lofty, in practice, the process can range from advanced modeling and prediction⁶³ to a form of "ad hoc contingency planning."⁶⁴ When used correctly, adaptive management "regards decision making as more of a series of fine-tuning steps that are continually and perpetually reevaluated."⁶⁵

In theory, adaptive management should work well for the Corps; the Master Manual provides a framework within which the Corps can make decisions. From there, the Corps should feel free to adjust and react to stimuli and unplanned happenings however they feel is best within that framework.⁶⁶ As discussed above, however, because of the Corps's unwillingness to change, adaptive management is not being used as it was intended.⁶⁷ This is unfortunate, as courts have paid lip service to adaptive management and endorsed the theory, using it as a determinative factor when deciding in the Corps's favor in certain litigation.⁶⁸

⁵⁹ Ruhl & Fischman, *supra* note 14, at 431–33.

⁶⁰ *Id.* at 431 (citing Holly Doremus, *Precaution, Science, and Learning While Doing in Natural Resource Management*, 82 WASH. L. REV. 547, 550 (2007)).

⁶¹ *See id.* at 424.

⁶² MASTER MANUAL, *supra* note 12, at VII-53.

⁶³ *See* Ruhl & Fischman, *supra* note 14, at 438.

⁶⁴ *Id.* at 427–28.

⁶⁵ *Id.* at 438.

⁶⁶ *See supra* note 58 and accompanying text.

⁶⁷ *See supra* note 16 and accompanying text.

⁶⁸ *See* Ruhl & Fischman, *supra* note 14, at 455 n.143.

IV. NOTABLE LITIGATION AND ITS EFFECTS ON THE MISSOURI RIVER SYSTEM MANAGEMENT

2003 was a popular year for litigation involving the Corps. This litigation helped shape how the Corps related to outside political pressure it faces on a regular basis from states bordering the Missouri River, and federal statutes and their subsequent enforcement agencies. Several cases from that year have redefined the relationship between the Missouri River management system and the politics of the area.⁶⁹ The first of these is *South Dakota v. Ubbelohde*,⁷⁰ which primarily shaped the relationship between individual states and the Corps. There was a particularly lengthy drought in the Missouri River area, and the Corps had to perform a controlled release of one of the dams to ensure navigation downstream.⁷¹ The Corps maintained a policy of alternating dams throughout the system, in order to share the drought burden among the entire water system.⁷² In 2002, the Corps chose Lake Oahe in South Dakota, because its reservoir had not been lowered in the past year.⁷³ South Dakota, because of the recreational fishing that took place on Lake Oahe, took issue with the decision and sued the Corps.⁷⁴ South Dakota argued that the lowering of the reservoir would harm the smelt spawning in the lake, and thus injure the fishing industry.⁷⁵ The federal district court in South Dakota sided with the state, and issued a temporary restraining order against the Corps to prevent them from lowering the water levels in Lake Oahe.⁷⁶ The Corps then announced plans to release water from another South Dakota reservoir, and South Dakota sought a second restraining order.⁷⁷ Nebraska and several other states tried to intervene as interested parties in this case, but the court denied the states' motions to enter litigation.⁷⁸ The district court sided with South Dakota once more, enjoining the Corps from releasing water from either of the South Dakota lakes.⁷⁹ The Corps,

⁶⁹ For a more thorough investigation of this, see John R. Seeronen, *Judicial Challenges to Missouri River Mainstem Regulation*, 16 MO. ENVT'L. L. & POL'Y REV. 59 (2009).

⁷⁰ *South Dakota v. Ubbelohde*, 330 F.3d 1014 (8th Cir. 2003).

⁷¹ *Id.* at 1020–21.

⁷² *Id.* at 1021.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *See id.*

⁷⁶ *Ubbelohde*, 330 F.3d at 1021.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

forbidden from releasing water from any of South Dakota's dams, then chose a reservoir in North Dakota to lower, in an effort to maintain downstream navigation.⁸⁰ North Dakota, following South Dakota's lead, sought a temporary injunction from lowering their reservoirs, and the district court in North Dakota granted it.⁸¹

After being denied access to South Dakota's lawsuit, Nebraska sought a preliminary injunction to force the Corps to strictly follow the plan of the Master Manual and the 2002 Annual Operating Plan.⁸² The district court in Nebraska granted this third injunction as well,⁸³ placing the Corps in a difficult predicament; they could not adhere to the mandates of the manual without violating the injunctions placed on them by both North and South Dakota. The Corps appealed all three cases simultaneously, and because of the important relationships of each decision to the others, the circuit court decided the cases together.⁸⁴

The decision of the Eighth Circuit was groundbreaking for all future understandings of Corps policy. The Corps first argued that their decisions were not subject to judicial review.⁸⁵ The Eighth Circuit rejected that reasoning, finding that agency actions are presumably reviewable when the agency operates within a set of definable rules against which their actions can be judged.⁸⁶ The court decided that since the Master Manual laid out such definable rules, the Corps's actions could be assessed by the court.⁸⁷ However, when looking to the merits of the case, the Eighth Circuit rejected the arguments of North and South Dakota that courts should be able to review any decision by the Corps, with little to no deference made to the administrative body.⁸⁸ The court reasoned that "[c]ourts are simply not empowered to review every decision of the Corps to ensure that it maximizes the benefits of the River for all interests."⁸⁹ Because of this, the Eighth Circuit granted deference to the Corps's decision, and overturned the injunctions of North and South Dakota, while maintaining the Nebraska injunction ordering the Corps to obey the Master Manual.⁹⁰

⁸⁰ *Id.* at 1021–22.

⁸¹ *Ubbelohde*, 330 F.3d at 1022.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.* at 1022.

⁸⁵ *Id.* at 1027.

⁸⁶ *Ubbelohde*, 330 F.3d at 1027.

⁸⁷ *Id.* at 1027.

⁸⁸ *Id.* at 1030.

⁸⁹ *Id.* at 1031.

⁹⁰ *Id.* at 1033.

Two important points to come from this case are: a) the binding authority of the Master Manual and b) the deference given by the Eighth Circuit to administrative decisions made by the Corps.⁹¹ The court looked to several different factors in deciding whether the Master Manual was binding law, including the language in the manual itself,⁹² the Corps's promulgated regulations,⁹³ and the Corps's treatment of the Master Manual in its own actions.⁹⁴ The Eighth Circuit's decision that the Master Manual is binding authority on the Corps has significant impact on how a claim against the Corps is now assessed. This decision ensures that any claims will be measured against the Master Manual itself. It both advantages the Corps, because if the action satisfies a requirement in the Manual then it will be presumptively acceptable, and disadvantages the Corps by making any administrative decisions judicially reviewable. This means that if anyone brought suit against the Corps regarding flood management during the summer of 2011, the Corps's decisions could be reviewed by a judge. However, if the Corps was operating within the confines of the Master Manual, there would be a strong argument toward deference to the Corps's administrative decisions as to how to meet those goals.

Deference towards the Corps's decisions regarding water management is the other key interpretive element from this case. The court, once deciding that the Master Manual was binding on the Corps, stated that "[a]s a general rule, courts defer to agency policy decisions because it is not a court's 'function to substitute [its] judgment for that of the agency.'"⁹⁵ In general, courts are loath to overturn decisions of administrative bodies as long as those actions fit within the scope of their mandates.⁹⁶ If a suit is brought regarding the summer 2011 flooding, as long as the Corps is

⁹¹ See Mary Kathryn Lucas, *The Missouri River Compromise: Negotiated Rulemaking as a Suggested Resolution to the River Basin Dispute*, 11 MO. ENVT'L. L. & POL'Y REV. 240, 253 (2004). However, not all courts have given the same deference to the Corps's administrative decisions. See *id.* at 253–54 (discussing how the D.C. Circuit did not follow the Eighth Circuit in deciding *Am. Rivers v. U.S. Army Corps of Eng'rs*, 271 F. Supp. 2d 230, 259 (D.D.C. 2003)).

⁹² *Ubbelohde*, 330 F.3d at 1028 (discussing the use of mandating words such as "is" or "will" in the text of the manual and the provision of certain priorities and goals).

⁹³ *Id.* at 1029 (assessing the language of Corps's regulations, and deciding that they refer to the Master Manual with authoritative deference).

⁹⁴ *Id.* (looking to statements that Corps officials have made regarding the authority of the Master Manual).

⁹⁵ *Id.* at 1030 (quoting AMAN & MAYTON, ADMINISTRATIVE LAW § 13.10.2 (1993)).

⁹⁶ See Andrew H. Baida, *When Discretionary Agency Action Is Not So Discretionary: Office of the Public Defender v. State*, 44 MD. B.J. 34, 36 (May/June 2011).

within the confines of the Master Manual's regulations, it is likely that courts will defer to its decisions.

The second case that shapes the relationship between the Corps and the court system's interpretive actions is *American Rivers v. U.S. Army Corps of Engineers*.⁹⁷ This case specifically addresses the connection between the Corps's water management and the Endangered Species Act.⁹⁸ This D.C. district court case was brought specifically on behalf of two endangered species, the least tern and pallid sturgeon, and one threatened species, the Great Plains piping plover.⁹⁹ In 2000, the Fish and Wildlife Service, in order to satisfy a section of the Endangered Species Act, released a Biological Opinion regarding future actions for the Corps to take in order to preserve these endangered and threatened species.¹⁰⁰ The opinion called for significant changes to the way water was managed on the Missouri River, including raising water flows in the spring and decreasing them in the summer at least once every three years.¹⁰¹ These steps, according to the Fish and Wildlife Service, would encourage breeding, lower the risks of flooding nests, increase food supply, and provide an overall environment more conducive to the thriving of these three species.¹⁰²

When the Corps evaluated its draft Annual Operating Plan in 2002, the recommendations from the Fish and Wildlife Service were not implemented.¹⁰³ They were also absent from the final Annual Operating Plan, released in January of 2003.¹⁰⁴ Also in 2003, the Fish and Wildlife Service released a second Biological Opinion that reversed the opinion of its first Biological Opinion, stating that they believed the species would most likely survive one additional year without the rise and subsequent lowering of the water levels.¹⁰⁵ They predicated this decision on the fact that the Fish and Wildlife Service assumed that the Corps would revise future decisions to be in line with the 2000 Biological Opinion.¹⁰⁶

⁹⁷ *Am. Rivers v. U.S. Army Corps of Eng'rs*, 271 F. Supp. 2d 230 (D.D.C. 2003).

⁹⁸ *Id.* at 237–38.

⁹⁹ *Id.* at 236.

¹⁰⁰ *Id.* at 237.

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Am. Rivers*, 271 F. Supp. 2d at 237.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* The 2003 Biological Opinion, however, also stated that the controlling opinion was to be the opinion released in 2000, *id.* at 245, and that the 2003 Biological Opinion only affected the 2003 water year. *Id.* at 246.

¹⁰⁶ *Id.* at 237.

American Rivers, an outside interest group, filed suit under the Endangered Species Act in an attempt to force the Corps to follow the 2000 Biological Opinion immediately in order to protect the endangered and threatened species.¹⁰⁷ They filed for an injunction to prevent the Corps from implementing their 2003 Annual Operating Plan, which did not contain the suggestions found in the 2000 Fish and Wildlife Service's Biological Opinion.¹⁰⁸ The D.C. Circuit agreed with American Rivers, finding that the 2003 Biological Opinion was arbitrary and capricious because the Fish and Wildlife Service ("FWS")

has failed to adequately explain or justify its reversal of position from its 2000 Biological Opinion to its 2003 Biological Opinion; FWS's 2003 Supplemental Biological Opinion is premised on a totally baseless assumption—namely that the Corps will adopt a River management plan for 2004 that will be consistent with the 2000 Biological Opinion; and FWS's 2003 Supplemental Biological Opinion improperly segments its analysis and narrowly focuses on harms to the species only during this summer instead of considering all present and future effects on the three imperiled species.¹⁰⁹

The court also emphasized the need to balance the interests of all interested parties in the Corps's water management, but stated that because the interest of retaining the existence of endangered species was "irreplaceable and unquantifiable," preventing extinction of endangered species should prevail, even when balanced against concrete losses from other interested parties.¹¹⁰

The court cited Section 7 of the Endangered Species Act, that "every federal agency must 'insure' that 'any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of the endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.'" ¹¹¹ In order to fulfill that provision, agencies must, through a consultation with a federal agency like the Fish and Wildlife Service, verify that their actions will not harm

¹⁰⁷ *Id.*

¹⁰⁸ *See id.* at 236–37.

¹⁰⁹ *Am. Rivers*, 271 F. Supp. 2d at 237–38.

¹¹⁰ *Id.* at 238.

¹¹¹ *Id.* at 241 (quoting 16 U.S.C. § 1536(a)(2)).

any endangered species.¹¹² This consultation usually takes the form of a Biological Opinion, and if that Biological Opinion “concludes that the proposed agency action will jeopardize a listed species, [it] must include the reasonable and prudent alternatives . . . to the agency’s action plans.”¹¹³ The 2000 Biological Opinion of the Fish and Wildlife Service provided reasonable and prudent alternatives in the form of the recommendations to raise the water flow in the spring and lower it in the summer, as well as several other recommendations.¹¹⁴

The D.C. district court used the logic of *Ubbelohde*, decided earlier that year, to reach the decision that the Corps was beholden to the Endangered Species Act.¹¹⁵ In particular, the court used *Ubbelohde*’s idea that agency actions are reviewable, since though the Corps must adhere to the Master Manual, they are given significant flexibility within which to do it.¹¹⁶ From that, it stated that the Flood Control Act, which gave the Corps the ability to control the Missouri River water system in the first place, “provide[d] the Corps the discretion to consider its ESA obligations as one of the ‘other interests’ to be balanced when making river management decisions under the FCA.”¹¹⁷ The court decided that even though the Master Manual is binding, the Endangered Species Act creates binding obligations for the Corps as well.¹¹⁸

The court also discussed public interest considerations, particularly the interest of endangered species, which weighed in favor of granting

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴

The five parts of the [Reasonable and Prudent Alternatives] contained in the 2000 [Biological Opinion] are: 1) flow enhancement through a spring rise and summer low flow which is necessary to restore spawning cues for fish, maintain and develop sandbar habitat for birds and fish . . . and improve habitat conditions for summer nesting terns and plovers, forage availability, and fish productivity, 2) habitat restoration, creation, and requisition, with a goal of 20–30 acres of shallow water per mile, 3) unbalanced system regulation for water levels at the upper three reservoirs by holding one reservoir low, one at average levels, and one rising on a 3-year rotation, 4) adaptive management and monitoring which would allow the Corps to efficiently modify and implement management plans in response to new information and to new environmental conditions to benefit the species, and 5) increased propagation and augmentation of pallid sturgeon.

Id. at 243 (internal quotation marks and notations omitted).

¹¹⁵ *See Am. Rivers*, 271 F. Supp. 2d at 252.

¹¹⁶ *See id.* at 253.

¹¹⁷ *Id.* at 252.

¹¹⁸ *See id.* at 253.

the injunction.¹¹⁹ It acknowledged that following the mandates of the 2000 Biological Opinion would not only help the three endangered and threatened species listed in the litigation, but would also preserve and repair the entirety of the existing Missouri River ecosystem which had been in decline since the implementation of the water management system.¹²⁰ The court rejected the public interest argument put forth by the Corps, which stated that it would be almost impossible for the Corps to uphold this injunction and also Nebraska's injunction which was upheld in *Ubbelohde*, because the two came into conflict.¹²¹ The court implied that the Corps brought this conflict on itself by not raising the Endangered Species Act in its Eighth Circuit litigation.¹²² The court stated that, "unfortunate and uncomfortable as the situation may be, [this conflict] does not constitute a justification for this Court abdicating its responsibilities under the applicable statutes."¹²³ For all of the reasons stated above, the D.C. district court granted American Rivers' request for a preliminary injunction to prevent the Corps from implementing any Annual Operating Plan that did not include the reasonable and prudent alternatives put forth in the Fish and Wildlife Service's 2000 Biological Opinion.¹²⁴

American Rivers more clearly outlines the relationship between the Corps and federal regulations. Several important points are made in this case. First, the D.C. district court was unimpressed by the Corps's argument that because the Master Manual is binding, "the Corps does not have the statutory discretion to manage the Missouri River Basin in compliance with the [Endangered Species Act]."¹²⁵ The court reasoned that even though the Master Manual is binding, other interests may also bind an agency's action.¹²⁶ Since the Endangered Species Act was intended to bind the actions of government agencies, the Corps could not work around the Endangered Species Act simply by saying they are governed by another document. Most agencies are created through, and bound by, a separate act of Congress, but are still bound by subsequent acts like the Endangered Species Act.¹²⁷ Also, as a prudential matter, it would seem strange to have the Endangered Species Act not be binding on those

¹¹⁹ *Id.* at 261.

¹²⁰ *Id.*

¹²¹ *Am. Rivers*, 271 F. Supp. 2d at 262.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Id.* See *supra* note 114 for a list of those reasonable and prudent alternatives.

¹²⁵ *Id.* at 251–52.

¹²⁶ *Id.* at 252–53.

¹²⁷ See *Am. Rivers*, 271 F. Supp. 2d at 251.

organizations and agencies that are most closely related to management of the environment.

The other important jurisprudential decision from *American Rivers* is that when weighing interests of all individuals and entities having a stake in the water management of the Missouri River, the plight of an endangered species trumps all other interests.¹²⁸ The court states that this is because those interests are irreplaceable;¹²⁹ a difference in navigation from one year to the next might harm some interests temporarily, but the loss of a species changes the ecosystem and, more importantly, is a permanent loss. This decision essentially places the interests of endangered and threatened species above all other interests of the Corps, both in the Master Manual and outside of it.

American Rivers is an interesting decision with widespread consequences. Using the logic of the court, endangered species always have a trumping interest in any decision. This essentially places the protection of endangered and threatened species at the top of the Army Corps's priority list. The court offers no alternatives for times of crisis, where the interests of endangered species might be balanced to a slightly lower degree in favor of solving a serious predicament efficiently and quickly. In fact, the D.C. District Court implies the opposite; the court states that even during the drought crisis of 2003, the Corps must consider the interests of endangered species above all others, and any conflict that creates with other aspects of water management is brought on by the Corps itself.¹³⁰ It remains to be seen how this would affect any litigation regarding the 2011 summer flooding; though the precedent does imply that the Corps must consider endangered species above all interests, the decision is only from a district court. It has been distinguished by the Eastern District of California and the Arizona District Court, and does not act as binding precedent for any of the circuits.¹³¹ The influence this decision will have on Missouri River jurisprudence in the future remains to be seen.

The cases of *Ubbelohde* and *American Rivers* are vital to understanding the management of the Missouri River water system.¹³² *Ubbelohde* demonstrates that the Master Manual is the ultimate governing document of water management for the Corps, but *American*

¹²⁸ See *id.* at 238.

¹²⁹ *Id.*

¹³⁰ See *id.* at 261–62.

¹³¹ See *NRDC v. Kempthorne*, 506 F. Supp. 2d 322, 354 (E.D. Cal. 2007); *Forest Guardians v. Veneman*, 392 F. Supp. 2d 1082, 1093 (D. Ariz. 2005).

¹³² *South Dakota v. Ubbelohde*, 330 F.3d 1014 (8th Cir. 2003); *Am. Rivers v. U.S. Army Corps of Eng'rs*, 271 F. Supp. 2d 230, 253–58 (D.D.C. 2003).

Rivers implies that it is not the only one.¹³³ *Ubbelohde* states that deference should be given to management decisions made within the confines of the Master Manual, but *American Rivers* shows that that deference is not necessarily universal.¹³⁴ The interplay between these two cases is vital to understanding how the Corps's management of the Missouri River water system can be assessed by a court, and what interests may prevail.

V. RIVER BASIN COMMISSIONS

A. *Basic Overview of River Basin Commissions*

Interstate compacts are little-used but generally successful tools for cooperative water management.¹³⁵ These compacts voluntarily bring together interested parties, usually several states and sometimes the federal government, to act together to influence, and sometimes control, the water management for the system in that area.¹³⁶ This allows the states to retain some control over water management, which has over time been shifted from the purview of the states to the Corps.¹³⁷

The shift in water management from the states to the Corps comes mostly from the fact that states cannot address interstate water issues easily, because they have constraints on their jurisdiction.¹³⁸ Additionally, any regulation a state may impose for its own benefit can potentially affect other states' abilities to use the water source.¹³⁹ These other states may already have plans for that water's usage, which are now significantly affected by the regulations of a surrounding state.¹⁴⁰ Adding to that, states

¹³³ *Ubbelohde*, 330 F.3d at 1028–29; *Am. Rivers*, 271 F. Supp. 2d at 252–53.

¹³⁴ *Ubbelohde*, 330 F.3d at 1031–32; *Am. Rivers*, 271 F. Supp. 2d at 251.

¹³⁵ Successful compacts include the Delaware River Basin Compact and the Susquehanna River Basin Compact. DELAWARE RIVER BASIN COMPACT, DELAWARE RIVER BASIN COMMISSION (1961), available at <http://www.state.nj.us/drbc/regs/compa.pdf>; SUSQUEHANNA RIVER BASIN COMPACT, SUSQUEHANNA RIVER BASIN COMMISSION (1972), available at http://www.srbc.net/about/srbc_compact.pdf. But see Joseph W. Dellapenna, *Interstate Struggles over Rivers: The Southeastern States and the Struggle over the 'Hooch*, 12 N.Y.U. ENVTL. L.J. 828, 830–31 (2005) (describing the Apalachicola-Chattahoochee-Flint River Basin Compact as an unsuccessful compact).

¹³⁶ Featherstone, *supra* note 21, at 274.

¹³⁷ Robert Haskell Abrams, *Water Federalism and the Army Corps of Engineers' Role in Eastern States Water Allocation*, 31 U. ARK. LITTLE ROCK L. REV. 395, 400 (2009) [hereinafter *Water Federalism*].

¹³⁸ See Featherstone, *supra* note 21, at 271.

¹³⁹ See *id.*

¹⁴⁰ See *id.*

are considered sovereign in their decisions about water regulations,¹⁴¹ leading a single sovereign's decision to affect several other sovereigns and their resources.¹⁴² In-fighting between states can arise,¹⁴³ particularly in areas where many people are consuming water resources, like larger cities, and places where water is more scarce, like the western states.¹⁴⁴

These compacts can come in many forms, including interstate compacts,¹⁴⁵ federal-interagency partnerships,¹⁴⁶ and federal-interstate compacts.¹⁴⁷ Interstate compacts are agreements just between the individual states on water usage.¹⁴⁸ The state compacts address primarily water allocation, and generally are administered through a commission.¹⁴⁹ Federal-interagency partnerships are similar, but focus instead on cooperation between states and federal agencies.¹⁵⁰ The focus of this Note, however, is federal-interstate compacts, which combine the advantages of both state cooperation and federal oversight and participation.¹⁵¹ Most of these federal-interstate compacts create commissions to act as oversight bodies, acting on behalf of their members to reach decisions about water management for the area.¹⁵² The commissions act with the combined sovereignty of their members, and pass down decisions that are binding on all parties, depending on the rules of the compact.¹⁵³

¹⁴¹ Unless they are superceded by a federal statute, as in *South Dakota v. Ubbelohde*, 330 F.3d 1014, 1019 (8th Cir. 2003).

¹⁴² *Water Federalism*, *supra* note 137, at 401 ("The idea that the states should be the authority making allocative choices about water is deeply ingrained in doctrines throughout water law . . .").

¹⁴³ *See supra* Part IV.

¹⁴⁴ Featherstone, *supra* note 21, at 271.

¹⁴⁵ *Id.* at 272; *see also Broadening Narrow Perspectives*, *supra* note 22, at 247–48.

¹⁴⁶ Featherstone, *supra* note 21, at 278–79.

¹⁴⁷ *Id.* at 279–81; *see also* Dellapenna, *supra* note 135, at 844 ("The name belies the fact that all compacts involve a federal role, at least in the approval of the compact. Some other compacts also include lesser degrees of active federal involvement.").

¹⁴⁸ These include the Colorado River Compact, the Upper Colorado River Basin Compact, the Interstate Commission on the Potomac River Basin, Interstate Environment Commission, New England Interstate Water Pollution Control Commission, Ohio River Valley Sanitation Commission and the Tahoe Regional Planning Agency. Featherstone, *supra* note 21, at 273.

¹⁴⁹ *Id.*

¹⁵⁰ *See id.* at 278.

¹⁵¹ *Id.* at 279–80.

¹⁵² *See id.* at 279.

¹⁵³ *Id.* at 279–80 ("Of the four compacts commissions, the [Delaware River Basin] compact grants the most extensive powers to its compact commission and most fully binds the federal government as a party. In the [Alabama-Coosa-Tallapoosa River Basins] and [Apalachicola-Chattahoochee-Flint River Basins] compacts, the federal government is

The advantages of any form of compact include a reduction in litigation, flexibility in purpose, and adaptability in management.¹⁵⁴ These compacts are generally strong, though federal participation may wax and wane throughout the life of the compact.¹⁵⁵ Additionally, parties must be willing to compromise; compacts can fall apart if their members cannot reach agreements on water management plans.¹⁵⁶ The feasibility and hardships of these compacts will now be explored by looking to a case study of the Delaware River Basin Commission.¹⁵⁷

B. Delaware River Basin Commission: Case Study

The Delaware River Basin Commission first grew out of intensive amounts of litigation among the states bordering and containing the Delaware River Basin.¹⁵⁸ Originally, the states attempted to form an interstate agreement without the presence of the federal government, but that first attempt failed.¹⁵⁹ The Delaware River Basin Commission currently in place was the second attempt to find consensus among these contentious parties.¹⁶⁰ It was formed by a compact among Delaware, New Jersey, Pennsylvania, and New York, with the new and additional party of the federal government.¹⁶¹ The Commission created a regulatory agency that also had the ability to plan and implement its own regulations.¹⁶²

more of a silent partner. However, the two compacts contain identical provisions mandating that federal agencies exercise their powers in a manner that is consistent with the allocation formulas developed by the compact commissions for the basins' surface waters."').¹⁵⁴ See *id.* at 274. For example, a commission can be created to regulate only one issue, or it can regulate only one waterway; the limits of these compacts are only what the states place on them.

¹⁵⁵ See *supra* Part V.2.

¹⁵⁶ See, e.g., Dellapenna, *supra* note 135, at 830–31 ("The Apalachicola-Chattahoochee-Flint River Basin Compact (Chattahoochee Compact) has proven the more troubling. . . . [T]he Florida and Georgia governments had such diametrically opposed agendas for the river that they were unable, after more than six years of negotiations, to reach an agreement about how to allocate the river. Because of this failure, the two compacts lapsed." (emphasis in original)).

¹⁵⁷ The majority of the scholarship in this area is regarding the Delaware River Basin Commission, the structure of which is most applicable to the recommendation of this Note. See generally, DELAWARE RIVER BASIN COMMISSION, <http://www.state.nj.us/drbc/> (last visited Jan. 17, 2013).

¹⁵⁸ Featherstone, *supra* note 21, at 279.

¹⁵⁹ See Dellapenna, *supra* note 135, at 842–43.

¹⁶⁰ See *id.* at 843.

¹⁶¹ *Id.* at 841–43.

¹⁶² *Id.* at 843; Featherstone, *supra* note 21, at 279.

The Commission consists of a federal representative and the governors of all four states, acting through representatives.¹⁶³ The Commission's managing power is focused directly on its main principles of allocation,¹⁶⁴ but also gives the Commission the broad responsibilities of "planning, designing, funding, constructing, and operating facilities for water supply and pollution control; establishing water quality standards; regulating and controlling water withdrawals and diversions from ground and surface waters; and reviewing projects to ensure that they do not impair or conflict with each commission's Comprehensive Plan."¹⁶⁵ Using these principles, the Delaware River Basin Commission has balanced the interests of all participating states, while also allowing for the Delaware River to be a major water source for New York City itself.¹⁶⁶

One of the most important features of the Delaware River Basin Commission was Congress's decision to allow federal projects on the Delaware River to be subject to the consent of the Commission.¹⁶⁷ This meant that some projects could be overturned, allowed, or altered through simple majority vote.¹⁶⁸ Though Congress did require that some decisions be only reached through a unanimous vote,¹⁶⁹ the reliance on the simple majority for most decisions demonstrates Congressional faith in the Commission's ability to achieve its goals. Another demonstration of this is that despite the fact that Congress "reserved the power to amend the compact without the consent of the participating states," it has never felt the need to exercise this power.¹⁷⁰

The Delaware Commission has been extraordinarily successful in achieving the goals first laid out in the compact.¹⁷¹ Its strength comes from two places: its operation as a regional manager, not simply a coalition of states, and its refusal to focus solely on allocation.¹⁷² The Commission has taken steps towards making "multi-state basinwide benefits," and used its powers to enhance the resource allocations for all interested parties.¹⁷³

¹⁶³ Dellapenna, *supra* note 135, at 843.

¹⁶⁴ *Broadening Narrow Perspectives*, *supra* note 22, at 249.

¹⁶⁵ Featherstone, *supra* note 21, at 280.

¹⁶⁶ *See Broadening Narrow Perspectives*, *supra* note 22, at 249.

¹⁶⁷ Dellapenna, *supra* note 135, at 844.

¹⁶⁸ *See id.*

¹⁶⁹ *Id.* ("Congress limited federal subordination by requiring a unanimous vote for certain decisions and by requiring that the federal delegate approve any comprehensive plan and a few other decisions.").

¹⁷⁰ *Id.*

¹⁷¹ Featherstone, *supra* note 21, at 280.

¹⁷² *Broadening Narrow Perspectives*, *supra* note 22, at 251.

¹⁷³ *Id.*

This is one of its greatest successes. For example, in the 1960s a significant period of drought hit the Delaware River Basin region.¹⁷⁴ During those drought periods, the Commission allowed a way for states to renegotiate ad hoc agreements within Supreme Court-mandated parameters, in order to satisfy the needs of all interested parties.¹⁷⁵ In the aftermath of that drought, the Commission provided a forum for “intensive good faith negotiations” to determine water allocation rights in times of drought.¹⁷⁶ Through a cooperative structure, the states and the federal government created a series of “drought operating curves,” which provided for water flow and capture in three different states, “drought watch,” “drought warning,” and “drought.”¹⁷⁷ These drought operating curves, with minimal changes, were adopted by the Commission in 1982.¹⁷⁸ Another example of ad hoc agreements and recommendations by cooperation of the states that were eventually adopted as law by the commissions includes:

allow[ing] the Commission to draw on private power company reservoirs and state and federal multi-purpose reservoirs to augment Delaware River flows in order to repel salt and protect water supply intakes in the Delaware Estuary and Bay, while also allowing New York City to maintain adequate water levels in its reservoirs.¹⁷⁹

This ability to reevaluate at a moment’s notice has made the Delaware River Basin Commission as successful as it is.

The Delaware River Basin Commission demonstrates the qualities of adaptive management as well. The Commission allowed for the adjustment of water allocations to “meet the needs of aquatic life and the demands of anglers, boaters, and other recreational users” as these needs arise, despite the fact that these needs could not be and were not foreseen when the Commission was created.¹⁸⁰

Some criticisms of the Delaware River Basin Commission include the lack of strong federal presence.¹⁸¹ The Commission originally placed a high importance on the presence of a strong federal power to coordinate

¹⁷⁴ *Id.* at 249.

¹⁷⁵ *See id.*

¹⁷⁶ *Id.* at 249–50.

¹⁷⁷ *Id.* at 250.

¹⁷⁸ *Broadening Narrow Perspectives*, *supra* note 22, at 250.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ *See Featherstone*, *supra* note 21, at 281.

the Commission and its relationship to federal projects, but the role of the strong federal actor has never been filled.¹⁸² In fact, the federal member of the Commission has become largely ceremonial; the representative does not have the power to “speak authoritatively for the federal government,” and the federal government attempted to avoid making commitments within the Commission.¹⁸³ As Martha Derthick, former professor of Governmental Studies at the University of Virginia and member of the Brookings Institution,¹⁸⁴ points out, this puts the federal representative in a strange position because “[h]e is supposed to represent the interests of the federal government that has never been convinced its interests are being served by his being there.”¹⁸⁵ There is evidence that federal commitment to the Delaware Commission is waning, as the federal government begins to believe that these Commissions serve the states much more than the federal government.¹⁸⁶ As a result, in 2001 the federal government shifted the funding mechanism primarily to the states,¹⁸⁷ and also appointed a Corps officer to represent federal interests on the Commission, rather than a presidential appointee.¹⁸⁸

VI. RIVER BASIN COMMISSIONS FOR THE MISSOURI RIVER

A river basin commission for the Missouri River watershed states would provide an excellent way to foster compromise, open lines of communication, and pursue an adaptive management program to the satisfaction of all parties involved. This river basin commission would provide a forum for airing grievances, altering waterway usage, and allowing for the balancing of mutual interests.¹⁸⁹

Because of the heavy influence of the Corps, it would be in the best interest of all parties for the river basin commission to be a joint one between the states and the federal government. Unlike the Delaware River Basin Commission, however, this commission should welcome the Corps

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ Martha Derthick '54, HIRAM COLLEGE ALUMNI, <http://alumni.hiram.edu/?awarddderthick> (last visited Jan. 17, 2013).

¹⁸⁵ Featherstone, *supra* note 21, at 281 (quoting Martha Derthick, *Between Nation and State*, BROOKINGS INSTITUTION (1974)).

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *See id.*

¹⁸⁹ Though successful River Basin Commissions are usually on rivers in areas that are not arid or as plagued with drought, there is no reason the model, with some adjustments, could not work in the American West. *See supra* note 135, and accompanying text.

as participants in the compact. This would also solve the issue of the federal government's apathy in their role in the federal-state joint commissions; since the Corps is so integral to the management of the Missouri River, it would be in their best interest to have representation.

To that end, it would also be helpful for the commission to establish some sort of input into the Corps's annual operating plan, as well as a supervisory, if not binding, interest in any revisions to the Master Manual. This should assuage the fears of individual states that the Corps is not accounting for their interests in its actions, and may prevent the governments of individual states from speaking out against the Corps's management. Giving states a stake in that management would allow states to feel as though their opinion is being taken into account, and would give them each a stake in the success of the management. In times of trouble, it may also spread the blame in such a way that there is no single entity to criticize if something goes wrong.

The Missouri River Basin may also benefit from another alteration to the traditional river basin commission by forming the commission around the restrictions of the now-standing Master Manual. Though, as stated above, these states would have influence in future drafts,¹⁹⁰ it may be helpful to have boundaries within which to build the commission. If everyone must work within the confines of the already-drafted Master Manual, it narrows the parameters in which states can work at the outset, leaving less room for potential in-fighting. Additionally, beginning within the Master Manual's confines may provide an important lesson to the states that were quick to decry the Corps by helping those states to realize the regulations within which the Corps must operate. Finally, a commission may help the Corps see areas in which the Master Manual allows for more creativity and new ideas than tradition typically allowed, or ways to draft future Master Manuals that allow for the incorporation of new ideas.

A commission may also help reinvigorate the use of adaptive management. Though the Corps is supposed to be following an adaptive management scheme, as stated above,¹⁹¹ that has recently grown stagnant. The use of a commission might encourage a rebirth of the concept of adaptive management. Though many more hands will be in the water management scheme, new and fresh management voices may allow for new management ideas and the opportunity for exploration and improvement. Additionally, with potentially contentious parties working together, the resolution of conflict might require more creative solutions than have been used in the

¹⁹⁰ See *supra* Part IV.

¹⁹¹ See *supra* Part III.

past. The spirit of adaptive management, "learning while doing,"¹⁹² may be revived with new and diverse parties on the table. At the very least, the stagnation that has been plaguing the Corps for so long will be fixed. With that many new parties assisting in the creation of policy, regulations, and actions, stagnation will not remain in the status quo.

This structure also would benefit the individual states, and the Corps overall, by fostering cooperation. This region, as stated above, is routinely litigious when it comes to water management, much like the Delaware River Basin Commission states were.¹⁹³ Creating an environment of forced cooperation may help each state to see beyond its own borders to manage their water in a way that benefits everyone, rather than suing to protect only what is within its borders. However, these states must learn to compromise if the commission is ever to become anything more than a figurehead. The Apalachicola-Chattahoochee-Flint River Basins Commission failed because of a lack of cooperation.¹⁹⁴ The Missouri River states should heed that as a warning, while also holding Delaware as an example of what cooperation can do to benefit states in a compact. As long as the Missouri River states can learn to cooperate, a commission could be beneficial for all parties.

CONCLUSION

The flood damage from the summer of 2011 was certainly devastating to the Missouri River watershed. While a federal-interstate water compact may not solve all environmental problems like drought and flood in the future, it certainly creates a way for all interested governmental parties to have a stake in the decision-making. In a region this contentious and litigious about its water rights, a cooperative program that incorporates all voices may be the first step down a path that ends in environmental solutions, not the courtroom. A new river basin compact will hopefully use the principles of adaptive management to balance all interests, from large corporations to those of the piping plover. If the current system is left untouched, it will continue to be a reactive and retroactive series of finger pointing, rather than a solution that allows those parties to work together to address problems out in the open. For these reasons, the Missouri River Basin Compact could improve goodwill, cooperation, and hopefully, the overall quality of the Missouri River ecosystem.

¹⁹² See Ruhl & Fischmann, *supra* note 14, at 424.

¹⁹³ See *supra* Part V; see also Featherstone, *supra* note 21, at 279.

¹⁹⁴ See Dellapenna, *supra* note 135, at 830–31.