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A TALE OF THREE STATES: EQUITABLE APPORTIONMENT OF THE APALACHICOLA-CHATTHOOCHEE-FLINT RIVER BASIN

Alyssa S. Lothrop

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COMMENT

A TALE OF THREE STATES: EQUITABLE APPORTIONMENT OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER BASIN

ALYSSA S. LATHROP*

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I. INTRODUCTION

In 1876, the head of the U.S. Geological Survey, Major John Wesley Powell, declared that west of the 100th meridian that divided the country, rainfall was scarce—"cooperative irrigation and an equitable

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system of water rights" would be required. By contrast, in the East, rainfall was plenty—people could grow anything without irrigation. In the East, there was so much water that those who lived there would never have to worry about water.

The eastern states, "blessed with bountiful rain and plentiful lakes and rivers, seemed immune to battles over . . . water." Unfortunately, as populations have risen, so have the conflicts over water in the East.⁵ Recent years have witnessed Maryland square off against Virginia over the Potomac; South Carolina against North Carolina over the Pee Dee River; North Carolina against Georgia over the Savannah River; and—the topic of this Comment—Florida, Alabama, and Georgia fighting over the Apalachicola-Chattahoochee-Flint (ACF) River Basin.⁶ As populations continue to grow, these conflicts will increase.⁷ Put simply, "[t]he water wars have moved east," and they are here to stay.

This Comment proceeds in four parts. Part II explores the history and conflict over the ACF River Basin as well as the current litigation. However, regardless of the outcome, the current litigation will not resolve the issues. The basics of the likely next step—equitable apportionment by the U.S. Supreme Court—are explored in Part III. Then, Part IV analyzes how an equitable apportionment case involving the ACF River Basin is likely to be decided. Part V delivers the bad news: even equitable apportionment will not solve all the problems. The best path to resolution, for all parties, is for Florida, Georgia, and Alabama to work amicably and cooperatively together toward a forward-looking solution.

II. A TRAGEDY OF THE COMMONS: THE ACF RIVER BASIN

Water is a limited and finite resource that everyone wants to use to the fullest extent possible. Because "[a] river basin is a resource shared by many users. . . . many aspects of . . . [the] famous description of 'The Tragedy of the Commons' apply." None of the users of

^{1.} CYNTHIA BARNETT, MIRAGE: FLORIDA AND THE VANISHING WATER OF THE EASTERN U.S. 3 (2007). The 100th meridian divides the country down the middle, through North and South Dakota to Texas. Id.

^{2.} *Id*.

^{3.} *Id.* at 4.

^{4.} J.B. Ruhl, Equitable Apportionment of Ecosystem Services: New Water Law for a New Water Age, 19 J. LAND USE & ENVIL. L. 47, 47 (2003).

^{5.} Josh Clemons, Interstate Water Disputes: A Road Map for States, 12 SE. ENVTL. L.J. 115, 115 (2004).

^{6.} *Id*.

^{7.} Id.

^{8.} Ruhl, *supra* note 4, at 48. *supra* note 4, at 48.

the basin have incentives to share the water; for users, it makes the most sense to consume it or allocate it for their own purposes. There is no easy method to motivate the users to internalize the consequences of their actions. Although river basins are hardly unregulated, existing regulatory controls offer a piecemeal effort at regulation and none consider the basin-wide best interest. The ACF River Basin system is an unfortunate illustration of the tragedy of the commons. In particular, Georgia has no incentive to allow water to flow downstream to the Apalachicola Bay rather than procure it to water its crops and provide drinking water for Atlanta. How the parties resolve the current conflict could either provide a glimmer of hope for resolution of future conflicts or it could become a tragic real-life demonstration of what happens when parties are unable to work together in a zero-sum game.

A. History and the Beginning of the Conflict

The ACF River Basin system has humble beginnings as the Chattahoochee River, a small river in northern Georgia that starts as a trickle and winds down the length of the state. ¹¹ The Chattahoochee provides recreation, supports sixteen power-generating plants, supplies water to Atlanta, irrigates crops, and is a dumping ground for pollution and wastewater. ¹²

There are thirteen dams on the Chattahoochee River,¹³ four of which are controlled by the Army Corps of Engineers.¹⁴ One of the Corps' dams, the Buford Dam, produces power and forms Lake Lanier.¹⁵ The Corps' operation of its dams has wide-reaching effects, making the Corps the "de facto river basin manager."¹⁶

^{9.} Robert Haskell Abrams, Broadening Narrow Perspectives and Nuisance Law: Protecting Ecosystem Services in the ACF Basin, 22 J. LAND USE & ENVIL. L. 243, 244-45 (2007) [hereinafter Abrams, Broadening Narrow Perspectives].

^{10.} Robert Haskell Abrams, Interstate Water Allocation: A Contemporary Primer for Eastern States, 25 U. ARK. LITTLE ROCK. L. REV. 155, 172 (2002).

^{11.} BARNETT, supra note 1, at 114.

^{12.} Id. at 114-15, 117.

^{13.} Gretchen Loeffler & Judy L. Meyer, University of Georgia River Basin Center, Chattahoochee-Flint River Basin, http://www.rivercenter.uga.edu/education/k12resources/basinsofga2.htm (last visited Nov. 30, 2009). There are sixteen mainstem dams on the ACF River Basin, thirteen of which are along the Chattahoochee River. *Id.*

^{14.} Atlanta Journal-Constitution, Drought Q&A (Nov. 9, 2007), http://www.ajc.com/metro/content/metro/stories/2007/11/09/droughtqa_1111.html [hereinafter Drought Q&A]. These four dams are the Buford Dam, West Point Dam, W.F. George Dam, and George W. Andrews Dam. *Id.* The Corps also operates the Jim Woodruff Dam, which is located on the Apalachicola River about 1,000 feet below where the Chattahoochee and Flint Rivers meet. *Id.*

^{15.} Abrams, *Broadening Narrow Perspectives*, supra note 9, at 246, 253. The Buford Dam was authorized by the Rivers and Harbors Act of 1945, which designated flood control and power as the sole purposes of the dam. *Id.* at 253.

^{16.} Id. ("The Corps, acting pursuant to its legal authority, decides who gets to use the water at what time and thereby imposes external costs on the loser of the allocation con-

About forty miles southwest of Lake Lanier is Atlanta, a city of about five million people who rely on the Chattahoochee to supply their drinking water.¹⁷ Unlike most eastern cities, Atlanta does not sit on a massive aquifer that supplies groundwater,¹⁸ nor does it sit near a big river or a port. In fact, Atlanta is the largest major city not built near a large body of water.¹⁹ This is because Atlanta developed as a transportation hub around railroads.²⁰ Railroads were typically built on ridges; consequently, Atlanta is located "at the intersection of several ridges on the drainage divide between the Atlantic Ocean and the Gulf of Mexico."²¹ The only sizable river near Atlanta is the Chattahoochee,²² which Atlanta must rely on for approximately 337.5 million gallons of water a day—three-fourths of its demand.²³

The Flint River starts just south of Atlanta's Hartsfield International Airport and flows southward through Georgia, providing irrigation to rural areas of the state.²⁴ The Flint River has historically provided more than forty percent of the Basin's summer flow.²⁵ At the Florida line, the Chattahoochee joins the Flint River to become the Apalachicola River.²⁶ By the time the Apalachicola River reaches the Gulf of Mexico, it is no longer small—in terms of flow, it is the largest in Florida and the fourth largest in the southeastern United Sates.²⁷ It discharges sixteen billion gallons of nutrient-rich freshwater daily into the Apalachicola Bay, an immensely productive estuary.²⁸ This

test."). However, the Corps' legal authority to manage the water does not necessarily align with any particular state's interest. Rather, the Corps should be operating the dams to achieve the purposes authorized by Congress. For example, regarding Florida's interests, "[t]here is no reason to expect the Corps to take actions that materially advance Florida's desire to maintain and improve ecosystem services in the ACF, unless it happens as a felicitous by-product of the Corps pursuing its narrower statutory missions." *Id.* at 270.

- 17. BARNETT, supra note 1, at 116-17.
- 18. Id. at 117.
- 19. Press Release, Shirley Franklin, Mayor of Atlanta, Stakeholder Letter on Water Conservation (Nov. 11, 2007), available at http://www.atlantaga.gov/media/wcstakeholderletter_110707.aspx [hereinafter Stakeholder Letter on Water Conservation].
- 20. United States Geological Survey, Atlanta Area Water Supply and Use, http://ga.water.usgs.gov/olympics/atlanta.wu.html (last visited Nov. 30, 2009).
 - $21. \ \ Id.$
 - 22. Id.
- 23. See BARNETT, supra note 1, at 117; Carl Erhardt, The Battle over "The Hooch": The Federal-Interstate Water Compact and the Resolution of Rights in the Chattahoochee River, 11 STAN. ENVLT. L.J. 200, 201 (1992).
 - 24. Abrams, Broadening Narrow Perspectives, supra note 9, at 246.
 - 25. Id.
 - 26. Barnett, supra note 1, at 115.
- 27. Florida Department of Environmental Protection, Apalachicola-Chattahoochee-Flint River System, http://www.dep.state.fl.us/mainpage/acf (last visited Nov. 30, 2009) [hereinafter Apalachicola-Chattahoochee-Flint River System].
- 28. BARNETT, supra note 1, at 115; Apalachicola-Chattahoochee-Flint River System, supra note 27.

area of Florida, known as the "Forgotten Coast," relies on the delicate mix of freshwater and saltwater to produce the unique environment of the estuary, which brings in more than \$130 million per year in revenue. 100 million per year in revenue.

Economically, this region "derives its benefits directly from the ecosystem services—literally harvesting some of them by oystering, but also by taking advantage of the beauty to promote tourism and recreational water use." The Apalachicola Bay produces a shrimp harvest of six million pounds per year and supplies ninety percent of Florida's oysters and ten percent of all oysters consumed in the United States. The Apalachicola River is also home to federally protected species that are particularly impacted if enough water does not flow down the Apalachicola—specifically, the Chipola slabshell mussel, the purple bankclimber mussel, the fat threeridge mussel, and the Gulf sturgeon. 33

Following droughts in Georgia in 1972,³⁴ Congress authorized the United States Army Corps of Engineers to study alternatives that would meet Atlanta's growing water supply needs.³⁵ In 1989, the Corps issued a report that recommended reallocating twenty percent of the hydropower storage in Lake Lanier for Atlanta.³⁶ The next year, Alabama brought suit against the Corps³⁷ in the Northern District of Alabama on the basis that the reallocation would violate Alabama's water rights and that the Corps had failed to do an adequate environmental impact statement.³⁸ In particular, Alabama claimed

^{29.} The nickname is a result of when Apalachicola and other neighboring towns were left off of the state tourism map. William Schemmel, *Where Florida Stayed Wild*, ATLANTA J.-CONST., Nov. 9, 2008, *available at* http://www.ajc.com/metro/content/printedition/2008/11/09/apalachicola.html (quipping that "one can't help wonder whether the oversight wasn't by design").

^{30.} John Zarrella & Patrick Oppmann, 'Forgotten Coast': A Drought, a Bay and a Way of Life Threatened, CNN.COM, Nov. 13, 2007, http://www.cnn.com/2007/US/11/13/water.wars/index.html.

 $^{31. \ \} Abrams, Broadening\ Narrow\ Perspectives,\ supra\ {\tt note}\ 9,\ {\tt at}\ 247.$

^{32.} Barnett, supra note 1, at 115.

^{33.} Alabama v. U.S. Army Corps of Eng'rs, 441 F. Supp. 2d 1123, 1125 & n.2 (N.D. Ala. 2006).

 $^{34.\,}$ Clemons, supra note 5, at 135. Major droughts also took place in 1981, 1986, and 1988. Id.

^{35.} Id.

^{36.} Id. at 135-36; see also Jeffrey Uhlman Beaverstock, Learning to Get Along: Alabama, Georgia, Florida and the Chattahoochee River Compact, 49 Ala. L. Rev. 993, 993 (1998); Jessica A. Bielecki, Managing Resources with Interstate Compacts: A Perspective from the Great Lakes, 14 BUFF. ENVTL. L.J. 173, 208 (2007). Atlanta had proposed to increase the additional withdrawals to twice the amount previously withdrawn—up to 529 million gallons a day. Beaverstock, supra, at 993 & n.5. Even so, the change was only expected to "quench Atlanta's growing thirst through the year 2010." Clemons, supra note 5, at 136.

^{37.} Bielecki, supra note 36, at 208.

^{38.} Joseph W. Dellapenna, Interstate Struggles over Rivers: The Southeastern States and the Struggle over the 'Hooch, 12 N.Y.U. ENVIL. L.J. 828, 865-66 (2005).

that this change would result in higher hydropower costs, reduced dilution of water pollution, and "a chilling effect on Alabama's ability to recruit industry to the state."³⁹ Florida intervened in the lawsuit because it was worried about the ecological health of the Apalachicola Bay. ⁴⁰ Georgia also intervened and responded that, as a sovereign, it was entitled to manage the river within its borders on its own terms. ⁴¹ Of the three states, Georgia is the only one that relies on the ACF River Basin for large supplies of fresh water. ⁴²

And thus the conflict over the ACF River Basin was born.

B. The ACF Compact: A Failed Attempt to Resolve

In 1992, the states signed a Memorandum of Agreement that postponed the litigation in order to work on compact agreements. The ACF River Compact was created in 1997 with the approval of Congress. The Compact did not allocate water—rather, it was an agreement to agree on allocation of the water. It established the ACF Basin Commission and charged it with the daunting task of agreeing on an allocation formula. Commentators and scholars hailed the ACF Compact as the best method of resolving the situation and were hopeful for a resolution.

Unfortunately, things did not go as planned or hoped. The Commissioners extended the deadline for the agreement more than a dozen times.⁴⁷ Although the parties came "tantalizingly close to a final agreement" in 2003, Florida refused to accept an agreement that only guaranteed minimum flows and Georgia "bristled at Florida's proposal that it limit irrigated farm acreage and control reservoir levels, refusing to be told by Florida how to 'micromanage' its water

^{39.} Clemons, supra note 5, at 136.

^{40.} Id.

^{41.} *Id.* Interestingly, Georgia is sovereign over all of the Chattahoochee even though part of the river forms the border between Alabama and Georgia. Dellapenna, *supra* note 38. at 866.

^{42.} Douglas Jehl, Atlanta's Growing Thirst Creates Water War, N.Y. TIMES, May 27, 2002. at A1.

^{43.} Dellapenna, supra note 38, at 870-71.

^{44.} Apalachicola-Chattahoochee-Flint River Basin Compact, Pub. L. No. 105-104, 111 Stat. 2219 (1997); see also Bielecki, supra note 36, at 208.

^{45.} Clemons, *supra* note 5, at 137-38. The ACF Basin Commission was "comprised of the governors of Alabama, Florida, and Georgia, and a non-voting federal member." *Id.*

^{46.} See, e.g., Beaverstock, supra note 36, at 1003 ("Alabama, Georgia, and Florida stand a better chance of getting what they want out of the water allocation if they can keep the case out of the Supreme Court and agree among themselves."); David N. Copas, Jr., Note, The Southeastern Water Compact, Panacea or Pandora's Box? A Law and Economics Analysis of the Viability of Interstate Water Compacts, 21 WM. & MARY ENVIL. L. & POLY REV. 697, 730 (1997) ("Because of the tremendous efficiency advantages, a federal-interstate compact represents the most economically intelligent idea for Alabama, Florida, and Georgia to pursue.").

^{47.} Dellapenna, *supra* note 38, at 872.

use."⁴⁸ In the end, despite six years of frustration and millions of dollars spent, the Commission never came to an agreement and the Compact expired on August 31, 2003.⁴⁹

C. A Tangled Web of Litigation

While the negotiations of the ACF Compact were pending, the southeastern United States, especially Georgia, experienced an even more severe drought than the one in the 1980s.⁵⁰ Atlanta's primary reservoir, Lake Lanier, fell to all-time lows.⁵¹ During this time, Georgia continued to petition the Corps to reallocate water from Lake Lanier for municipal uses in Atlanta.⁵² While the request was pending, Southeastern Power Customers, Inc., filed its own suit against the Corps in December 2000 in the District of Columbia.⁵³ When the Corps did not respond to Georgia's request in 2001, Georgia filed suit against the Corps in the Northern District of Georgia, only to have Florida and Southeastern Power petition to intervene in the suit.⁵⁴ In 2002, the Corps finally registered a decision and declined Georgia's request. The Northern District of Georgia denied Florida and Southeastern Power's motions to intervene. ⁵⁵ On appeal in August 2002, the Eleventh Circuit reversed the district court's decision and remanded for further proceedings.⁵⁶

Meanwhile, in the D.C. case, the district court referred the parties to mediation in 2001, where they were joined by Georgia and water supply providers.⁵⁷ The parties negotiated an agreement to reallocate water from Lake Lanier and signed it in January 2003.⁵⁸ In October 2003, the Alabama district court entered an injunction that prevented the agreement from being implemented.⁵⁹ In February 2004, the district court in D.C. approved the agreement contingent on the dissolution of the Alabama court's injunction.⁶⁰ Alabama and Florida appealed this decision, but the D.C. Circuit Court of Appeal initially dismissed for lack of a final order since the decision was contingent.⁶¹

^{48.} Clemons, supra note 5, at 138-39.

^{49.} Bielecki, supra note 36, at 208 & n.192.

⁵⁰. Dellapenna, supra note 38, at 828. From 1998 to 2002, parts of Georgia received nineteen inches fewer than normal and the Flint River was reduced to one-forth its normal flow. Id.

^{51.} Id. at 828-29.

^{52.} Id. at 875.

^{53.} Id. at 876.

^{54.} *Id.* at 875.

^{55.} Georgia v. U.S. Army Corps of Eng'rs, 302 F.3d 1242, 1249 (11th Cir. 2002).

^{56.} Id. at 1260

^{57.} Se. Fed. Power Customers, Inc. v. Geren, 514 F.3d 1316, 1319 (D.C. Cir. 2008).

^{58.} *Id*.

^{59.} Id. at 1320.

^{60.} Id.

^{61.} Id.

The Eleventh Circuit dissolved the Alabama district court's injunction in 2005;⁶² subsequently, the D.C. district court entered a final order in 2006.⁶³ In 2008, the D.C. Circuit Court of Appeal invalidated the agreement.⁶⁴ Under the Water Supply Act, the Corps must obtain prior congressional approval before making any major operational changes.⁶⁵ The court held that the settlement agreement's reallocation of Lake Lanier constituted a major operation change that had not been authorized by Congress.⁶⁶

Meanwhile, in 2006, the Corps adopted an Interim Operations Plan (IOP), which incorporated "a sliding scale water release schedule that is triggered by basin inflow to the ACF System" but requires maintenance of a minimum flow of no less than 5000 cubic feet per second (cfs).⁶⁷ The IOP made neither Florida nor Georgia happy. Just weeks after the plan was adopted, the drought in Georgia worsened.⁶⁸ Georgia voiced concerns that the IOP would rapidly deplete the conservation storage in the ACF River Basin.⁶⁹ After the Corps failed to alter the IOP, Georgia filed an action against the Corps in June 2006 in the Northern District of Georgia,⁷⁰ alleging that the IOP was arbitrary and capricious because the Corps failed to consider the possibility of a severe drought like the one that was occurring in Georgia.⁷¹

In the Northern District of Alabama lawsuit, Florida filed a motion for preliminary injunction, arguing that the IOP as implemented resulted in an unlawful taking of the endangered mussel species under the Endangered Species Act. Evidence that the implementation of the IOP allowed precipitous drops in flows and stranded the slow-moving mussels provided support for Florida's motion. The court found that a taking had occurred and acknowledged that the mussels are "dying by the hundreds, that more will die at 5,000 cfs, and that their habitat is being modified by the decreased flows so that they are facing death, harm and harassment. Despite these findings,

^{62.} Alabama v. U.S. Army Corps of Eng'rs, 424 F.3d 1117, 1136 (11th Cir. 2005).

^{63.} Geren, 514 F.3d at 1320.

^{64.} Id. at 1325.

^{65.} Id.

^{66.} Id.

 $^{67.\ \,}$ Alabama v. U.S. Army Corps of Eng'rs, $441\ \,$ F. Supp. 2d $1123,\ 1127$ (N.D. Ala. 2006).

^{68.} Motion of the State of Georgia for Preliminary Injunction and Memorandum of Law in Support Thereof at 17, *In re* Tri-State Water Rights Litig., No. 3:07-MD-1-PAM (M.D. Fla. Oct. 19, 2007) [hereinafter Motion for Preliminary Injunction].

^{69.} Id

^{70.} Georgia v. U.S. Army Corps of Eng'rs, No. 1:06-cv-1473 (N.D. Ga. 2006).

^{71.} Motion for Preliminary Injunction, supra note 68, at 18.

^{72.} Alabama, 441 F. Supp. 2d at 1128.

^{73.} *Id*.

^{74.} Id. at 1132.

the district court held that because the Basin was experiencing an extreme drought, the Corps could not be held "responsible for the absence of rain,"⁷⁵ and it stated that the U.S. Fish & Wildlife Service, not the court, was in the best position to determine the appropriate steps to protect the mussels.⁷⁶ Florida then filed a lawsuit against the U.S. Fish & Wildlife Service in 2006.⁷⁷

In March 2007, the Judicial Panel on Multidistrict Litigation transferred all of the cases, ⁷⁸ except the D.C. Circuit litigation, to the Middle District of Florida and assigned the case to Judge Paul Magnuson, who was given an inter-circuit assignment in the Middle District. ⁷⁹ Judge Magnuson, a judge from Minnesota, has experience with difficult water battles, having served as a judge in the complicated *Missouri River* litigation. ⁸⁰

Georgia then filed a petition of certiorari with the U.S. Supreme Court, seeking review of the D.C. Circuit's Southeastern Power decision that invalidated the settlement agreement. However, Georgia quickly saw the likelihood dwindle that the Supreme Court would take the case and perhaps validate the agreement. The Justice Department recommended that the Supreme Court not take the case, and on January 12, 2009, the Supreme Court denied Georgia's petition, declining to hear the case.

D. Current Status of the Water War

In the consolidated litigation over the ACF River Basin, Florida recently garnered an arguable "win" in the form of a ruling that the Corps were not authorized to operate the Buford Dam to supply water to Atlanta.

In August 2008, Judge Magnuson of the Middle District of Florida had ordered that the central question was whether Atlanta has a right to depend on Lake Lanier as the primary source for its drinking water supply, stating that the answer may render other aspects of

^{75.} Id. at 1134.

^{76.} Id. at 1135.

^{77.} Florida v. U.S. Fish & Wildlife Serv., No. 4:06-cv-410 (N.D. Fla. 2006).

^{78.} In re Tri-State Water Rights Litig., 481 F. Supp. 2d 1351, 1353 (J.P.M.L. 2007) (consolidating Florida v. U.S. Fish & Wildlife Serv., No. 4:06-cv-410 (N.D. Fla. 2006); Georgia v. U.S. Army Corps of Eng'rs, No. 1:06-cv-1473 (N.D. Ga. 2006); Georgia v. U.S. Army Corps of Eng'rs, No. 2:01-cv-26 (N.D. Ga. 2001); Alabama v. U.S. Army Corps of Eng'rs, No. 1:90-cv-1331 (N.D. Ala. 1990)).

^{79.} *Id*.

^{80.} Id.

^{81.} Georgia's Hopes for Reversing Water Ruling Fading, ATLANTA J.-CONST., Nov. 21, 2008, available at http://www.ajc.com/metro/content/printedition/2008/11/21/waterwars.html.

^{82.} Florida Department of Environmental Protection, Apalachicola-Chattahoochee-Flint River System (ACF) Timeline of Action as of July 27, 2009, http://www.dep.state.fl.us/mainpage/acf/timeline.htm (last visited Nov. 30, 2009) [hereinafter ACF Timeline].

the case "obsolete."83 Alabama and Florida contended that the three purposes for Lake Lanier authorized by Congress did not include supplying Atlanta's drinking water and, thus, the Corps was "obligated to seek Congressional approval for the actions the Corps has taken with respect to water supply in Lake Lanier."84 Georgia disagreed and essentially asserted that drinking supply was the main function intended by Congress85 and, thus, congressional approval was not needed.86 Florida, Georgia, and Alabama, as well as other parties to the lawsuit, all filed motions for summary judgment.87 Judge Magnuson heard oral arguments on May 11, 2009, and issued a detailed decision on July 17, 2009.88

In the July 17th ruling, the district court determined that Florida and Alabama had standing to bring the lawsuit. Georgia had contested whether Florida and Alabama had standing to bring the litigation, arguing that Florida and Alabama could not establish injury-infact, which is required in order to bring suit in federal court. In particular, Georgia asserted that "there is no evidence that the Corps's support of water supply and recreation in Lake Lanier has resulted in any 'discernable reduction in flows downstream in Alabama or Florida.' "89 This argument was rejected because "Alabama and Florida have come forward with evidence sufficient to support their contention that they have suffered harm because of the Corps's operations in the ACF basin." 90 Specifically:

According to government documents, low flows in the Apalachicola River are at least to some extent caused by the Corps's operations in the ACF basin and consumptive uses of the water in the basin, and those low flows cause harm to the creatures that call the Apalachicola home. According to the evidence to which Alabama and Florida cite, low flows harm not only wildlife, but also harm navigation, recreation, water supply, water quality, and industrial and power uses downstream. Even if annually the average flows are reduced by only a small amount, as the Georgia parties argue, the actual variation in flows can wreak havoc on the downstream uses of the water. 91

^{83.} Stacy Shelton, Question of Right to Water Central in Lanier Case, ATLANTA J.-CONST., Aug, 12, 2008 [hereinafter Shelton, Question of Right], available at http://www.ajc.com/wireless/content/metro/stories/2008/08/12/georgia_water_lake_lanier.html.

^{84.} In re Tri-State Water Rights Litig., 639 F. Supp. 2d 1308, 1310 (M.D. Fla. 2009).

^{85.} Shelton, Question of Right, supra note 83.

^{86.} In re Tri-State Water Rights Litig., 639 F. Supp. 2d at 1310.

^{87.} Id. at 1356.

^{88.} ACF Timeline, supra note 82.

^{89.} In re Tri-State Water Rights Litig., 639 F. Supp. 2d at 1341.

^{90.} Id.

^{91.} Id. at 1342.

Regarding the issue of the purposes for which the dam was constructed, the district court examined the history of the project in depth⁹² and concluded that the Buford Dam was not intended, at the time that it was authorized, to be a water supply source for Atlanta:

At the time Buford Dam was authorized, planned, and constructed, the Corps did not anticipate any water-supply withdrawals from the reservoir itself, with the exception of the water withdrawn by the cities of Gainesville and Buford. Nor did the Corps or any other entity set aside any portion of Lake Lanier's storage for water supply. Rather, the water-supply benefit discussed throughout the legislative history was the regulation of the river's flow.⁹³

Despite this, "[i]n the decades after the Buford Dam was built, . . . the Corps's and the Georgia parties' definition of water supply in the Buford project changed considerably."⁹⁴ The district court noted that "[t]he origin of this change is difficult to pinpoint."⁹⁵ However, it concluded that at some point after the completion of the Buford Dam, "both the Corps and the municipal entities in the Atlanta area began to envision the water supply benefit as a storage-and-withdrawal benefit. In other words, water supply came to mean not flow regulation in the river but water withdrawals from the lake."⁹⁶

The district court concluded that "[h]aving thoroughly reviewed the legislative history and the record, the Court comes to the inescapable conclusion that water supply, at least in the form of withdrawals from Lake Lanier, is not an authorized purpose of the Buford project."97 "Because water supply is not an authorized purpose of Lake Lanier," the Water Supply Act requires that "if the Corps's actions to support water supply constitute 'major structural or operational changes' or 'seriously affect' the project's authorized purposes, the Corps was required to seek Congressional approval for those actions and its failure to do so renders the actions illegal."98 The district court ruled that the Corps' actions both constituted "a major operational change"99 and that the "Corps's decision to support water sup ply has seriously affected the purposes for which the Buford project was originally authorized."100 Accordingly, the Corps' actions were in violation of the Water Supply Act and, ultimately, "Corps's failure to seek Congressional authorization for the changes it has wrought in the operation of Buford Dam and Lake Lanier is an abuse of discre-

^{92.} Id. at 1310-21.

^{93.} Id. at 1321.

^{94.} Id.

^{95.} Id.

^{96.} Id.

^{97.} Id. at 1347.

^{98.} Id.

^{99.} Id. at 1352.

^{100.} Id. at 1353.

tion and contrary to the clear intent of the Water Supply Act. As such, the Corps's actions must be set aside."¹⁰¹

The district court recognized that "it will take time to secure the required Congressional authorization for the changes to the operation of the Buford project."102 Taking a common sense approach, the court stated that "the municipal entities that withdraw water from Lake Lanier and the Chattahoochee River cannot suddenly end their reliance on that water merely because a federal court has determined that the Corps failed to comply with its statutory obligations."103 Accordingly, the litigation was stayed for three years in order to "allow the parties to obtain Congress's approval for the operational changes the water-supply providers request." ¹⁰⁴ Meanwhile, during the stay, "the parties may continue to operate at current water-supply withdrawal levels but should not increase those withdrawals absent the agreement of all other parties to this matter."105 At the end of three years, "absent Congressional authorization or some other resolution of this dispute, the terms of [the decision] will take effect."106 For Atlanta as well as the other communities surrounding Lake Lanier, "this means that the operation of Buford Dam will return to the 'baseline' operation of the mid-1970s. Thus, the required off-peak flow will be 600 cfs and only Gainesville and Buford will be allowed to withdraw water from the lake."107 Although this was admittedly a "draconian result," the court stated that it was "the only result that recognizes how far the operation of the Buford project has strayed from the original authorization."108

This decision has been hailed as the "end" to the tri-state water dispute¹⁰⁹ and can be seen as a "win" for Florida and Alabama. However, the war has merely shifted to Congress, which has the power to

^{101.} Id. at 1356.

^{102.} Id. at 1355.

^{103.} Id.

^{104.} Id.

^{105.} Id.

^{106.} *Id*.

^{107.} Id.

^{108.} *Id.* The court also expressed frustration with the "the slow pace at which the Corps operates," which it noted "has only served to further complicate and provoke this already complicated and inflammatory case. It is beyond comprehension that the current operating manual for the Buford Dam is more than 50 years old." *Id.* "[T]he states and municipalities that rely on the ACF basin for water cannot determine how the operation of the project will affect their interests if they do not understand how the Corps intends to operate the project." *Id.* This "uncertainty created by the Corps's alarmingly slow pace only adds to the frustration of all parties involved in this litigation." *Id.* The court encouraged "the Corps to complete its plans for the ACF basin as quickly as possible, to allow the parties and Congress to analyze more effectively the future of this vital resource." *Id.*

^{109.} Press Release, Florida Dep't of Envtl. Protection, *Judge's Ruling Signals End to Tri-State Water Dispute* (July 17, 2009), *available at* http://www.dep.state.fl.us/secretary/news/2009/07/0717 03.htm.

authorize the water withdrawals from the Buford Dam. Further, the fate of the Buford Dam and Lake Lanier will not solve the issue of how much water Florida is entitled to from the entire Basin, unless the states come together and work cooperatively toward a comprehensive solution. Ultimately, the fate of the ACF River Basin and the Apalachicola Bay remains uncertain.

E. A New Kind of Water War Rages On

While "water wars" in the United States, particularly in the West, are nothing new, the ACF conflict is a new kind of water war. ¹¹¹ The conflict is not over just the apportionment of water but also over maintaining minimum downstream flows in the Apalachicola Bay for ecological reasons. ¹¹²

In Georgia, the situation has improved considerably in the last year. A year ago—as of December 6, 2008—Lake Lanier was almost twenty feet below full.¹¹³ But, in May 2009, the drought was considered to be "over."¹¹⁴ However, as quickly as the recent drought ended, another drought can strike again. Further, the end of the drought may prove more harmful in the long run, as there is no longer the same urgency to resolve the situation. If the situation is not resolved now, the states will be in a worse position when the next drought occurs as the population in Georgia will only continue to increase.

Citizens of Georgia, primarily Atlanta, have framed the debate in terms of "man versus mussels" and, in the face of potentially catastrophic water shortages, ask "why the needs of endangered mussels are apparently more important than the needs of millions . . . who may face critical water shortages" in the event of a drought. The situation looks grim in the event drought strikes again.

The situation also looks grim in Florida. The population of fat threeridge mussel, a species that only exists in the Apalachicola River, appears to be declining rapidly. Not only are three federally protected species, including the mussels, being threatened, but so is the local industry, which is closely intertwined with the environmental health of the area. Oyster beds are vanishing in the Apala-

^{110.} See infra notes 120-25 and accompanying text.

^{111.} Ruhl, supra note 4, at 48.

^{112.} Id.

^{113.} National Weather Service Forecast Office, Peachtree City, Georgia, Georgia Lake Levels, http://www.srh.noaa.gov/ffc/html/rrm.php (last visited Nov. 30, 2009).

^{114.} Mark Davis, *Drought's over and Lake Lanier Gets Lively*, ATLANTA J.-CONST., May 22, 2009, http://www.ajc.com/services/content/metro/stories/2009/05/22/lake_lanier_memorial.html.

^{115.} Debbie Gilbert, Water for Wildlife: The Mussels Debate, GAINESVILLE TIMES, Jan. 3, 2008, available at http://www.gainesvilletimes.com/news/archive/847.

^{116.} Press Release, U.S. Fish & Wildlife Service, Fish and Wildlife Service Completes Biological Opinion on Corps' Revised Interim Operations Plan at Woodruff Dam (June 2, 2008), http://www.fws.gov/southeast/news/2008/r08-028.html.

chicola Bay, signs that the delicate balance between freshwater and saltwater has been altered, which threatens economic productivity as well as a way of life that has existed for generations at the "Forgotten Coast."¹¹⁷ The danger to the Bay is not just environmental but also one of social integrity, as argued by Christine Klein:

[P]rotection of the extraordinary aquatic ecosystem of Apalachicola will also protect an oystering village that has sustained its way of life for at least four generations. . . . Honoring ecological and social integrity, in the ACF Basin and beyond, would require a reversal of the traditional wisdom that projected urban growth must be supported at any cost and often at the expense of ecosystems. 118

Scientists do not know how long it will be before the environmental damage is irreversible. ¹¹⁹ But, the danger is clear—the way of life at Florida's Forgotten Coast, both environmental and human, as we know it could disappear forever.

Meanwhile, the water war rages on.

III. SOME BACKGROUND: WATER LAW & EQUITABLE APPORTIONMENT

A. Why Equitable Apportionment Is Likely to Be Needed

Despite the recent decision in the current litigation, it is highly likely that an equitable apportionment case will be needed. The right of three million people in Atlanta to get their drinking water from the Chattahoochee River was not being contested in the litigation; rather, the issue in the current litigation was the authorization of the Army Corps of Engineers to use Lake Lanier to provide water to Atlanta and store water in the lake for Atlanta's future use. And it remains to be seen what action Congress will take. Moreover, forty percent of the summer flows into the Apalachicola Bay come from the Flint River, 120 and there are no Corps dams to sue over on the Flint River.

Surprisingly, given the attention the Buford Dam receives, Lake Lanier is a headwaters reservoir that only drains somewhere between five and nine percent of the ACF River Basin.¹²² Its ability to

^{117.} Zarrella & Oppmann, supra note 30.

^{118.} Christine A. Klein, On Integrity: Some Considerations for Water Law, 56 ALA. L. REV. 1009, 1066-67 (2005).

^{119.} Zarrella & Oppmann, supra note 30.

^{120.} Abrams, Broadening Narrow Perspectives, supra note 9, at 246.

^{121.} See Drought Q&A, supra note 14.

^{122.} Estimates of the exact percentage differ. United States Geological Survey, Chattahoochee River Basin, http://ga.water.usgs.gov/nawqa/basin7.html (last visited Nov. 30, 2009) ("Lake Sidney Lanier alone provides 65 percent of conservation storage, although it drains only 5 percent of the ACF River basin"); Pamphlet, Atlanta Regional Commission, Metro Atlanta Water Challenges: Facts About Lake Lanier and the Apalachicola-Chattahoochee-Flint River Basin, June 2008, available at http://www.atlantaregional.com/

refill quickly is limited because it is a headwaters reservoir that drains such a small percentage of the Basin. ¹²³ Even if all of the water was being continuously released from Lake Lanier, it is unlikely that the Apalachicola Bay would be insulated from trouble during a sustained drought. Additionally, the Atlanta Regional Commission argues that Atlanta's water use reduces the flow of the Apalachicola River at the Florida line by two percent at the most. ¹²⁴ Therefore, *all* of upstream uses must be addressed as to the *entire* Basin, not just a small part of it. As pointed out by Joseph W. Dellapenna, the current litigation involves the Corps' management of the Chattahoochee River and "[s]uch litigation . . . only indirectly affects the interstate allocation of water. For an actual resolution of the rights of the three states . . . , the states will have to turn to the highest levels of the federal government—the Supreme Court or Congress." ¹²⁵

There are two other methods of resolving water disputes—interstate compacts and congressional apportionment¹²⁶—and both appear unlikely. Efforts at an interstate compact previously failed,¹²⁷ and the animosity between Georgia and Florida makes resolution seem unlikely.¹²⁸ Although an interstate compact is noted by many scholars as the best method of apportioning water,¹²⁹ there appears to be little hope for the parties involved in the ACF River Basin dispute to resolve the issue this way.¹³⁰

documents/MetroWaterChallenges.pdf ("As a headwaters reservoir, [Lake Lanier] controls only 9% of the flow in the ACF basin above the Florida line.").

- 123. Pamphlet, *supra* note 122. It took three years for the reservoir to initially fill after the Buford Dam was constructed. Drought Q&A, *supra* note 14.
- 124. Pamphlet, *supra* note 122 (arguing that "Lake Lanier was not designed to protect the entire Apalachicola-Chattahoochee-Flint Basin from drought" and pointing out that flows are eleven times greater in Florida than in metro Atlanta).
 - 125. Dellapenna, supra note 38, at 881.
 - 126. WILLIAM GOLDFARB, WATER LAW 52 (Lewis Publishers 2d ed. 1988).
 - 127. See sources cited supra notes 48-49 and accompanying text.
- 128. Brendan Farrington, Water War: Governors Trade Jabs at Conference, ATLANTA J.-CONST., Nov. 14, 2008, http://www.ajc.com/services/content/printedition/2008/11/14/water.html. Instead, the two states and their proponents trade jabs. Recently, Georgia Governor Sonny Perdue pointed to Georgia's own pristine coast and questioned Florida's ability to preach about the environment when it had allowed development on its coastline. Id. Florida Governor Charlie Crist responded that "[w]ater's important. . . . We ought to let [the courts] deal with it for now." Id.
- 129. See sources cited supra note 46; see also GOLDFARB, supra note 126, at 53-54 ("There is a far better way to settle interstate diversion rights conflicts [than equitable apportionment]—interstate compacts.").
- 130. However, Florida's Governor has announced that the federal district court's ruling "allows the governors to come together to reach an agreement outside of the court system." Fla. Dep't of Envtl. Prot. Press Release, *supra* note 109. Governor Crist has stated, "I look forward to working with Governors Riley and Perdue to find a solution that will be beneficial for all of our states." *Id.* While arguably the threat that in three years Atlanta will no longer be entitled to water from Lake Lanier may motivate Georgia to work together with Florida and Alabama toward a solution, it remains doubtful whether the states can actually come to an agreement.

The second method also seems unlikely—congressional apportionment is quite rare.¹³¹ Additionally, as Dellapenna argues, the absence of any agreement among the three states "is likely to be an effective bar in practice, if not in theory, to any action by Congress."¹³² The states would be unwilling to surrender control to the federal government, where any resolution would likely be the result of "unseemly pressures by particular powerful interests groups . . . rather than because Congress has reached a reasoned conclusion regarding the best allocation of the water"—and Congress is unlikely to act without the states' concurrence.¹³³ In short, Congress will likely be reluctant to impose its own solution in a sensitive matter such as a dispute over interstate water.¹³⁴

Therefore, bringing the matter to the Supreme Court in an equitable apportionment action is likely the only way that the water situation in the entire Basin can be resolved. There are advantages and disadvantages to turning to judicial equitable apportionment; however, at first glance, the disadvantages appear to outweigh the advantages. Some argue that equitable apportionment has the advantage of providing an answer. However, any apportionment would not be final—rather, it would be open to adjustment. Noted disadvantages of equitable apportionment include the following: the Court lacks the necessary expertise and the process is expensive, time consuming, and leads to uncertain outcomes. Yet, despite these drawbacks, it appears that an equitable apportionment case is inevitable.

B. The West and the East: A Brief Overview of State Water Law Regimes

In order to understand equitable apportionment, a little background on the water law regimes of the states is needed. Water law in the United States has developed along two separate paths—in the

^{131.} GOLDFARB, supra note 126, at 54.

^{132.} Dellapenna, supra note 38, at 894.

^{133.} *Id*.

^{134.} See Erhardt, supra note 23, at 212.

^{135.} Clemons, *supra* note 5, at 142 ("Equitable apportionment by the Supreme Court has the advantage of being certain to provide an answer....").

^{136.} Dellapenna, *supra* note 38 at 890 ("[A]ny real resolution of an interstate water dispute through equitable apportionment litigation has proven to be 'painfully elusive.'").

^{137.} Bielecki, *supra* note 36, at 204 (noting that a previous equitable apportionment case involved "three appearances before the Supreme Court and two trips to a special master" and "a final decision was rendered seven years later" and arguing that "[w]hen a judge renders a decision, parties are left powerless and the outcome is uncertain"); Clemons, *su-pra* note 5, at 142 ("[Equitable apportionment's] disadvantages are that it is expensive, time-consuming, and something of a gamble for the states, who may be stuck with an unfavorable outcome."); Copas, *supra* note 46, at 717 ("The central criticism of judicial allocation of water resources under the Equitable Apportionment doctrine is that the court lacks the expertise that is necessary to make allocation decisions of such monumental importance" (citing GOLDFARB, *supra* note 126, at 53)).

arid West, water rights are based on the doctrine of prior appropriation and in the rainfall-plentiful East, riparianism.¹³⁸ This Section will briefly sketch the basics of these water rights regimes.

1. Prior Appropriation

Under the doctrine of prior appropriation, once a water user has acquired a water right, his or her right is superior to any water uses that arise later. The prior appropriator's use remains superior even in times of drought and even over more socially beneficial uses. This doctrine has the advantage of ensuring constant and unchanging water rights to the prior appropriators—a certainty essential to almost every modern productive use. However, this often comes at the expense of downstream users. For example, the Colorado River is so over-appropriated that most of its water never reaches its delta.

2. Riparianism

The doctrine of riparianism is based on a different set of assumptions—that water is plentiful and that there is enough to go around. Under this doctrine, "all uses, regardless of when they began, are allowed provided they do not unreasonably interfere with other uses." Although this system functions well when water is plentiful, when drought or other conditions cause a shortage of water, the doctrine's shortcomings are exposed. In drought years, uses that were previously reasonable may no longer be reasonable, and each user's claim is uncertain and subject to change.

C. The Water Law of the Supreme Court: Equitable Apportionment

The U.S. Supreme Court has original and exclusive jurisdiction over cases in which a state is a party.¹⁴⁷ Therefore, the Court is the exclusive forum for judicial settling of disputes over interstate wa-

^{138.} C. Grady Moore, Water Wars: Interstate Water Allocation in the Southeast, 14 NAT'L RESOURCES & ENV'T 5, 6 (1999).

^{139.} Id.

^{140.} *Id*.

^{141.} See id.

^{142.} Rudy E. Verner, Short Term Solutions, Interim Surplus Guidelines, and the Future of the Colorado River Delta, 14 COLO. J. INT'L ENVIL. L. & POL'Y 241, 244 (2003).

^{143.} Moore, *supra* note 138, at 6.

^{144.} Id.

^{145.} Id.

^{146.} Id.

^{147.} U.S. CONST. art. III, § 2, cl. 2 ("In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction.").

terways.¹⁴⁸ In its original jurisdiction, the Court essentially acts as the trial court.¹⁴⁹ The Court first exercised this jurisdiction to apply the equitable apportionment doctrine in *Kansas v. Colorado*.¹⁵⁰ Since then, the Supreme Court has exercised original jurisdiction to decide equitable apportionment cases only a handful of times and has only entered equitable apportionment decrees for three interstate rivers.¹⁵¹

Equitable apportionment cases usually arise when a downstream state seeks to prevent a diversion by an upstream state.¹⁵² The downstream state has to show that the diversion will cause substantial injury.¹⁵³ Then the burden shifts to the upstream state to demonstrate that the equities weigh in its favor and a diversion should be permitted.¹⁵⁴ In this capacity, the Court has "refused to impose doctrinaire water law rules, but instead has borrowed a principle of international water law called 'equitable apportionment.' "155 However, the state water law doctrines of the contended states are an important consideration. For example, among prior appropriation states, priority becomes the "guiding principle." But, the Court has emphasized that state law is not controlling. ¹⁵⁸

The Court has stated repeatedly that equitable apportionment "is a flexible doctrine which calls for 'the exercise of an informed judgment on a consideration of many factors' to secure a 'just and equitable' allocation."¹⁵⁹ In "arriving at 'the delicate adjustment of interests which must be made,'" the Court must consider all relevant factors, which can include the following: "physical and climatic conditions, the consumptive use of water . . . , the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, [and] the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former."¹⁶⁰ The Court's aim "is always to secure a just and equitable apportionment 'without quibbling over formulas.' "¹⁶¹ The next Section will explore a few of most notable equitable apportionment cases

^{148.} Douglas L. Grant, Interstate Allocation of Rivers Before the United States Supreme Court: The Apalachicola-Chattahoochee-Flint River System, 21 GA. St. U. L. Rev. 401, 403 (2004). These disputes typically arise "when a downstream state seeks to enjoin a diversion by an upstream state." Clemons, supra note 5, at 119.

^{149.} See Grant, supra note 148, at 403.

^{150. 206} U.S. 46 (1907); see also Grant, supra note 148, at 404.

^{151.} Grant, supra note 148, at 404.

^{152.} Clemons, supra note 5, at 119.

^{153.} *Id*.

^{154.} *Id*.

^{155.} GOLDFARB, supra note 126, at 52.

^{156.} Colorado v. New Mexico (Colorado v. New Mexico I), 459 U.S. 176, 183-84 (1982).

^{157.} Id. at 184 (quoting Nebraska v. Wyoming, 325 U.S. 589, 618 (1945)).

^{158.} Id.

^{159.} Id . at 183 (quoting $\mathit{Nebraska}$, 325 U.S. at 618).

^{160.} Id. (quoting Nebraska, 325 U.S. at 618).

^{161.} Id. (quoting New Jersey v. New York, 283 U.S. 336, 343 (1931)).

to demonstrate the factors the Court has considered in the past and to provide a perspective on how the Court handles these unique cases.

D. A Few Notable Equitable Apportionment Cases

1. The Beginning: Kansas v. Colorado (1907)¹⁶²

The Supreme Court introduced the doctrine of equitable apportionment in the case of *Kansas v. Colorado*. ¹⁶³ Even though the case was dismissed, it set the stage for how the Court would handle equitable apportionment cases. Kansas, the downstream state, brought an action against Colorado, the upstream state, alleging that Colorado was diverting waters of the Arkansas River to the extent that the flow was diminished to Kansas's detriment. ¹⁶⁴ Interestingly, the states had different water rights schemes—Kansas was a riparian rights state while Colorado used prior appropriation. The states framed the issue in terms of their water rights doctrines—Kansas argued that the riparian rights doctrine entitled it to undiminished flows; Colorado argued that prior appropriation entitled it to all of the water. ¹⁶⁵

The Supreme Court decided that the guiding principle should be "equality of right." The Court stated that it

must consider the effect of what has been done upon the conditions in the respective states, and so adjust the dispute upon the basis of equality of rights as to secure as far as possible to Colorado the benefits of irrigation without depriving Kansas of the like beneficial effects of a flowing stream. ¹⁶⁷

After evaluating the evidence, the Court concluded that it tended to show Colorado's withdrawal for irrigation purposes was not a "serious detriment" to Kansas. ¹⁶⁸ The case was dismissed without prejudice. ¹⁶⁹

In this seminal case, the Court created a substantial injury requirement for equitable apportionment cases, explicitly stating that Kansas could institute new proceedings "whenever it shall appear that, through a material increase in the depletion of the waters of the Arkansas [River] by Colorado . . . the substantial interests of Kansas are being injured to the extent of destroying the equitable appor-

^{162. 206} U.S. 46 (1907).

^{163.} Copas, *supra* note 46, at 716.

^{164.} Kansas, 206 U.S. at 46-48; see also Clemons, supra note 5, at 119.

^{165.} Kansas, 206 U.S. at 57; see also Clemons, supra note 5, at 119.

^{166.} Kansas, 206 U.S. at 97, 100.

^{167.} Id. at 100.

^{168.} Id. at 113.

^{169.} Id. at 117.

tionment of benefits between the two States resulting from the flow of the river."¹⁷⁰

2. A Rare Case in the East: New Jersey v. New York (1931)¹⁷¹

Unlike the other cases discussed in this Section, this case involved an eastern water dispute, where both states were firmly rooted in riparianism. New York proposed to divert a large amount of water to increase New York City's water supply, 172 and New Jersey sought to enjoin New York from diverting any water from the Delaware River or its tributaries. 173 The Special Master found that the taking of 600 million gallons per day from the tributaries would not affect the river's sanitary conditions or impair its use as a source of municipal water, for industrial uses, or for fisheries.¹⁷⁴ However, the Special Master found that the "effect upon the use for recreation . . . will be somewhat more serious as will be the effect of increased salinity of the River upon the oyster fisheries."175 This damage could be removed, concluded the Special Master, by reducing New York's withdrawal to 440 million gallons per day, constructing a sewage treatment plant, and ensuring a minimum flow by releasing water from New York's reservoirs when the stage of the water falls below that minimum. 176 The Supreme Court confirmed the Master's report. 177 Justice Holmes, writing for the majority, famously stated:

A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. New York has the physical power to cut off all the water within its jurisdiction. But clearly the exercise of such a power to the destruction of the interest of lower States could not be tolerated. And on the other hand equally little could New Jersey be permitted to require New York to give up its power altogether in order that the River might come down to it undiminished. Both States have real and substantial interests in the River that must be reconciled as best they may. The different traditions and practices in different parts of the country may lead to varying results, but the effort always is to secure an equitable apportionment without quibbling over formulas. 178

^{170.} Id. at 117-18.

^{171. 283} U.S. 336 (1931).

^{172.} Id. at 342.

^{173.} *Id.* at 341.

^{174.} Id. at 345.

^{175.} Id.

^{176.} Id.

^{177.} Id. at 345-46.

^{178.} Id. at 342-43.

The decision put the burden of any major shortage on New York, which happened during a drought in the 1960s.¹⁷⁹ The fact that both states involved were eastern riparian doctrine states was relevant to the Court's approach. As stated by Dellapenna, the apportionment described by Justice Holmes was "a rather straightforward application of reasonable use riparian theory."¹⁸⁰

3. The Importance of Conservation: Colorado v. New Mexico I (1982)¹⁸¹

In Colorado v. New Mexico I, the Supreme Court clearly indicated that a state's conservation measures were important to its weighing of the equities. Colorado, seeking to divert water for future uses, brought an action for equitable apportionment of the water of the Vermejo River. 182 At the time, the water of the Vermejo River was fully appropriated by New Mexico. 183 The Special Master recognized that a strict application of prior appropriation would not result in Colorado receiving any water because all of the water was needed to supply New Mexico, which had senior rights. 184 Regardless, the Special Master, applying the principle of equitable apportionment established in prior cases, recommended permitting Colorado a "transmountain diversion of 4,000 acre-feet." The Special Master's recommendation rested on two grounds: (1) New Mexico could compensate Colorado for some or all of the diversion "through reasonable water conservation measures," and (2) any injury to New Mexico was outweighed by the benefit to Colorado. 186

The Supreme Court concluded "that the criteria relied upon by the Special Master comport[ed] with the doctrine of equitable apportionment" and rejected New Mexico's argument that the Special Master was "required to focus exclusively on the rule of priority." The Court stated that "when both States recognize the doctrine of prior apportionment, priority becomes the 'guiding principle.' "188 However, the Court went on to clarify that "state law is not controlling. Rather, the just apportionment of interstate waters is a question of federal law that depends 'upon a consideration of the pertinent laws of the contending States and *all other relevant facts*.' "189 Noting that the

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179. Dellapenna, supra note 38, at 887.
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^{180.} *Id*.

^{181. 459} U.S. 176 (1982).

^{182.} *Id.* at 177.

^{183.} *Id*.

^{184.} Id. at 180.

^{185.} *Id*.

^{186.} Id. at 181.

^{187.} Id. at 182-83.

^{188.} Id. at 183-84.

^{189.} Id. at 184 (quoting Connecticut v. Massachusetts, 282 U.S. 660, 670-71 (1931)).

doctrine of equitable apportionment was a flexible one, the Court held that it clearly extended to a claim to divert water for future uses. However, the Court ultimately concluded that the Special Master's report did not contain sufficient facts to enable it to assess whether the Special Master's application of the principle of equitable apportionment to the facts was correct. He case was remanded with instructions to the Special Master to make further findings of fact. He

Despite the fact that the merits were not decided in this case, the Court clearly established that conservation was an important consideration. It began by noting that its prior cases "clearly establish that equitable apportionment will protect only those rights to water that are 'reasonably required and applied.' "193 Accordingly, the Court stated that "wasteful or inefficient uses will not be protected." Even "concededly senior water rights will be deemed forfeited or substantially diminished where the rights have not been exercised or asserted with reasonable diligence."195 Further, the Court stated that it had "invoked equitable apportionment not only to require the reasonably efficient use of water but also to impose on States an affirmative duty to take reasonable steps to conserve and augment the water supply of an interstate stream."196 Therefore, it would be appropriate to consider the extent to which New Mexico could employ reasonable conservation measures as well as whether Colorado could take steps to minimize the amount of water it would need.¹⁹⁷ Justice O'Connor's concurrence tempered the requirement of conservation measures by reemphasizing the majority's statement that "the extent of the duty to conserve . . . is limited to measures that are 'financially and physically feasible' and 'within practicable limits.' "198

4. The Importance of Conservation Revisited: Colorado v. New Mexico II $(1984)^{199}$

On remand from *Colorado v. New Mexico I*, the Special Master developed additional factual findings and reaffirmed his original recommendation that Colorado be granted a transmountain diversion of 4000 acre-feet per year.²⁰⁰ The Court had requested the Special Mas-

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    190. Id. at 190.
    191. Id. at 183.
    192. Id.
    193. Id. at 184 (quoting Wyoming v. Colorado, 259 U.S. 419, 484 (1922)).
    194. Id.
    195. Id.
    196. Id. at 185.
    197. Id. at 186.
    198. Id. at 192 (O'Connor, J., concurring) (quoting Wyoming, 259 U.S. at 484).
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 ⁴⁶⁷ U.S. 310 (1984).
 Id. at 312; Colorado v. New Mexico I, 459 U.S. at 180.

ter on remand to make specific findings about the existing uses and reasonable conservation measures available to both Colorado and New Mexico.²⁰¹ The Special Master concluded that the then-current levels of use reflected a failure on the part of existing users and indicated that he believed that New Mexico could alleviate shortages through more careful water administration.²⁰²

However, the Court conducted an independent review of the record and concluded that Colorado had "not demonstrated by clear and convincing evidence that a diversion should be permitted." Emphasizing the "clear and convincing" standard, the Court stated that requiring Colorado to meet that standard "is necessary to appropriately balance the unique interests involved in water rights disputes" and that "[t]he standard reflects this Court's long-held view that a proposed diverter should bear most . . . of the risks of erroneous decision." The Court found it noteworthy that Colorado had failed to refer to specific measures that New Mexico could reasonably employ to conserve water, and it found Colorado's evidence generally unconvincing. Then the Court pointed its finger at Colorado—specifically, the fact that Colorado had not offered any evidence that it had taken reasonable steps to minimize the amount of diversion it required. Description of the court pointed its finger at Colorado that it had taken reasonable steps to minimize the amount of diversion it required.

The effect of the clear and convincing standard was that Colorado had the burden of proving that New Mexico could offset its loss by reasonable conservation measures to the point of placing the fact finder in "abiding conviction" that its factual assertions were "highly probable." Although the Court made sweeping statements about conservation in *Colorado v. New Mexico I*, in this second case, the Court tempered them by requiring Colorado to show, "by clear and convincing evidence, that reasonable conservation measures could compensate for some or all of the proposed diversion" and, further, that any injury to New Mexico from the diversion "would be outweighed by the benefits to Colorado." 208

As the Court stated the rule, once a state successfully proves substantial injury, "the burden shifts to the diverter to show that reasonable conservation measures exist."²⁰⁹ In doing so, the Court placed a heavy burden on proposed diverters (that is, the future user, Colorado) and shielded the prior user, New Mexico, from having to meet

^{201.} Colorado v. New Mexico II, 467 U.S. 310, 317 (1984).

^{202.} Id. at 317-18.

^{203.} Id. at 312-17.

^{204.} *Id.* at 316.

^{205.} *Id.* at 319.

^{206.} *Id.* at 320.

^{207.} *Id.* at 316.

^{208.} *Id.* at 317.

^{209.} Id. at 321.

anything other than the substantial injury requirement. New Mexico had already met that burden by simply proving that it would have less available water should Colorado be allowed to divert water—a relatively easy task.

The Court then considered the benefits and harms that might result from Colorado's proposed diversion. It found that Colorado had "not committed itself to any long-term use for which future benefits can be studied and predicted."²¹⁰ By contrast, New Mexico had commissioned independent studies of the economic impact.²¹¹ Unimpressed by Colorado's offering of evidence and the fact that it had not decided on a permanent use for the diverted water, the Court reemphasized that an attempt by Colorado to prove that benefits would outweigh any injury must meet the clear and convincing standard. This evidentiary burden, the Court stated, "cannot be met with generalizations about unidentified conservation measures and unstudied speculation about future uses."²¹² The Court dismissed the case.²¹³

5. A Different Kind of Case: Idaho ex rel. Evans v. Oregon $(1983)^{214}$

In a different kind of case, Idaho sought an equitable apportionment of migrating fish on the Columbia-Snake River system. Although the equitable apportionment doctrine has its roots in water litigation, the Special Master concluded—and the Court agreed—that the natural resource of fish was "sufficiently similar to make equitable apportionment an appropriate mechanism for resolving allocative disputes." ²¹⁶

Idaho had no legal right to the fish, but the Court stated that "the doctrine of equitable apportionment is neither dependent on nor bound by existing legal rights to the resource being apportioned"; the Court held that Idaho had "an equitable right to a fair distribution of this importance resource." Further, the Court stated that "[a]lthough existing legal entitlements are important factors in for-

^{210.} Id.

^{211.} Id. at 322.

^{212.} Id. at 324.

^{213.} *Id.* Justice Stevens dissented. After he examined in detail the Special Master's findings as well as the evidentiary record, he agreed with the Special Master's conclusion that reasonable conservation measures would offset the effects of a diversion by Colorado. *Id.* at 339 (Stevens, J., dissenting). He stated that the Special Master's job was not to "draw up blueprints for New Mexico to eliminate its waste." *Id.* Rather, Justice Stevens argued, "New Mexico's manifestly lax, indeed virtually nonexistent, administration of the [River] surely substantially diminishes its rights to the waters." *Id.* at 335.

^{214. 462} U.S. 1017 (1983).

^{215.} Id. at 1018-19.

^{216.} Id. at 1024.

^{217.} Id. at 1025.

mulating an equitable decree, such legal rights must give way in some circumstances to broader equitable considerations."²¹⁸

The Court dismissed the action without prejudice because Idaho had not demonstrated a real and substantial injury by clear and convincing evidence. Idaho had failed to prove that Oregon and Washington were injuring it by overfishing now or in the future. Further, Idaho had not proven that the other states had mismanaged and would continue to mismanage the resource. However, importantly, the Court emphasized that "a State may not preserve solely for its own inhabitants natural resources located within its borders. . . States have an affirmative duty under the doctrine of equitable apportionment to take reasonable steps to conserve and even to augment the natural resources within their borders for the benefit of other States."

Professor J.B. Ruhl has pointed to this case as significant with regard to the substantial injury test and ACF River Basin, arguing that, "like fish flowing through the river system, ecosystem services do as well, delivering true economic value in many different ways and locations." Therefore, injury to economically valuable resources—such as a healthy ecosystem—ought to count for the substantial injury analysis as well as for the apportionment phase. Asking the Court to take injury to ecosystem services into account is a novel proposition; however, Ruhl argues that it is a "logical, incremental extension of the Court's analysis." With regard to the ACF River Basin, water left in the Basin is also valuable, not only as a commodity but also because it performs necessary ecosystem functions.

IV. EQUITABLY APPORTIONING THE ACF RIVER BASIN

A. The First Hurdle: Getting to the Supreme Court

A state seeking equitable apportionment must prove substantial injury by clear and convincing evidence.²²⁷ If Florida petitions the Supreme Court to equitably apportion the ACF River Basin, it will likely assert that Georgia's water consumption would cause "ecologi-

^{218.} Id.

^{219.} Id. at 1027-29.

^{220.} Id. at 1028.

^{221.} Id. at 1029.

^{222.} Id. at 1025.

^{223.} Ruhl, supra note 4, at 53-54.

^{224.} *Id.* at 54.

^{225.} Id.

^{226.} *Id.* ("You can't have salmon without some water in the river. Wetlands aren't wet without water in the river. Riparian habitat isn't riparian if there is no water in the river.").

^{227.} Oregon, 462 U.S. at 1027.

cal and economic harm to the Apalachicola Bay."²²⁸ J.B. Ruhl has argued that using ecological harm in the analysis is a logical extension of *Idaho* ex rel. *Evans v. Oregon*. However, as pointed out by Douglas Grant, "[p]redictions of ecological and economic harm raise complex factual issues about the consequences that varying levels of increased upstream diversions have on the Apalachicola Bay Estuary and on the industries that it supports."²²⁹ In short, these claims have "sound legal bases," but the "factual bases of the claims may be more problematic."²³⁰ Further, Florida would need to prove the injury by clear and convincing evidence.

There is evidence that low flow has harmed the Bay in the past—oyster beds and endangered species have died. However, the Court has stated that "equitable apportionment is directed at ameliorating present harm and preventing future injuries . . . not at compensating for prior injury."²³¹ Since Florida is seeking to prevent Atlanta from causing any greater diversion of water, if Florida can prove that anything below a certain flow will cause ecological and economic injury, then the test should be met. Whether or not Florida can prove this is yet to be determined.²³²

B. Weighing the Factors

If this case were to end up in the Supreme Court—provided that Florida can prove ecological and economic injury with clear and convincing evidence—this would be the first major case the Court has entertained in decades. The Court has stated that "all the factors which create equities in favor of one state or the other must be weighed."²³³ The following question naturally arises: what would be the relevant factors in equitably apportioning the ACF River Basin? The relevant factors "could be numerous and will remain unknown until evidentiary proceedings occur."²³⁴ Further, "[t]he Supreme Court has said little about how it weighs conflicting apportionment factors, and what it has said leaves much room for interpretation."²³⁵

This is a different case than most. Unlike the typical equitable apportionment case, Florida and Georgia are seeking different uses

^{228.} Grant, supra note 148, at 413.

 $^{229. \ \} Id.$

^{230.} Id.

^{231.} Oregon, 462 U.S. at 1028.

^{232.} Florida, Georgia, and Alabama are seeking to have a current water study conducted, which may help determine the chances of Florida's success. Brendan Farrington, *Georgia Official: 3 States Should Do Water Study*, ATLANTA J.-CONST., July 25, 2008 [hereinafter Farrington, *Water Study*].

^{233.} Colorado v. Kansas, 320 U.S. 383, 394 (1943).

^{234.} Grant, supra note 149, at 413.

^{235.} Id. at 425, 427 (calling equitable apportionment a "vague standard").

for the water. Florida seeks to leave water in the ACF River Basin to maintain a more natural flow regime for the protection of its oyster industry as well as the ecological integrity of the Apalachicola Bay. 236 Georgia seeks to divert water for domestic uses, mainly water supply for drinking and agricultural purposes. This will complicate the Supreme Court's determination of how the water should be equitably apportioned: "When the upstream and downstream uses diverge, comparison and equitable balancing are [inherently] more difficult. However, what Justice Holmes makes abundantly clear [in *New Jersey v. New York*] is that the interests of the downstream state are on par with those of the upstream state." 237

1. The Usual Suspects: Some Typical Factors Considered in the Past

The Court has stated that it will consider "all relevant factors" in deciding equitable apportionment cases. ²³⁸ Some factors that the Court has said in the past that it may consider include the following: established legal rights of the states to the resource being apportioned, ²³⁹ extent of established uses of the water, availability of storage water, practical effect of wasteful uses on downstream areas, damage to the upstream areas as compared to the downstream areas if a limitation is imposed on the upstream areas, ²⁴⁰ the water law(s) of the states involved, ²⁴¹ and the extent to which reasonable conservation measures could be employed. ²⁴² Also, environmental aspects may be a factor in the age of environmental statutes. ²⁴³ The conservation efforts of the states, water laws of the states, and environmental factors will be discussed in the next three Sections.

The "established legal rights of the states to the resource being apportioned" factor is why the outcome of the current litigation before Judge Magnuson is important. Given his recent ruling that Atlanta does not have a right to obtain its water supply from Lake Lanier absent congressional authorization, the Court may consider

^{236.} Christine Klein also brings up the issue of protecting the social integrity of the Apalachicola Bay: "[P]rotection of the extraordinary aquatic ecosystem of Apalachicola will also protect an oystering village that has sustained its way of life for at least four generations." Klein, *supra* note 118, at 1066. Klein argues that "[h]onoring ecological and social integrity, in the ACF Basin and beyond, would require a reversal of the traditional wisdom that projected urban growth must be supported at any cost and often at the expense of ecosystems." *Id.* at 1066-67.

^{237.} Abrams, Broadening Narrow Perspectives, supra note 9, at 264; see also New Jersey v. New York, 283 U.S. 336, 342-43 (1931).

^{238.} Colorado v. New Mexico I, 459 U.S. 176, 183 (1982).

^{239.} Idaho ex. rel. Evans v. Oregon, 462 U.S. 1017 at 1025 (1983).

^{240.} Colorado v. New Mexico I, 459 U.S. at 183.

^{241.} Id. at 183-84.

^{242.} Id. at 186.

^{243.} See Ruhl, supra note 4, at 49.

that as a factor weighing against Georgia (and Atlanta in particular). However, there is still the uncertainty of what action Congress will take at this juncture.

How the Court considers the remaining factors will depend on whether it will choose to focus on water supply to Georgia as more important or whether it will consider the ecological and economic injury to Florida on equal footing. If the Court decides that urbanized areas and established uses are more important, this will weigh in Georgia's favor because Atlanta will likely be in dire straits without water from Lake Lanier.

However, the Court can ultimately choose which factors it will examine. In a novel case such as one over the ACF River Basin, the Court may be more likely to consider things such as conservation and environmental concerns rather than just the typical factors.

2. The Importance of Conservation

Whether or not Georgia is taking reasonable conservation measures or plans to do so in the future will likely play an influential role in an equitable apportionment action. Florida has pointed fingers at Georgia, and Atlanta specifically, for failing to conserve. Matt Lembke, one of Alabama's attorneys, has criticized Atlanta for a "'total failure of planning' that led to its dependence on [Lake] Lanier."²⁴⁴ The very existence and growth of Atlanta in an area without a major source of water supply and without an alternate water supply plan is arguably unwise.

Proponents for Atlanta argue that Atlanta is taking reasonable conservation measures. In 2007, the Georgia Department of Natural Resources declared a level four drought response, banning most outdoor water uses in northern Georgia.²⁴⁵ Residents of Atlanta met water conservation goals set by the city. Between 2000 and 2007, Atlanta's customer base rose nine percent, but its water consumption dropped by five percent.²⁴⁶ In May 2008, Atlanta's residents were using twenty-four percent less water than in May 2007.²⁴⁷ Water con-

^{244.} Stacy Shelton, Water War: Court Rulings Crucial to State, ATLANTA J.-CONST., Aug. 17, 2008, available at http://www.ajc.com/metro/content/printedition/2008/08/17/water.html [hereinafter Shelton, Water War].

^{245.} Press Release, Ga. Dep't of Nat'l Res., Citing Historic Drought, Georgia EPD Bans Most Outdoor Water Use in North Georgia (Sept. 28, 2007), available at http://www.gaepd.org/Files_PDF/news/Level_4_Drought_news_release.pdf.

^{246.} Stakeholder Letter on Water Conservation, supra note 19.

^{247.} Press Release, City of Atlanta, Dep't of Watershed Mgmt., Atlantans Hit Water Conservation Mark in May (June 4, 2008), available at http://www.atlantawatershed.org/news/press%20releases/May%20water%20usage%206-4-2008.pdf. "These numbers reflect production from the Hemphill and Chattahoochee water treatment plants; the City's share of the North Area Treatment Plant production is not included since that plant has its own river withdrawal permit." *Id.*

servation seems to have caught on in Atlanta. Even the mayor publicly posted her personal water consumption information.²⁴⁸ In addition to watering restrictions and conservation, Atlanta is spending over a billion dollars to overhaul its outdated water system that dates back to the 1800s, replacing leaking and broken pipes as well as updating water meters.²⁴⁹ Also, with an eye toward a long-term approach, Atlanta purchased a quarry with the intention of converting it into a two-billion-gallon reservoir.²⁵⁰ Atlanta will argue that all of this shows reasonable conservation measures.

Further, Atlanta's proponents have responded to accusations leveled at them with ire, arguing that claims of Atlanta being the cause of Florida's water problems are ridiculous.²⁵¹ The Atlanta Regional Commission, the regional planning and intergovernmental coordination agency for the ten-county Atlanta area, has stated that Atlanta's consumption only accounts for one percent of the flows at the Florida line in normal years and two percent during drought years.²⁵² The Commission argues that if the three million-plus people who depend on the Chattahoochee River were to disappear, flows at the Florida line in normal years would increase less than two inches, "an imperceptible amount in a river that experiences daily fluctuations of more than 2 feet due to hydropower operations."²⁵³

What if the conservation attempts are too little and too late? Atlanta may be conserving *now*, but Georgia as a whole has failed to conserve water in a timely fashion. Georgia uses the Chattahoochee (as well as the Flint River) for other uses downstream of Atlanta, such as irrigation, drinking water for other cities and towns, hydroelectric power plants, paper companies, nuclear plants, and more.²⁵⁴ Even if Atlanta's consumption only accounts for two percent of the Apalachicola River's flows, all of Georgia surely accounts for more.

^{248.} City of Atlanta Online, Mayor Shirley Franklin Releases Her Water Bill and Usage, http://www.atlantaga.gov/media/medadv_waterbill_101907.aspx (last visited Nov. 30, 2009).

^{249.} Stakeholder Letter on Water Conservation, supra note 19.

^{250.} Id.

^{251.} Ron Seder, Opinion, *Going with the Flow Hurts Lanier*, ATLANTA J.-CONST., Apr. 25, 2008, *available at* http://www.ajc.com/print/content/printedition/2008/04/25/laniered0425.html (arguing that downstream of Lake Lanier, "there is an abundance of water in the rivers and reservoirs" and that "[t]he claims of Atlanta water use causing a significant Florida problem are just ridiculous" because on average, "Atlanta water consumption amounts to less than 2 percent of the Apalachicola River flow, hardly a significant difference").

^{252.} Pamphlet, supra note 122.

^{253.} Id.

^{254.} Water-use Map, ATLANTA J.-CONST., Oct. 26, 2007, http://www.ajc.com/metro/content/metro/stories/2007/10/26/watermap.html (showing thirty-eight total uses of the ACF River Basin other than Atlanta, twenty-nine of which are located in Georgia).

Just how much, no one seems to know. There may be an independent study on the issue, but Congress has not approved it yet.²⁵⁵

Many feel that Georgia has no one but itself to blame for its current water crisis. One critic called out the state's "feeble water-conservation efforts" by pointing out that Georgia waited until September 2007 to ban outdoor watering and had "lollygagged" throughout 2007—despite the drought—"without attempting to conserve." The New York Times reported in 2007 that "[a]ll summer, more than a year after the drought began, fountains sprayed and football fields were watered, prisoners got two showers a day and Coca-Cola's bottling plants chugged along at full strength." As the Times pointed out, the "last-minute [water conservation] measures belie a history of inaction in Georgia and across the South when it comes to managing and conserving water, even in the face of rapid growth." Indeed, the drought has only been "over" for a matter of months and Georgia has already eased its water restrictions.

Further, as of October 2007, Florida was the only state in the Southeast that had a statewide water plan.²⁶⁰ And Floridians are quick to point out that when a drought descends upon them, water restrictions are imposed almost immediately.²⁶¹ Moreover, in early 2008, just before Georgia requested that the Corps lower outflows from Lake Lanier to preserve storage, Georgia itself eased conservation restrictions in Atlanta.²⁶² Florida has pointed to this as Georgia asking for water to be withheld from Florida but declining "to take action to minimize impacts to reservoir storage resulting from its own consumptive demands."²⁶³

In *Colorado v. New Mexico I*, the Court promulgated a principle that wasteful or inefficient uses will not be protected and created an affirmative duty in equitable apportionment cases "to take reasona-

^{255.} Farrington, Water Study, supra note 232. Georgia is urging the states not to wait for the National Academy of Sciences to study the Basin, but rather pay for it themselves to save time. Id.

^{256.} Opinion, Don't Let Water-Wasting Georgia Ruin Florida's Apalachicola Bay, TAMPA TRIB., Oct. 27, 2007, available at http://www2.tbo.com/content/2007/oct/27/na-dont-let-water-wasting-georgia-ruin-floridas-ap.

^{257.} Shaila Dewan & Brenda Goodman, New to Being Dry, the South Struggles to Adapt, N.Y. TIMES, Oct. 23, 2007, available at http://www.nytimes.com/2007/10/23/us/23drought.html.

^{258.} Id.

^{259.~} Bo Emerson, State Eases Water Rules, but Urges Restraint, ATLANTA J.-CONST., June 10, 2009, available at http://www.ajc.com/services/content/metro/stories/2009/06/10/drought_0610_web.html.

^{260.} Dewan & Goodman, supra note 257.

^{261.} Don't Let Water-Wasting Georgia Ruin Florida's Apalachicola Bay, supra note 256.

^{262.} Letter from Michael W. Sole, Fla. Dep't of Envtl. Prot., to Col. Byron Jorns, Army Corps of Eng'rs at 2 (May 6, 2008), available at http://www.dep.state.fl.us/mainpage/acf/files/letters/050608_exten%20reduc_flow.pdf.

^{263.} Id.

ble steps to conserve and augment the water supply of an interstate stream."²⁶⁴ This factor can only weigh in Florida's favor—Florida is not asking for a diversion of water; rather, it is seeking to prevent Georgia from diverting water. This factor applies almost solely to Georgia—Florida and Alabama are not consuming large amounts of water from the ACF River Basin, so there is nothing for them to conserve. Georgia, on the other hand, is diverting huge amounts of water from the Flint and Chattahoochee Rivers for urban water supply and agricultural irrigation, among other uses.

Another question must be answered in evaluating this factor: which state would be required to carry the burden of proof on the conservation issue? In Colorado v. New Mexico II, the Court revisited the conservation issue and found it significant that Colorado had failed to point out specific measures that New Mexico could take to reasonably conserve water.265 In that case, Colorado brought an action proposing a diversion and the issue was whether New Mexico could compensate for some or all of the diversion to Colorado; in contrast, in a case over the ACF River Basin, Florida would be bringing suit to enjoin a diversion request from Georgia. 266 In Colorado v. New *Mexico II*, the Court stated that after the petitioner state proved substantial injury, the burden shifted to the proposed diverter to show that reasonable conservation measures are being employed. 267 Accordingly, it would likely fall on Georgia to prove by clear and convincing evidence that it is taking reasonable conservation measures to offset the proposed diversion. Obviously, Georgia could be doing more to conserve—among other measures, it could impose stricter watering restrictions rather than lifting them. However, the Court has emphasized that conservation measures must be reasonable—the duty to conserve "is limited to measures that are 'financially and physically feasible' and 'within practicable limits.' "268 Since Georgia is not conserving as it should, this factor should weigh in Florida's favor. But, exactly how much it weighs in Florida's favor will depend on how far the Court expects Georgia to go toward conservation and how expensive possible conservation measures would be.

3. More Than an Amenity: Environmental Concerns

Should this case end up in the Supreme Court, it will be the first major equitable apportionment case "in the age of mature environmental statutory law." It is unclear how decades of environmental

^{264.} Colorado v. New Mexico I, 459 U.S. 176, 185 (1982).

^{265.} Colorado v. New Mexico II, 467 U.S. 310, 321 (1984).

^{266.} Id. at 310.

^{267.} Id. at 321.

^{268.} Colorado v. New Mexico I, 459 U.S. at 192 (O'Connor, J., concurring).

^{269.} Ruhl, supra note 4, at 49.

awareness, statutory development, and regulation will affect the Court's weighing of the equities and, ultimately, its decision.²⁷⁰ Unlike other equitable apportionment cases, Florida will not come to the table arguing only for its own interests—protecting the oyster industry—but also arguing environmental concerns, including the protection of federally protected endangered species.

Congress has emphatically indicated a clear intent to protect the environment in a series of statutes. For instance, the Endangered Species Act states that it is the purpose of Congress to provide "a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve [conservation]."271 The fact that Congress has expressed a clear intent in a series of environmental statutes will likely weigh heavily on at least some of the Justices' minds. For example, Justice Scalia has expressed a position that is strongly against the Court contravening a clear mandate expressed by Congress; in fact, Scalia has argued that doing so is undemocratic. 272 If the Court chooses to consider the environmental statutory scheme—in particular, that there are federally protected species that will be impacted by apportioning too much water to Georgia—that should weigh heavily in Florida's favor.

4. The Relevance of New Jersey v. New York²⁷³

Another factor the Court has considered is the water law or laws of the states involved.²⁷⁴ This brings *New Jersey v. New York* to the forefront because New Jersey and New York both employ a riparian rights regime.²⁷⁵ Likewise, all of the states in the current conflict—Alabama, Georgia, and Florida—follow some form of regulated riparianism.²⁷⁶ Although the Court has expressed that state law is not controlling,²⁷⁷ the fact that all three states involved follow some form of regulated riparianism will most likely have an impact on how the Supreme Court handles the litigation.²⁷⁸ There have been few equita-

^{270.} See id.

^{271.} Endangered Species Act of 1973, Pub. L. No. 93-205, § 2, 87 Stat. 884 (1973).

^{272.} See generally Antonin Scalia, A Matter of Interpretation: Federal Courts and the Law 22-23 (Amy Gutmann ed., 1998).

^{273. 283} U.S. 336 (1931).

^{274.} Colorado v. New Mexico I, 459 U.S. 176, 183-84 (1982).

^{275.} New Jersey, 283 U.S. at 343.

^{276.} Moore, supra note 138, at 6.

^{277.} $Colorado\ v.\ New\ Mexico\ I,\ 459\ U.S.\ at\ 184.$

^{278.} Dellapenna, supra note 38, at 885 n.324.

ble apportionment actions that involved only riparian rights states,²⁷⁹ so *New Jersey v. New York*, despite being decided in 1931, is important as a test case.

New Jersey v. New York is factually analogous to the current controversy. In that case, the upstream state, New York, sought to divert water; the downstream state, New Jersey, sought to enjoin that diversion.²⁸⁰ The Court reduced the amount of water that New York could divert because the sought-after diversion would have serious effects upon the oyster industry downstream.281 The Court also ordered other measures, including the construction of a sewage treatment plant and a requirement of a minimum flow.282 As stated by Dellapenna, this was a rather straightforward application of riparian rights law, 283 which provides that all uses, regardless of when they arise, will be allowed if they do not unreasonably interfere with other uses.²⁸⁴ Therefore, New York was entitled to its use of the water provided it did not unreasonably interfere with New Jersey's use of the water. Many of the legal commentators that have addressed New Jersey v. New York in the context of the ACF River Basin agree that Florida would win if the Court decided the case using the same approach it used in New Jersey v. New York.²⁸⁵

New Jersey v. New York aside, a straightforward application of riparian rights would likely give Florida a "win." Applying basic riparian rights principles, Georgia may use the water so long as it does not unreasonably interfere with other uses. If the Court places emphasis on conservation and environmental concerns, then the Court would hold that Georgia's use of too much water unreasonably interferes with Florida's use of the water.

C. What Is the Likely Outcome?

Unless the Court disregards ecological, conservation, and environmental concerns, Florida is likely to "win"—that is, be guaranteed some minimum flow amount into the Apalachicola Bay. In light of *Idaho* ex rel. *Evans v. Oregon* and the current environmental focus of Congress, the Special Master and the Supreme Court are likely to emphasize that the ACF River Basin is a natural resource to be

^{279.} Historically, disputes over water between riparian states were not common for the same reason that disputes over water rights in those states were not common—usually there was enough water to go around. *Id.* at 881.

^{280.} New Jersey, 283 U.S. at 341.

^{281.} Id. at 345.

^{282.} Id.

^{283.} Dellapenna, supra note 38, at 887.

^{284.} Moore, supra note 138, at 6.

^{285.} See, e.g., Natasha Meruelo, Note, Considering a Cooperative Water Management Approach in Resolving the Apalachicola-Chattahoochee-Flint River Basin Water War, 18 FORDHAM ENVIL. L. REV. 335, 355-56 (2007).

protected rather than just a commodity to divvy up. However, Florida cannot expect the Court to order Georgia to give up all claim to the Chattahoochee and Flint Rivers. In this day and age, "it is simply not productive to discuss total restoration of natural flow." Exactly how much water Georgia would be allotted will depend on the Special Master's findings. The Special Master will conduct fact-finding and then closely examine all of the relevant facts before making a determination.

V. THE BAD NEWS

A. Equitable Apportionment Is Not a Panacea

Regardless of the Supreme Court's decision in an equitable apportionment case, there is bad news for all involved—from the citizens of Atlanta to the fat threeridge mussel. No matter what the Supreme Court decides, there will be problems. The water in the ACF River Basin is finite and the amounts needed by all the parties for their individual reasons appear to exceed the water available. For example, if the Supreme Court orders that more water be released from dams in order to keep sufficient water flowing into the Apalachicola Bay, that could be harmful to the Bay in future droughts when there is no water left to release. If the Court orders that Georgia be allowed enough water to supply Atlanta's growing population, irrigate crops throughout the state, and supply other uses, that will contribute to disastrous, irreversible effects downstream and do nothing to encourage conservation and long-term water planning in Georgia.

Further, the Court could take a decade to make its decision—ten years or more is not be an unreasonable estimate for an equitable apportionment case involving the ACF River Basin.²⁸⁷ By way of illustration, the controversy between Nebraska and Wyoming started in 1934 when Nebraska brought suit.²⁸⁸ The original decree of equitable apportionment was issued in 1945, eleven years later.²⁸⁹ The case has since been reopened for litigation and relitigation of certain issues several times, most recently in 1995.²⁹⁰

Regarding the ACF River Basin, it is impossible to predict the future—whether droughts will strike again or whether there will be enough water to go around. However, should droughts reoccur, which seems likely, by the time the Court finally makes its decision, the

^{286.} Abrams, Broadening Narrow Perspectives, supra note 9, at 264.

^{287.} Dellapenna, *supra* note 38, at 889. The longest running case is the dispute between Arizona and California, which was filed in 1929. *Id.* In 2000, the Supreme Court issued a ruling and remanded to the Special Master for further proceedings. *Id.*

^{288.} Nebraska v. Wyoming, 325 U.S. 589, 591 (1945).

^{289.} Id. at 589.

^{290.} Nebraska v. Wyoming, 515 U.S. 1 (1995).

situation may have become even more dire—it may then be too late to save the ecosystem of the Apalachicola Bay.

An equitable apportionment case has yet another downside: its cost. An equitable apportionment case over the ACF River Basin has been estimated to cost somewhere between four to six million dollars per year, per state.²⁹¹ The millions of dollars spent on an equitable apportionment action are millions of dollars that cannot be spent on conservation measures or studies.

B. A Better Course of Action: Cooperation and Practical Solutions

Rather than extended litigation, a better focus would be for the states to cooperate toward a more forward-looking solution, such as a joint management regime.²⁹² An independent and current water study of the entire Basin would help—and one is possibly in the works.²⁹³ Simply put, more information is needed before the parties can reach a comprehensive solution. One of the advantages to cooperative, forward-looking decisionmaking is that the states would be able to move quickly to adjust any plans when the situation changes in the Basin. Such flexibility and speed will be impossible if equitable apportionment is used—the parties would instead have to relitigate. However, this plan would require the states to work together to reach such a solution. Alabama, Georgia, and Florida have publicly maintained that they are open to the possibility of reaching an agreement,²⁹⁴ but in light of the history of the conflict, whether this will actually come to pass remains to be seen.

Regardless of the ultimate outcome of the current litigation or an equitable apportionment action, Georgia will need to plan for the future. In 2002, Georgia officials projected that Atlanta will exceed its water supply by the year 2030.²⁹⁵ However, other sources indicate that Atlanta may already be nearing 2030 levels of consumption.²⁹⁶ As an attorney not involved with the current litigation stated, a defeat for Georgia "would not be the worst outcome because it would be a defeat of the current way of growing," and "the region can either choose its current path of litigation, desperate attempts to tap into the Tennessee River and blindly planning for new reservoirs, or it can start taking conservation seriously and grow where water is

^{291.} Dellapenna, supra note 38, at 888.

^{292.} See id. at 898-99.

^{293.} Farrington, Water Study, supra note 232.

^{294.} Shelton, *Question of Right*, *supra* note 83 ("Both sides said they are ready to negotiate out of court. 'The three states should reach an agreement, but only if there is a recognition that each state has to make compromises,' Alabama Gov. Bob Riley said in a statement.").

^{295.} Jehl, supra note 42.

^{296.} Id.

available."²⁹⁷ Population growth must be sustainable—a place like Atlanta that lacks a major water source should not grow unchecked without having a long-term comprehensive water supply plan.

Lake Lanier is not set up to be a main water storage reservoir when rainfall is scarce. Lake Lanier provides sixty-five percent of the ACF River Basin's storage, but only drains between five and nine percent of the Basin. And the lake is slow to refill. The downstream reservoirs are fed by much larger watersheds but have much less capacity. A long-term solution would be to increase the capacity of downstream reservoirs so that the strain would not be so heavily placed on Lake Lanier. Much more water could be stored in the system during times of plenty to be released during times of drought for the benefit of the Apalachicola Bay without overburdening Lake Lanier and Atlanta's water supply. However, doing so could take a long time and be very costly. Additionally, environmentalists are likely to balk at any suggestion of building dams or reservoirs on the Flint River, which is one of only forty rivers in the lower forty-eight states that flow unimpeded for more than two hundred river miles.

Conservation measures would be a much more immediate and practical fix. ³⁰² As argued by columnist Jay Bookman, "[t]he appeal of dam-building is obvious. . . . Sometimes, though, it's smarter to take a lot of smaller-scale responses, such as mandating use of efficient plumbing fixtures and charging a lot more for water above a basic use level." ³⁰³ Further, "conservation is a far more immediate and concrete source of water than a dam. Plans for a reservoir can go awry at any point in the process And if you clear all those hurdles and build a reservoir, you still need rainfall to fill it." ³⁰⁴ Georgia, especially Atlanta, should pass legislation measures mandating small-scale conservation measures such as low-flow toilets.

Regardless of when the next drought strikes, the city of Atlanta as well as Georgia as a whole should start conservation measures as well as long-term planning *now* and continue them even though the drought is "over." However, Georgia does not appear to be taking this approach—rather, it has already eased watering restrictions, ³⁰⁵ Some

^{297.} Shelton, Water War, supra note 244.

^{298.} Seder, supra note 251.

^{299.} *See supra* note 122.

³⁰⁰. Seder, supra note 251.

^{301.} Susan D. Morris, Flint River, The New Georgia Encyclopedia (July 15, 2005), http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-3266.

^{302.} See Jay Bookman, Opinion, In Water War, Science Is on Our Side, ATLANTA J.-CONST., Oct. 23, 2008, available at http://www.ajc.com/opinion/content/opinion/bookman/stories/2008/10/23/bookmaned_1023.html.

^{303.} Id.

^{304.} Id.

^{305.} Emerson, supra note 259.

environmentalists have protested this decision, worrying that Georgia has moved too quickly in easing restrictions. As stated by one such environmentalist, "[w]ater conservation needs to become a way of life whether we're in an emergency-level drought or it's raining outside. We have an ever-growing population and a finite amount of water." In sum, wasting water in times of plenty rather than storing it for times of drought is not sustainable given current population trends and the likelihood of climate change altering future weather and rainfall patterns. 308

VI. CONCLUSION

The ACF River Basin conflict is a classic example of the tragedy of the commons. The users of the water in Georgia have no incentives to conserve water for the benefit of other users, particularly of the downstream state, Florida. Although Florida is likely to succeed if it petitions the Supreme Court to equitably apportion the Basin, such litigation may come at the cost of discouraging the states from attempting once again to cooperatively work toward a solution. Regardless of what happens among the states, Georgia must take immediate steps to conserve—for its own benefit as well as for the benefit of the Forgotten Coast, its way of life, and even the mussels.

^{306.} *Id.* ("'Due to the fact that Lake Lanier is still four feet below full pool and there isn't enough water in the Chattahoochee to support fishing and recreation and we're not meeting flow target, we definitely believe it's irresponsible to withdraw watering restrictions,' said Juliet Cohen, general counsel for the Upper Chattahoochee River Keepers.") 307. *Id.*

^{308.} Jon Gertner, *The Future Is Drying Up*, N.Y. TIMES, Oct. 21, 2007, available at http://www.nytimes.com/2007/10/21/magazine/21water-t.html.