

THE FAILINGS OF THE TRI-STATE WATER NEGOTIATIONS:  
LESSONS TO BE LEARNED FROM INTERNATIONAL LAW

Michael Keene\*

TABLE OF CONTENTS

I.	INTRODUCTION .....	474
	A. <i>The Chattahoochee River Basin</i> .....	474
	B. <i>The Dispute</i> .....	476
II.	UNITED STATES LEGAL BACKGROUND .....	478
	A. <i>Water Appropriation in the United States</i> .....	478
	B. <i>Dispute Resolution Under U.S. Law</i> .....	480
III.	WATER DISPUTES IN INTERNATIONAL LAW .....	484
	A. <i>The Indus Waters Treaty</i> .....	484
	B. <i>The Ganges River Treaty</i> .....	486
	C. <i>The Mahakali Rivers Treaty</i> .....	488
	D. <i>The Boundary Waters Treaty</i> .....	491
IV.	LESSONS FROM AND APPLICATIONS OF INTERNATIONAL LAW .....	493
	A. <i>The Equitable Utilization Principle</i> .....	495
	B. <i>Composition of the Commission</i> .....	497
	C. <i>The Threat of Force</i> .....	499
V.	CONCLUSION .....	500

---

\* J.D. 2004, University of Georgia School of Law; B.A. 2001, Oglethorpe University.

## I. INTRODUCTION

For more than two centuries, the southeastern United States was blessed with more than enough water for its needs. Unlike the arid western region of the country, which has been plagued by water rights disputes since the middle of the nineteenth century,<sup>1</sup> the Southeast has always had an ample water supply.<sup>2</sup> In the 1980s, however, severe droughts exposed problems within the region's water rights system; Georgia, Alabama, and Florida were forced to recognize that continued growth was putting a strain on their natural resources.<sup>3</sup>

The result of that recognition has been a contentious and divisive process of negotiation. Those negotiations have been hampered by the inability of the region's system of water allocation to deal effectively with situations of scarcity.<sup>4</sup> The system of international law has proven effective in resolving a number of historic water rights disputes.<sup>5</sup> In those disputes, three factors appear to have improved the fluidity of the negotiation process: the acceptance of the equitable utilization principle,<sup>6</sup> the presence of a strong, autonomous mediator,<sup>7</sup> and the threat of force in the event of a failure in negotiations.<sup>8</sup> These three factors have increased the efficiency of past international water rights disputes.<sup>9</sup> Efforts at incorporating them into the context of the tri-state water dispute could help expedite the negotiation process.

A. *The Chattahoochee River Basin*

The Chattahoochee River is one of the Southeast's primary water resources.<sup>10</sup> The river springs in the mountains of northern Georgia and flows to the southwest, through the city of Atlanta and on to form the southern half

---

<sup>1</sup> See Larry Copeland, *Water Wars Loom Amid Southern Boom*, USA TODAY, Nov. 24, 1998, at 5A. See also Grady Moore, *Water Wars: Interstate Water Allocation in the Southeast*, 14-SUM NAT. RESOURCES & ENV'T 5 (1999).

<sup>2</sup> See Copeland, *supra* note 1.

<sup>3</sup> Moore, *supra* note 1.

<sup>4</sup> See *infra* Part II.A.

<sup>5</sup> See *infra* Part III.

<sup>6</sup> See *infra* Part IV.A.

<sup>7</sup> See *infra* Part IV.B.

<sup>8</sup> See *infra* Part IV.C.

<sup>9</sup> See *infra* Part III.

<sup>10</sup> Dustin S. Stephenson, *The Tri-State Compact: Falling Waters and Fading Opportunities*, 16 J. LAND USE & ENVTL. L. 83, 89 (2000).

of the Georgia-Alabama border.<sup>11</sup> Near the Florida border, the Flint River joins the Chattahoochee, and from there it becomes the Apalachicola River. The Apalachicola River continues south through the panhandle region of Florida and empties into the Apalachicola Bay, which is part of the Gulf of Mexico.<sup>12</sup>

The Chattahoochee holds great significance in all three states. The river is vital to north Georgia, providing approximately seventy percent of the drinking water for the metropolitan Atlanta area.<sup>13</sup> Atlanta is already home to some 3.5 million residents, and its population and economic activity are growing rapidly.<sup>14</sup> These growths are echoed by an increased need for water for both residential and industrial purposes.

Alabama relies heavily on the Chattahoochee as well. The southeastern portion of the state uses the river for much of its drinking water, as well as for industrial and recreational purposes.<sup>15</sup> Though Alabama's growth may be slower than Atlanta's, the water supplied by the Chattahoochee is still critical to the state.<sup>16</sup>

Florida has a more single, specific reliance on the river than either Georgia or Alabama. The Apalachicola Bay, where the river enters the Gulf of Mexico, is home to ninety percent of Florida's \$70 million per year oyster industry.<sup>17</sup> The fresh water flow from the river "stabilizes the salinity of the bay water at the optimum level for oyster bed cultivation."<sup>18</sup> Florida thus has a strong economic interest in maintaining a clean, natural flow in the Chattahoochee.

---

<sup>11</sup> *Id.* at 85.

<sup>12</sup> *Id.* (citing GUY J. KELNHOFER, JR., METROPOLITAN PLANNING AND RIVER BASIN PLANNING: SOME INTERRELATIONSHIPS 30 (1968)).

<sup>13</sup> See Stephenson, *supra* note 10, at 84 (citing *River Rivalry*, ECONOMIST, Mar. 30, 1991, at 26).

<sup>14</sup> Malani Peebles, *NPR's Morning Edition: Battle for Water Rights* (NPR radio broadcast, Oct. 9, 1998), available at 1998 WL 3309037. See also Greg Jaffe, *Water Deal May Settle Old Dispute*, WALL ST. J., Sept. 11, 1996, at F1 (stating that by a 1990 estimate, Atlanta was expected to experience a population growth of 800,000 in the next twenty years).

<sup>15</sup> See Stephenson, *supra* note 10, at 85 (citing Jim Nesbitt, *Water Wars Move South, East as Cities Gulp Supplies*, NEW ORLEANS TIMES-PICAYUNE, May 24, 1998, at A25) [hereinafter *Water Wars Move*].

<sup>16</sup> *Id.*

<sup>17</sup> See Jonathan Kerr, *Southeastern States Form Interstate Compact to Resolve Water Disputes*, WEST'S LEGAL NEWS, Sept. 18, 1996, available at 1996 WL 524406; Peebles, *supra* note 14.

<sup>18</sup> See Stephenson, *supra* note 10 (citing *Water Wars Move*, *supra* note 15).

### B. The Dispute

In 1989, the state of Georgia and the United States Army Corps of Engineers entered into an agreement for significant additional withdrawal from the Chattahoochee River.<sup>19</sup> This was done to accommodate Atlanta's rapid growth and corresponding increasing need for water for both domestic and commercial uses. When this contract was announced, the state of Alabama commenced a lawsuit seeking an injunction against the implementation of the contract.<sup>20</sup> The state of Florida joined the suit shortly thereafter, hoping to protect its interests in the Chattahoochee.<sup>21</sup>

Before the case came to judicial resolution, the Governors of all three states agreed to suspend legal action and move to negotiations.<sup>22</sup> The agreement also froze the water usage at current levels and forced the states to fund a five-year Army Corps of Engineers study of the current and future water use requirements of the three states.<sup>23</sup> In anticipation of the study's completion, the legislatures of all three states passed a bill forming an interstate water compact.<sup>24</sup> This compact created a commission<sup>25</sup> to be made up of "one representative from each state (appointed by the Governor), plus one [non-voting]<sup>26</sup> federal representative (appointed by the President) to analyze the results of the comprehensive study and negotiate each state's allocation."<sup>27</sup> The compact was signed into law by President Clinton on November 20, 1997.<sup>28</sup> The Apalachicola-Chattahoochee-Flint Commission's (ACF) structure is considered effective because it allows appropriate water resource experts to

---

<sup>19</sup> See Jaffe, *supra* note 14 (noting that Atlanta proposed to withdraw an additional 529 million gallons a day, a fifty percent increase in its total withdrawals).

<sup>20</sup> Jeffrey Uhlman Beaverstock, *Learning to Get Along: Alabama, Georgia, Florida and the Chattahoochee River Compact*, 49 ALA. L. REV. 993, 994 (1998).

<sup>21</sup> See Mike Williams, *Florida Seafood Workers Fear Being Left High, Dry in Water War*, ATLANTA J.-CONST., Aug. 9, 1991, at F4.

<sup>22</sup> See Tom Watson, *Pact Eases Water War in Southeast; 3-State Dispute of River Supply Has Threatened Atlanta's Growth*, WASH. POST, Jan. 4, 1992, at A8. The agreement was reached on January 3, 1992. *Id.*

<sup>23</sup> See *id.*

<sup>24</sup> Apalachicola-Chattahoochee-Flint River Basin Compact, Pub. L. No. 105-104, 111 Stat. 2219 (1997). The compact was signed into law by all three states in 1997. O.C.G.A. § 12-10-100, F.S.A. § 3.73.71, and ALA. CODE 1975 § 33-19-1.

<sup>25</sup> Apalachicola-Chattahoochee-Flint River Basin Compact, § 1, art. VI(a).

<sup>26</sup> See *id.*

<sup>27</sup> Stephenson, *supra* note 10, at 88 (citing Charles Seabrook, *Heading Off a Tri-State Water War*, ATLANTA J.-CONST., Feb. 19, 1998, at C1).

<sup>28</sup> See Apalachicola-Chattahoochee-Flint River Basin Compact, *supra* note 24.

be involved in the negotiations.<sup>29</sup> Experts would also be involved in the enforcement of any agreement that might result from the ACF Commission's work.<sup>30</sup>

As of yet, however, the ACF Commission has not been able to come to any agreement. Since the creation of the ACF Commission, numerous extensions have been granted,<sup>31</sup> and seemingly little forward movement has been made. Many factors are to blame for this lack of progress. One key setback was the gubernatorial elections of 1998, when all three states elected new governors.

The new governors brought "new policies, less cooperation, and less knowledge of the situation as a whole."<sup>32</sup> Also, there have been questions as to the good faith of the efforts being put forward by all the parties.<sup>33</sup> For example, in 1997, Georgia budgeted \$46 million to proceed with a reservoir plan involving withdrawal from the Chattahoochee River.<sup>34</sup> This was done despite the 1992 agreement that halted all legal action and froze water withdrawal levels. Georgia ceased its plans in the face of protests from the other parties, but this incident "threatened to derail the entire compact process."<sup>35</sup>

It is possible that both Alabama and Florida might also not be negotiating in the best of faith.<sup>36</sup> They might be delaying the proceedings in hopes that Georgia will be forced to locate another water source to fulfill its continually expanding needs.<sup>37</sup> If Georgia finds such a source, Georgia's bargaining position as to the Chattahoochee allocation will be greatly compromised.<sup>38</sup> Thus, both Alabama and Florida have at least a potential motivation to prolong the negotiations of the ACF Commission. Georgia, conversely, would like to

---

<sup>29</sup> Stephenson, *supra* note 10, at 102.

<sup>30</sup> *Id.* at 101. See generally Apalachicola Chattahoochee Flint River Compact (establishing that any agreement reached under the compact would create a permanent body to monitor and enforce the agreement).

<sup>31</sup> The initial deadline for completion of a water allocation plan was December 31, 1998. Apalachicola Chattahoochee Flint River Basin Compact, *supra* note 24, § 1, art. VI(g)(12); art. VII(a); art. VIII(a)(3). Since then, the deadline has been extended at least a dozen times. Stacy Shelton, *Water Wars: Tri-state Negotiations Covered Up, Barr Says*, ATLANTA J.-CONST., Sept. 9, 2002, at B2.

<sup>32</sup> Stephenson, *supra* note 10, at 102-03.

<sup>33</sup> *Id.* at 106.

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> *Id.* at 106-07.

resolve the dispute without resorting to another water source.<sup>39</sup> Therefore, Georgia has the strongest vested interest in resolving the water allotment dispute as quickly as possible.

Recently, Georgia has again threatened the negotiating process. In January 2003, Georgia reached an agreement with the Army Corps of Engineers to allow the Atlanta metropolitan area a substantially larger allocation of water from the Chattahoochee.<sup>40</sup> This agreement brought the feasibility of success of the tri-state negotiations into question: both Alabama and Florida appeared unwilling to continue negotiating in the face of what they view as an act in bad faith. Though Georgia subsequently withdrawn its plans, the negotiations have continued to flounder.<sup>41</sup> This faltering of the settlement process demonstrates the need for improvement in doctrinal approach to water allocation.

## II. UNITED STATES LEGAL BACKGROUND

The U.S. framework system of water appropriations, under which the tri-state water negotiations are taking place, lacks key components present in water rights dispute resolution under international law. These components make a settlement more likely. In order to consider whether international law has any relevant lessons for the tri-state water negotiations, it is necessary to first consider the legal framework in which the negotiations are currently taking place.

### A. *Water Appropriation in the United States*

Water appropriation law in the United States has traditionally taken on two distinct forms: riparianism and prior appropriation. In the eastern United States, riparianism is the primary doctrine of water rights law.<sup>42</sup> Riparianism functions under the assumption that water from a given source is available to all parties owning property adjacent to that source: all uses of the water are permissible as long as they do not "unreasonably interfere"<sup>43</sup> with other uses

---

<sup>39</sup> *Id.* at 107.

<sup>40</sup> Stacy Shelton, *Georgia Water Accord Will Hike Charges*, ATLANTA J.-CONST., Jan. 21, 2003, at A1.

<sup>41</sup> Stacy Shelton, *Water Feud Likely to Spill into the Court*, ATLANTA J.-CONST., Sept. 2, 2003, at A1.

<sup>42</sup> Moore, *supra* note 1, at 6.

<sup>43</sup> *Id.*

and can be considered a "reasonable use."<sup>44</sup> This doctrine is functional and easy to administer when water is abundantly available (as it traditionally has been in the southeastern United States). This system, however, can be very problematic when resources become scarce; the difficulty then becomes determining whether something constitutes a "reasonable use."<sup>45</sup>

In the western part of the country, water rights arise from the system of prior appropriation.<sup>46</sup> Prior appropriation is based on the assumption that " 'first in time is first in right.' "<sup>47</sup> Once a person puts a source of water to a particular use, that use has priority over all later-arising uses.<sup>48</sup> If the water is scarce, the use that was established first will be first to be fulfilled. This priority is maintained even during times of "drought and at the expense of more socially beneficial uses."<sup>49</sup> The prior appropriation doctrine was developed because during the time of western expansion, it was believed that the riparian system would hinder development.<sup>50</sup> Early settlers would be more likely to move westward if they knew that any use they made of the water there would be secured from subsequent usurpers. This system of water allocation is still maintained in the West today. The only modification is that in a modern prior appropriation system a water right is usually requested from and granted by the state government.<sup>51</sup>

---

<sup>44</sup> *Tyler v. Wilkinson*, 24 F. Cas. 472 (C.C.R.I. 1827) (No. 14312). This case originated the reasonable use doctrine, which abandoned the natural flow theory of riparian rights (under which a riparian landowner could not make use of the water in any way that would materially reduce the water's flow). *Id.*

<sup>45</sup> Stephenson, *supra* note 10, at 91.

<sup>46</sup> Moore, *supra* note 1, at 6.

<sup>47</sup> *Id.*

<sup>48</sup> *See id.*

<sup>49</sup> *Id.*

<sup>50</sup> *See WILLIAM GOLDFARB, WATER LAW 15 (1984)*. During the western expansion, most of the lands were owned by the government, but the people were encouraged to settle there. These settlers were basically trespassing on public land, and could thus have no riparian rights. By adopting the prior appropriation system, these settlers were allowed to make legal claim to the water they used. Additionally, many of the lands available to the western settlers (for such purposes as farming and especially mining) were distant from any water source. To limit water use to those occupying property directly adjacent to a water source would have limited the ability of settlers to make full use of the West's resources. In its expansive western territories, the government therefore rejected the riparianism doctrine and allowed people to divert, or "appropriate," water and transport it from the source. This approach to "appropriation" was borrowed from the mining industry, of which many of the early settlers were a part. When a new site for a mine was discovered on public lands, the discoverer had rights to the mine.

<sup>51</sup> *See Stephenson, supra* note 10, at 89. Under modern prior appropriations, the point of contention is which use was "granted" first, rather than which use was made first. *Id.*

There has been a trend, particularly in the Southeast, towards combining these two doctrines of water appropriation.<sup>52</sup> These systems are designed to "recognize riparian rights, while also implementing an administrative permit mechanism for new demands placed on water resources."<sup>53</sup> Such systems still do not place "as much emphasis on priority in time as does the western model of prior appropriation."<sup>54</sup> Florida's system involves such a combination, and is implemented through a statutorily based three-prong test.<sup>55</sup> Any proposed use must pass this test in order for a permit to be granted. While Georgia's system is still considered to be riparian, Georgia has also compromised by adopting a "quasi-appropriation 'permit' system onto the existing riparian framework."<sup>56</sup> The move away from a pure riparian system is indicative of the fact that the riparian system is not well equipped to handle instances of scarcity.

### *B. Dispute Resolution Under U.S. Law*

There are three methods for resolving water rights disputes under U.S. law: legislative apportionment, judicial apportionment, and interstate compact.<sup>57</sup> Interstate compact, the method invoked to settle the water dispute over the Chattahoochee River Basin, is widely considered to be the best form of allocation, principally because of the perception that "congressional and judicial apportionment schemes often are based on incomplete information."<sup>58</sup> The interstate compact process is itself far from ideal, however, and some

---

<sup>52</sup> *Id.* at 91. Systems combining the characteristics of the riparian and the prior appropriation doctrines are often referred to as "hybrid" systems. *Id.*

<sup>53</sup> *Id.* at 92.

<sup>54</sup> *Id.*

<sup>55</sup> Florida's three-prong test: the proposed use "must be defined as a reasonable beneficial use, the use must not adversely affect other riparian users, and the use must be consistent with the public interest." Stephenson, *supra* note 10, at 92 (citing Ronald A. Christaldi, *Sharing the Cup: A proposal for the Allocation of Florida's Water Resources*, 23 FLA. ST. U. L. REV. 1063, at 1080-81 (1996)).

<sup>56</sup> Moore, *supra* note 1, at 6. Georgia requires a permit for any new withdrawal of more than 100,000 gallons per day. Regulations for granting the permit establish a hierarchy of uses; the result is similar to a prior appropriation system. *Id.*

<sup>57</sup> Stephenson, *supra* note 10, at 93.

<sup>58</sup> See Beaverstock, *supra* note 20, at 1007; GOLDFARB, *supra* note 50, at 32; David N. Copas Jr., *The Southeastern Water Compact: Panacea or Pandora's Box? A Law and Economics Analysis of the Viability of Interstate Water Compacts*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 697, 714 (1997) (stating that interstate compacts are both the most common and most desirable method of resolving water rights disputes).



important concepts of conflict resolution can be drawn from other methods of apportionment.

Congress' right to legislatively apportion interstate waters is based in the Commerce Clause.<sup>59</sup> Congress has the power to settle interstate water disputes by passing a bill dictating distribution of the waters.<sup>60</sup> However, Congress has proven reluctant to use this power.<sup>61</sup> Congress has generally refrained from using this authority because this issue is highly politicized, forcing representatives to "choose a side, unless their home state has a stake in the outcome,"<sup>62</sup> and a Congressman would rather not alienate a number of his colleagues unnecessarily.

Furthermore, legislative apportionment is probably not desirable for the parties involved either. Congress men are not necessarily qualified to settle an interstate water rights dispute; they lack the scientific expertise that an interstate commission might be able to apply.<sup>63</sup> Moreover, a Congressman from one state may have very little interest in the resolution of a dispute between states on the other side of the country.<sup>64</sup> Lastly, Congress is easily influenced by special interest groups. Individual Congressmen might be influenced by such groups, and thus might not make the most efficient allocations.<sup>65</sup> Obviously, this is an area of concern that extends to all legislative decision-making. Nonetheless, the potential biases of legislators are another reason why the states do not seek to have their water rights disputes settled through legislative allocation.

Judicial apportionment is another option for allotting water rights. The U.S. Supreme Court has automatic jurisdiction over any controversy between the states,<sup>66</sup> and thus maintains jurisdiction over interstate water controversies. The Supreme Court uses the principle of equitable utilization in its adjudication of interstate water controversies.<sup>67</sup> This principle involves "abandonment of the traditional common law allocations doctrines of riparian rights and prior appropriations. The important consideration for the Court is arriving at an

---

<sup>59</sup> See Stephenson, *supra* note 10, at 93 (citing *Arizona v. California*, 373 U.S. 546, 597-98 (1963)). See also U.S. CONST. art. I, § 8.

<sup>60</sup> See Stephenson, *supra* note 10, at 93.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at 94.

<sup>63</sup> See generally Copas, *supra* note 58, at 715.

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> U.S. CONST. art. III, § 2, cl. 1.

<sup>67</sup> See Stephenson, *supra* note 10, at 93.

equitable distribution of the water among the disputing states."<sup>68</sup> The doctrine of equitable utilization was borrowed from international law,<sup>69</sup> and was first adopted by the Supreme Court in *Kansas v. Colorado*.<sup>70</sup> In implementing the doctrine of equitable utilization, the Court has "laid out a number of factors to consider," among them the type of consumptive use, the priority of appropriation, and the physical condition of the lands involved.<sup>71</sup>

The equitable utilization principle can be effectively used to resolve water rights disputes. However, despite the advantages of this principle, judicial apportionment is not an ideal means for water rights dispute resolution. Judicial apportionment has three primary drawbacks: lack of expertise of the Court, the high costs of litigation, and the Court's lack of ability to monitor the implementation of its solution.<sup>72</sup> Probably in large part based on the aforementioned reasons, the Court has implicitly expressed its desire that future water rights disputes be handled between the states.<sup>73</sup> Based on these concerns, judicial apportionment is not a satisfactory means of resolving interstate water disputes.<sup>74</sup> However, the doctrinal approach used in judicial apportionment could be very helpful in otherwise resolving such disputes.

Interstate compacts are generally considered the best method of resolving water rights disputes.<sup>75</sup> The key goal underlying interstate water compacts is to make appropriations for future uses.<sup>76</sup> In negotiating a compact, states attempt to "anticipate future uses of water and apportion rights accordingly."<sup>77</sup>

---

<sup>68</sup> Beaverstock, *supra* note 20, at 1001 (citing WILLIAM GOLDFARB, *WATER LAW* 52-53 (1988)).

<sup>69</sup> *Id.*

<sup>70</sup> 206 U.S. 46, 117 (1907).

<sup>71</sup> Copas, *supra* note 58, at 716-17 (citing *Nebraska v. Wyoming*, 325 U.S. 589, 618 (1945)).

<sup>72</sup> Stephenson, *supra* note 10, at 96.

<sup>73</sup> See *Kansas v. Colorado*, 206 U.S. 46 (1907) (showing that the Court was unwilling to deal with the technical aspects of the case, choosing instead to merely state that the current pattern of water usage was not objectionable). See also Beaverstock, *supra* note 20, at 1001 (interpreting *Kansas v. Colorado* to express the intention that "disputes between states over interstate water resources be settled by sharing of the water").

<sup>74</sup> Cf. Shelton, *supra* note 41 (arguing that despite the seeming inadequacies of judicial apportionment, it seems likely that the ACF dispute will eventually be resolved by the court in the face of the faltering negotiation process).

<sup>75</sup> See Copas, *supra* note 58, at 714 (stating that interstate compacts are both the most common and the most preferable method of settling water rights disputes).

<sup>76</sup> *Id.* at 719.

<sup>77</sup> *Id.* (citing Jerome C. Muys, *Approaches and Considerations for Allocation of Interstate Waters*, in *WATER LAW TRENDS, POLICIES AND PRACTICE* 311, at 314 n.17 (Kathleen M. Carr & James D. Crammond eds., 1995) (citing the Colorado River Compact)).

However, such estimates have the tendency to be imprecise, so the enforcement mechanism of the compact is extremely important.<sup>78</sup> Compacts can be enforced in two ways: first, through the compact itself (by including an enforcement mechanism for state agencies to implement); or second, through the creation of a permanent commission.<sup>79</sup> Such a commission can hopefully exercise impartiality in its enforcement of the water allocations. As described above, such a commission has been created for the tri-state dispute negotiations.<sup>80</sup>

Interstate water compacts have three primary advantages over the other means of water allocation.<sup>81</sup> First, compacts provide adaptability because they are tailored to the specific situation.<sup>82</sup> Flexibility is even more present when, as in the tri-state dispute, a commission has been established that can adapt the allocations to meet changing conditions.<sup>83</sup> Second, interstate compacts are considered advantageous because they can more easily involve expert opinions.<sup>84</sup> If the delegates are well-chosen by their respective states, they can provide ample expertise in the area of water allocation. Third, in the case of a compact that establishes a permanent commission, the parties can expect effective enforcement.<sup>85</sup> Having the states enforce their own allocations (rather than having an autonomous commission to do so) leads to a clear conflict of interests.

While water compacts are considered the best of the three major forms of water allocation, they too are far from ideal. Water compacts are recognized as having three principal detriments.<sup>86</sup> First, they often lead to exceedingly long periods of negotiation<sup>87</sup> that can be very involved and expensive. Second, states have the tendency to draft around the contentious issues with some vagueness.<sup>88</sup> States do not want to entirely bind themselves to limitations that could be stifling. Some form of outside adjudication would probably be more

---

<sup>78</sup> Stephenson, *supra* note 10, at 98.

<sup>79</sup> *Id.*; Copas, *supra* note 58, at 719.

<sup>80</sup> See Stephenson, *supra* note 10, at 102.

<sup>81</sup> *Id.* at 99 (citing A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES, § 10.24 (1988)).

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*

<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> *Id.* at 100 (citing CHARLES J. MEYERS & A. DAN TARLOCK, WATER RESOURCE MANAGEMENT 419 (2d ed. 1980)).

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

likely to result in a hard rule or decision. Last, the commissioners and compact negotiators are beholden to the governments of the involved states. The commissioners and negotiators typically are not free to formulate the state's policy, but instead must constantly consult with policymakers who are usually absent during negotiations.<sup>89</sup> Thus if the state's policy changes, the commissioner or negotiator is forced to alter his stance in the negotiations or enforcement of the compact.<sup>90</sup>

### III. WATER DISPUTES IN INTERNATIONAL LAW

Water has always presented a challenging issue for international law. By its very transient nature, water does not conform to traditional conceptions of ownership. The international legal community has had to address water rights with increasing frequency as the populations and economies of the world's nations have expanded.<sup>91</sup> The following are examples of historically significant international water rights negotiations from which lessons and observations can be made that might prove helpful in assessing the tri-state water dispute.

#### A. *The Indus Waters Treaty*

The Indus Waters Treaty,<sup>92</sup> concluded by India and Pakistan in 1960, was a landmark effort in international water rights dispute resolution. The Indus River rises in Tibet and crosses the Indian subcontinent in the form of six separate rivers.<sup>93</sup> These waters are used most notably for agricultural irrigation, domestic consumption, and transport.<sup>94</sup> The partitioning of India and Pakistan in 1947 resulted in India controlling most of the headwaters of the river, while Pakistan controlled the larger share of the irrigated lands.<sup>95</sup> In the ensuing dispute, India, relying on the principle of territorial sovereignty,

---

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> Colleen P. Graffy, *Water, Water, Everywhere, Nor Any Drop to Drink: The Urgency of Transnational Solutions to International Riparian Disputes*, 10 GEO. INT'L ENVTL. L. REV. 399, 425 (1998).

<sup>92</sup> Indus Waters Treaty, Sept. 19, 1960, India-Pak., 419 U.N.T.S. 125.

<sup>93</sup> Graffy, *supra* note 91, at 425.

<sup>94</sup> *Id.*

<sup>95</sup> *Id.*

initially asserted that it had the right to use the waters as it saw fit.<sup>96</sup> Under this doctrine, Pakistan would have had no say if India chose to divert most of the headwaters for its own purposes.

Initial negotiations between India and Pakistan did not proceed well: India continued to maintain its territorial sovereignty rights, while Pakistan sought some sort of equitable resolution to the dispute.<sup>97</sup> Proposals for commissions to settle the dispute were rejected, and obligations under past agreements were repudiated.<sup>98</sup> A settlement to the dispute did not seem likely.

This stalemate was ended, however, when the president of the International Bank for Reconstruction and Development (World Bank) offered his organization's services as a mediator to the dispute.<sup>99</sup> Both parties accepted this offer, and the treaty borne of the subsequent negotiations was based on the principle of equitable utilization.<sup>100</sup> The Indus Waters Treaty allocated three of the six rivers to each of the negotiating countries.<sup>101</sup> It also resulted in the formation of a Permanent Indus Commission with one representative from each country, and it delineated various means through which any future disputes would be settled.<sup>102</sup>

The Indus Waters Treaty of 1960 demonstrates the effectiveness of the principle of equitable utilization. This doctrine emphasizes distribution of resources in the manner that is most beneficial to all the parties involved. Equitable utilization has proven to be a mainstay of international water rights negotiations.<sup>103</sup> It transcends the limitations of the systems of water allocation in the negotiating countries. The Indus Waters Treaty also demonstrates the practicality and efficiency of having a strong, non-political mediator. Having

---

<sup>96</sup> *Id.* at 425-26. See also Melissa Crane, *Diminishing Water Resources and International Law: U.S.-Mexico, A Case Study*, 24 CORNELL INT'L L.J. 299, 305 (1991). Crane gives historical background on the concept of territorial sovereignty, as defined in the United Nations General Assembly Resolution on Permanent Sovereignty over Natural Resources (1962) (signed after the Indus Waters Treaty, but nonetheless an embodiment of historic international law).

<sup>97</sup> Graffy, *supra* note 91, at 426.

<sup>98</sup> *Id.*

<sup>99</sup> *Id.* at 426-27. This idea was spurred when a former head of the Tennessee Valley Authority suggested that the situation could more readily be solved by mediation of a non-political third party such as the World Bank. *Id.*

<sup>100</sup> See *id.* at 427 (noting however, that the parties did within the treaty explicitly try to prevent the formal endorsement of the equitable utilization principle (citing The Indus Waters Treaty, *supra* note 92, art. XI(2). "Nothing in this treaty shall be construed by the Parties as in any way establishing any general principle of law or any precedent.")).

<sup>101</sup> *Id.* at 427.

<sup>102</sup> *Id.*

<sup>103</sup> See Crane, *supra* note 96, at 306.

a mediator who is not beholden to any specific party benefits the fluidity of the negotiation process. Both of these features could prove advantageous for domestic interstate water disputes.

### *B. The Ganges River Treaty*

The Ganges River Treaty of 1996<sup>104</sup> between Indian and Bangladesh is another important historical international water rights dispute settlement. Though India traditionally has had better relations with Bangladesh than with Pakistan, India and Bangladesh have a turbulent history of water sharing.<sup>105</sup>

The Ganges River flows south from Nepal into West Bengal, where it splits into two rivers.<sup>106</sup> One portion continues to flow south through Indian territory and becomes the Hooghly River, flowing through the city of Calcutta to the Indian Sea.<sup>107</sup> The other portion, taking the name Padma River, flows east into Bangladesh before emptying south into the Bay of Bengal.<sup>108</sup>

To appreciate the significance of the 1996 Ganges River Treaty, one must consider it in the context of the negotiations that preceded it. That history began with India's 1951 decision to construct the Farakka Barrage<sup>109</sup> on the Ganges River ten miles away from Bangladesh in the Indian territory of West Bengal.<sup>110</sup> The Farakka Barrage, which was not completed until 1971, was built to divert water from the Ganges River to the Hooghly.<sup>111</sup> During the twenty years between the announcement of the construction and its completion, Pakistan (of which Bangladesh was then a part) strongly opposed the Barrage's construction through various diplomatic means.<sup>112</sup> After Bangladesh gained its independence from Pakistan, its relationship with India was much

---

<sup>104</sup> Treaty on Sharing of the Ganges Waters at Farakka, Dec. 12, 1996, Bangl.-India, 36 I.L.M. 519.

<sup>105</sup> Salman M.A. Salman & Kishor Uprety, *Hydro-Politics in South Asia: A Comparative Analysis of the Mahakali and Ganges Treaties*, 39 NAT. RESOURCES J. 295, 304 (1999).

<sup>106</sup> *Id.* at 298.

<sup>107</sup> *See id.*

<sup>108</sup> *Id.* at 299.

<sup>109</sup> A barrage is a manmade barrier in a flow of water; a dam.

<sup>110</sup> *Id.* at 301.

<sup>111</sup> *Id.*

<sup>112</sup> *See id.* at 305. Pakistan believed that the proposed divergence was too large, and would "negatively effect irrigation, decrease the water supply, inhibit fishery production, reduce groundwater tables, aggravate the salinity problem, and restrict river navigation . . . the most frequently used mode of transportation in Bangladesh." *Id.*

improved. Nevertheless, the Farakka Barrage remained a "thorny issue, and Bangladesh opposed it vehemently."<sup>113</sup>

Despite this dispute, Bangladesh and India have been able to come to an agreement on water issues in a number of instances. The first such agreement went into effect in April of 1975, only three days prior to the commissioning of the Farakka Barrage.<sup>114</sup> In a precursor to future agreements, the 1975 agreement only accounted for the remainder of the dry season of that year; subsequent agreements regarding water distribution rights on the Ganges continue to this day to regulate only the dry seasons. During the wet season, water was available so abundantly that the countries did not deem it necessary to regulate the allotment.<sup>115</sup> Perhaps the greatest significance of the 1975 agreement might be that it amounted to Bangladeshi acceptance of the reality of the Farakka Barrage.<sup>116</sup>

The next agreement between Bangladesh and India for allocation of the Ganges River occurred in 1977.<sup>117</sup> This agreement ran for the next five years, and again applied only during the dry season.<sup>118</sup> The 1977 agreement allotted India a larger proportion of the water supply than had the 1975 agreement.<sup>119</sup> The 1977 agreement expired in 1982, but was replaced by another agreement that same year, this one running for two years.<sup>120</sup> Following the expiration of the 1982 agreement, a fourth agreement was signed in 1985.<sup>121</sup> Both the 1982 and the 1985 agreements kept roughly the same terms and allocations as the 1977 agreement had contained.<sup>122</sup> The 1985 agreement expired in 1988.<sup>123</sup> It was followed by a gap of more than eight years, in which there was no official allocation of water rights on the Ganges between India and Bangladesh.<sup>124</sup>

---

<sup>113</sup> *Id.*

<sup>114</sup> *Id.* at 306.

<sup>115</sup> *Id.* (explaining that there is no need to agree to water allotments between the months of June and December).

<sup>116</sup> *Id.* at 307.

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.* at 307-08. The 1975 agreement had allocated India between 20-25% of the predicted Ganges water flow during the dry season; the 1975 agreement allocated India 41% of the predicted water flow. *Id.*

<sup>120</sup> *Id.* at 308.

<sup>121</sup> *Id.*

<sup>122</sup> *Id.* at 309-10. It is of note, however, that the 1982 and 1985 agreements did not have an important guarantee clause of Bangladeshi allocation that the 1977 agreement contained. The terms of allocation were progressively moving more in India's favor. *Id.*

<sup>123</sup> *Id.* at 308.

<sup>124</sup> *Id.* at 310.

The 1996 Ganges River Treaty brought the return to agreed-upon terms of allocation. The Ganges Treaty generally followed the trends established in the previous four agreements. Like those agreements, the 1996 Treaty was based on the principle of equitable utilization.<sup>125</sup> Decisions were to be made to further the comprehensive best interests of both parties to the agreement. Also similar to the previous agreements, the 1996 Treaty only regulated the dry season.<sup>126</sup> Lastly, the 1996 Treaty continued the trend of India enjoying larger and larger portions of the Ganges' waters.<sup>127</sup> This trend could be attributed to the equitable utilization principles, that allocations to India represented a more efficient use of the waters. It is noteworthy, however, that India, which made gains in its proportion of the allocation, was militarily the more powerful of the negotiating countries.

### C. *The Mahakali Rivers Treaty*

The Mahakali Rivers Treaty between India and Nepal,<sup>128</sup> also signed in 1996, is another example of a water allocation agreement based on many of the same principles. The Mahakali River flows through the far western portion of Nepal and goes on to form the western boundary between Nepal and India.<sup>129</sup> When it flows into India, it is called the Sarada River. From there it joins the Ghaghra River, and it eventually goes on to join into the Ganges River.<sup>130</sup>

The relationship between India and Nepal has typically been very strong and peaceable. However, much like the relationship between India and Bangladesh, water sharing and water-related development have proven to be a weak spot in diplomacy.<sup>131</sup> Rivers that flow from Nepal into India, such as the Mahakali, have long been a source of water sharing disputes.<sup>132</sup> There is a notable exception to the similarities between the situation between Nepal and India and that between India and Bangladesh: Nepal has the advantage of being upstream from the more powerful India.

---

<sup>125</sup> *Id.* at 324.

<sup>126</sup> *See id.* at 325.

<sup>127</sup> *Id.* at 327 (stating that India's share of the Ganges water rights increased from 41% (under the 1977, 1982, and 1985 agreements) to 48% under the 1996 Treaty).

<sup>128</sup> Treaty Concerning the Integrated Development of the Mahakali River, Feb. 12, 1996, India-Nepal, 36 I.L.M. 531 [hereinafter *Mahakali Rivers Treaty*].

<sup>129</sup> Salman & Uprety, *supra* note 105, at 297.

<sup>130</sup> *Id.* at 298.

<sup>131</sup> *Id.* at 299.

<sup>132</sup> *Id.*



The 1996 Mahakali Rivers Treaty was in large part a consolidation of prior agreements. The first of its components is the Sarada Treaty of 1920, an agreement between the Colonia British Indian government and the government of Nepal. Under this agreement, the Indian government gained the right to dam the Mahakali River in Nepalese territory.<sup>133</sup> A channel, known as the Sarada Canal, would flow from there into Indian territory. To accommodate these plans, the Nepalese government agreed to exchange 4000 acres of territory with India.<sup>134</sup> India would take possession of the lands needed for the construction of the dam, and Nepal would gain a matching acreage of nearby territory. In return for agreeing to this exchange of territory, Nepal was guaranteed certain flows from the Sarada Canal for irrigation purposes.<sup>135</sup>

A second prior treaty consolidated into the Mahakali Rivers Treaty was the Tanakpur Agreement.<sup>136</sup> Under this agreement, reached in 1991, the Nepalese government provided land for a retaining wall to regulate the river's flow. While Nepal had been compensated in kind for the land it sacrificed under the Sarada Treaty, under the Tanakpur Agreement it would not receive any land from India.<sup>137</sup> The Tanakpur Agreement did, however, involve a number of stipulations aimed to compensate Nepal for its loss of territory.<sup>138</sup>

However, many in Nepal soon came to regret their decision to enter into this agreement. They felt that they had received inadequate compensation and that India was benefiting from the project far more than was Nepal.<sup>139</sup> It is still a point of some debate as to why the Nepalese government would agree to this exchange.<sup>140</sup> It is possible that the Nepalese government did not understand the magnitude of the sacrifices it was making. There is also speculation that the Nepalese agreed to those terms in order to appease the stronger Indian government,<sup>141</sup> and that Nepal was intimidated into agreeing to those terms.

---

<sup>133</sup> *Id.* at 301.

<sup>134</sup> *Id.*

<sup>135</sup> *Id.* Nepal was guaranteed between 400 and 1000 cubic-feet per second of water. *Id.*

<sup>136</sup> *Id.* at 302.

<sup>137</sup> *Id.*

<sup>138</sup> *Id.* Tanakpur Agreement provided Nepal with another 150 cubic feet per second of water, in addition to 10 megawatts of electricity. These allotments were seen as the compensation for Nepal's loss of land. *Id.*

<sup>139</sup> *Id.*

<sup>140</sup> *Id.* at 302-03.

<sup>141</sup> *Id.* at 302 (citing Abu Taher Salahuddin Ahmed, *Challenges of Governance in Nepal: Politico-Economic and Ethno-Religious Dimensions*, 24 J. CONTEMP. ASIA 351, at 360 (1994)).

Under the Mahakali Rivers Treaty, the committed permanent water allotments continue to be governed by the Sarada Treaty.<sup>142</sup> Thus, it contains terms of water distribution that date from over eighty years ago, when India was ruled by the British and Nepal had a very small population. At that time water distribution was not given the same significance and priority it now enjoys.<sup>143</sup> Thus, though the Mahakali agreement is at least ostensibly modeled on the principles of equitable utilization,<sup>144</sup> it does demonstrate how inequality of power can manifest itself in negotiations.

The equitable utilization principle is used most prominently in the Mahakali Treaty in those portions pertaining to the proposed Pancheshwar Multipurpose Project.<sup>145</sup> This project will be placed along a portion of the Mahakali River that forms the border between India and Nepal. The specifications of this Project have not yet been finalized, but attempts have been made to address a number of policy concerns, such as power generation, irrigation, and flood control.<sup>146</sup>

Under Article 3 of the Treaty, which addresses the Project, four overriding principles are specified as governing the Project. First, the Project shall be designed to produce the maximum total benefits for both countries: the plans should not be affected by the resulting respective allotments.<sup>147</sup> Second, that the two states shall implement projects jointly. Two power stations of equal capacity are to be located on both sides of the Mahakali River, and the power they produce shall be divided equally.<sup>148</sup> Third, the cost of the project shall be borne by the two states in direct proportion to the benefits they shall receive.<sup>149</sup> The costs will be allotted when the final terms of apportionment are reached.<sup>150</sup> Fourth, a portion of Nepal's energy shall be sold to India, at a price and quantity on which the parties shall agree.<sup>151</sup>

The Mahakali Rivers Treaty, and particularly the Pancheshwar Multipurpose Project, clearly represent a strong endorsement of equitable utilization

---

<sup>142</sup> *Id.* at 311.

<sup>143</sup> *Id.*

<sup>144</sup> *Id.* at 320.

<sup>145</sup> *Id.*

<sup>146</sup> Mahakali Rivers Treaty, *supra* note 128, art. 3, § 1.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.* art. 3, § 2.

<sup>149</sup> *Id.* art. 3, § 3.

<sup>150</sup> *Id.* art. 3 (declaring that the final terms of these apportionments shall be agreed to in the form of a jointly prepared Detailed Project Report).

<sup>151</sup> *Id.* art. 3, § 4.

principles. It is true that those principles could be compromised by some specifics that are left unclear in the treaty. An example of that lack of clarity is the treaty's stipulation that the states should be entitled to equal use of the unutilized water,<sup>152</sup> but only the Nepalese permanent allotments are specified in the terms of the treaty. India has not committed itself to a current level of water utilization, and thus might be able to manipulate future total allotments by how it decides on the permanent levels of usage it indicates. But despite these shortcomings, the Mahakali Rivers Treaty is a strong example of the effective implementation of the principle of equitable utilization.

#### *D. The Boundary Waters Treaty*

The last important historic international water rights agreement for consideration is the 1909 Boundary Waters Treaty between the United States and Canada.<sup>153</sup> This treaty represented one of the first international water rights treaties not oriented towards navigation.<sup>154</sup> In contrast to the preceding agreements, this treaty involved nations whose relations have traditionally been strong, even in the area of water distribution rights. Nonetheless, the 1909 Boundary Waters Treaty is considered a landmark in water rights negotiations.<sup>155</sup> One of the Boundary Waters Treaty's most notable accomplishments was the creation of the International Joint Commission, one of the first standing commissions of its kind.<sup>156</sup> Many subsequent water commissions, both domestically and internationally (including the ACF Commission), are to some degree modeled after the International Joint Commission. To this day, the International Joint Commission, established in the Boundary Waters Treaty, continues to regulate water issues concerning the border between the United States and Canada.<sup>157</sup>

---

<sup>152</sup> Salman & Uprety, *supra* note 105, at 321. Unutilized water refers to water that is not allotted through other terms of the agreement, such as the incorporated Sarada Treaty. *Id.*

<sup>153</sup> Treaty Between the United States and Great Britain Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, U.S.-Can., 36 Stat. 2448 [hereinafter *Boundary Waters Treaty*].

<sup>154</sup> Graffy, *supra* note 91, at 424.

<sup>155</sup> *Id.*

<sup>156</sup> *Boundary Waters Treaty*, *supra* note 153, art. 3.

<sup>157</sup> *Id.* art. IV. See Graffy, *supra* note 91, at 424 (stating that the jurisdiction of the commission extends to "the uses of lakes and rivers which touch the border").

The International Joint Commission is considered exceptionally effective.<sup>158</sup> A number of attributes have contributed to this success. First, the Commission is considered effective because of its non-political composition.<sup>159</sup> Negotiations run more efficiently when the negotiators are independent experts. Representatives who have to constantly report the details of the negotiations to their governments greatly slow the proceedings, as demonstrated by the effect that the gubernatorial elections of 1998 had on the ACF Commission's negotiations. It is far more effective to allow the negotiators leeway in determining the resulting agreement.

Second, the success of the International Joint Commission is bolstered by the independent fact-finding and research capabilities of the non-political delegates.<sup>160</sup> The delegates have the ability to find for themselves the information on which they ultimately will base their decisions. This again makes them less beholden to the capricious political considerations of their governments. This manner of autonomy allows more efficient negotiation power.

Third, the commission is considered effective because its method of dispute resolution is based upon the equitable utilization principle,<sup>161</sup> the overriding principle in international water rights dispute resolution.<sup>162</sup> This principle allows for greater flexibility in negotiations and distribution of waters. The U.S. government's use of the equitable utilization principle represents a departure from the standard U.S. domestic doctrines of riparian rights and prior appropriation. This departure was very important in making the International Joint Commission so successful.

These three attributes, and the adaptability that they afford, are the keys to the success of the 1909 Boundary Waters Treaty and the International Joint Commission that arose out of it.<sup>163</sup> Negotiations will generally proceed better if the negotiators are allowed the autonomy these attributes allow. Also, an abandonment of the rigidities of the U.S. domestic systems of water rights appropriation was vital in allowing the Boundary Waters Treaty to be successful.

---

<sup>158</sup> See Graffy, *supra* note 91, at 425.

<sup>159</sup> *Id.* at 424. See Boundary Waters Treaty, *supra* note 153, art. VII (stating that the Commission should be comprised of three representatives of each country who are independent experts rather than representatives of government).

<sup>160</sup> Graffy, *supra* note 91, at 424-25.

<sup>161</sup> *Id.* at 424.

<sup>162</sup> See Crane, *supra* note 96, at 306-07.

<sup>163</sup> Graffy, *supra* note 91, at 425.

Perhaps the most notable attribute of the 1909 Boundary Waters Treaty is that, more than ninety years ago, the United States accepted and made use of the equitable utilization principle with regards to international negotiations. Thus, the practicality of the equitable utilization principle has been recognized by the United States both in its international relations and in its adjudicative water rights dispute settlement.<sup>164</sup> However, the principle has yet to be effectively utilized in interstate water disputes such as the current one involving Georgia, Alabama, and Florida. Its acceptance as the sole doctrine through which to view interstate water rights negotiations would improve the efficiency and fluidity of the negotiation process.

#### IV. LESSONS FROM AND APPLICATIONS OF INTERNATIONAL LAW

The preceding sections have reviewed several historically significant international water rights agreements. These negotiations have been between neighboring countries, sometimes with strained relations, that have been able to arrive at usage and allotment plans for water rights. How have these international disputes found resolution? What have been their doctrinal approaches to water distribution? How do those differ from the methodologies and systems used domestically? Can the international law approaches they adopted be applied to domestic interstate disputes? Or are some of the factors contributing to their success beyond the control of the negotiating parties? What lessons can be learned from the resolution of these disputes, and how can they be applied to the negotiations within the tri-state water dispute?

Considering the failure of the ACF Commission to agree on terms of water distribution acceptable to all parties, clearly new approaches would be helpful. In particular, in order for dispute resolution to be improved, the inflexibility of the domestic doctrinal approaches should be relaxed. The riparian system of water rights, in particular, is deficient in dealing with any situation of scarcity.<sup>165</sup> This deficiency is due to riparianism's base assumption: that "water is available to all riparian and littoral property owners."<sup>166</sup> Though availability is somewhat limited by the necessity of reasonable use, "reasonable use" is a very ambiguous term. Furthermore, these limitations in no way

---

<sup>164</sup> See Boundary Waters Treaty, *supra* note 153 (where the U.S. applied equitable utilization in its international relations); *Kansas v. Colorado*, 206 U.S. 46 (1907) (applying equitable apportionment to adjudication of an interstate water rights dispute).

<sup>165</sup> Moore, *supra* note 1, at 6.

<sup>166</sup> *Id.*

restrict the total amount of water that is used. The system is not prepared to decide between "reasonable" uses when there is not enough water available to accommodate all users. The basic assumption that all riparian landowners can make use of the water simply cannot be maintained.<sup>167</sup>

Some of these flaws in the riparian system have been addressed in the states involved in the current dispute. Georgia has attempted to address the problem by its adoption of a quasi-appropriation permit system.<sup>168</sup> Florida has adopted its hybrid system with similar motivations.<sup>169</sup> But the prior appropriations system, while it is better capable of dealing with situations of scarcity than the riparianism doctrine, is still a less than ideal doctrine for tackling issues of interstate water distribution.<sup>170</sup> Is the first use of the water to be given paramount consideration such that the water uses with the most "priority," or seniority, remain unaffected in instances of scarcity? The prior appropriation system allows the most senior water uses to be maintained even while uses more beneficial to the public are neglected.<sup>171</sup> Is this doctrine justifiable in modern times? Historically, it served well to encourage western settlers.<sup>172</sup> They were more likely to move westward knowing that if they made a use of the water, they would have the right to maintain said use. In modern day, however, there is no need that water still be allocated under the motto "first in time, first in right."<sup>173</sup> This Note argues that the doctrine is antiquated, and that it would be more equitable to allocate resources such as water by determining what uses will be the most beneficial.

The reality is that "neither prior appropriation, riparianism, nor a hybrid of the two, can adequately manage interstate water resources."<sup>174</sup> Though these approaches have proven effective to varying degrees in dealing with water distribution within states, they are not capable of serving as the guiding principles behind interstate negotiations. The problem is that in the internal evaluations of any state under these doctrines, "withdrawals in a neighboring state are undervalued."<sup>175</sup> Interstate water rights negotiations must be undertaken with a more equitable approach. The negotiations of the ACF

---

<sup>167</sup> *See id.*

<sup>168</sup> *Id.*

<sup>169</sup> *See generally* Stephenson, *supra* note 10, at 92.

<sup>170</sup> *See* Moore, *supra* note 1, at 6.

<sup>171</sup> *Id.*

<sup>172</sup> *See* GOLDFARB, *supra* note 50, at 15.

<sup>173</sup> Moore, *supra* note 1, at 6.

<sup>174</sup> *Id.*

<sup>175</sup> *Id.*

Commission have been undermined by the doctrinal approaches of the states represented. The participating states must look past their own internal water allocation systems to find an approach that is more conducive to fluid negotiations between the states.

### *A. The Equitable Utilization Principle*

The principle of equitable utilization has been best stated by the United Nations in its Convention on the Law of the Non-Navigational Uses of International Watercourses.<sup>176</sup> The Convention states that waters should be “used and developed . . . taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.”<sup>177</sup> The Convention goes on to list a number of factors to be used to determine whether a water source is being equitably utilized.<sup>178</sup> While “existing uses” are

---

<sup>176</sup> Convention on the Law of the Non-Navigational Uses of International Watercourses, May 21, 1997, 36 I.L.M. 700.

<sup>177</sup> *Id.* art. 5, at 705.

<sup>178</sup> *Id.* art. 6, at 706.

#### Factors relevant to equitable and reasonable utilization

1. Utilization of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:

- (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
- (b) The social and economic needs of the watercourse States concerned;
- (c) The population dependent on the watercourse in each watercourse State;
- (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;
- (e) Existing and potential uses of the watercourse;
- (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;
- (g) The availability of alternatives, of comparable value, to a particular planned or existing use.

2. In the application of article 5 or paragraph 1 of this article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of cooperation.

3. The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

*Id.*

one of the factors mentioned, they are not considered of paramount importance as they are under current domestic water distribution doctrines.

The doctrine of equitable utilization could be criticized for its vagueness. Under this doctrine, there are indeed a number of factors to be considered in determining whether a water use can be maintained, but the equitable utilization principle does not allow for concrete, permanent rights to water use. At first glance, this could be seen as detraction because there is an appeal to having permanence. However, when it comes to water rights negotiations, the feeling of ownership proves to be a burden on successful negotiation. Parties to a discussion who believe that they possess inalienable rights are liable to be uncompromising. Concrete rights to water usage create a feeling of entitlement that can be stifling to negotiation.<sup>179</sup> The equitable utilization principle furthers the negotiation process, because it avoids this sense of entitlement.

The equitable utilization principle provides for a more flexible negotiation process.<sup>180</sup> Some would argue that this doctrinal approach invites ambiguity and uncertainty, but oftentimes this sort of ambiguity serves to "assist parties seeking to defer or avoid stumbling blocks."<sup>181</sup> A concrete sense of absolute right will often lead to sticking points in negotiations (areas in which parties will not be willing to negotiate and compromise). This sense of absolute right can prove a barrier to negotiation.

Vagueness, however, provides a motivation to negotiate. As Eyal Benvenisti has written, through the vague standards such as the equitable utilization doctrine

the law can prevail on the parties to negotiate. It can do so by stating a vague standard for water apportionment, rather than setting a clear rule. . . . A vague standard would leave room for negotiations, during which each side could develop its own interpretation of the standard. . . . Negotiations under the flexible standards would not only include lawyers and politicians concerned about the internal political ramifications of "concessions" to neighboring states; they would also include scientists from various disciplines who could suggest alternative ways of

---

<sup>179</sup> See Eyal Benvenisti, *Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law*, 90 AM. J. INT'L L. 384, 404 (1996) (stating that a lack of "property rights" on existing uses emphasizes the need for negotiation).

<sup>180</sup> See *id.* at 403.

<sup>181</sup> *Id.* at 402.



reaching optimal solutions, and whose contributions could defuse the potentially adversarial dimension of the negotiations.<sup>182</sup>

Thus, the equitable utilization doctrine encourages the parties to negotiate and to come to an agreement that is reasonable for all parties. The allocations and allotments arising out of these equitable principles will be more just and impartial than allotments arriving out of the traditional domestic approaches. Furthermore, the doctrinal incorporation of equitable utilization principles also allows for an agreement with terms that will be adaptable. This adaptable approach allows the fulfillment of other areas of policy goals. The protection of the environment is bound to suffer when states have invariable rights to a certain allocation of water. When the allocations are more flexible, they can more readily be modified to allow for the protection of ecosystems, as well as any other policy concerns that might arise.<sup>183</sup>

The successes of the equitable utilization approach are demonstrated in the historic water rights disputes previously examined. This approach allowed the flexibility necessary to accommodate concerns of scarcity and potential growth. If the ACF Commission were to commit itself to this doctrinal approach, it could abandon the rigidities of the domestic U.S. water rights doctrines, which promote a sense of entitlement and ownership. The equitable utilization principle would allow negotiations to proceed much more efficiently and probably more speedily.

### *B. Composition of the Commission*

In addition to the doctrinal approaches that can be implemented from international law, there are other ways in which the negotiation process could be improved in terms of efficiency and effectiveness. In particular, there are constructive ways to improve the composition of the negotiating body.

The ACF Commission is considered to be well-structured.<sup>184</sup> The ACF Compact allows for experts to be involved in the negotiations and the enforcement of whatever agreement is produced.<sup>185</sup> The inclusion of a delegate from the federal government was also a constructive step. Such a delegate

---

<sup>182</sup> *Id.*

<sup>183</sup> *See id.* at 404.

<sup>184</sup> *See* Beaverstock, *supra* note 20, at 1007.

<sup>185</sup> Stephenson, *supra* note 10, at 101.

hopefully could serve by facilitating negotiations, as well as indicating the desires of the national administration.

However, the ACF Commission has clearly not been effective in its task. First established in 1992, the Commission has yet to reach any sort of resolution. How could the Commission have been better structured? From these historic international water rights negotiations, we can draw conclusions as to a more efficient structure for a negotiating process.

The historic Indus Waters Treaty serves as a good example. There, the World Bank stepped in and served as mediator of the negotiations.<sup>186</sup> Both of the parties were willing to accept the World Bank's impartiality. After negotiations had taken place, both countries went on to accept the agreement that arose out of the World Bank's deliberation.<sup>187</sup> The lesson to be learned from this episode is that a strong, impartial mediator can greatly improve the effectiveness of the negotiation process. Negotiations held without an effective mediator can take on an unproductive and confrontational demeanor.

The tri-state water negotiations would probably be more successful if the ACF Commission empowered a strong autonomous mediator, such as a high figure in the Environmental Protection Agency. Perhaps even more ideal would be a strong-minded individual or organization from outside of the political process (a domestic equivalent to the role of the World Bank within the U.S.). Such a mediator could facilitate and expedite negotiations without having his or her own agenda to fulfill.

Another lesson to be learned from these historic international water rights negotiations is the merits of having non-political representatives for the involved parties. One of the main reasons for the success of the International Joint Commission, the organization arising out of the 1909 Boundary Waters Treaty, is that its delegates were nonpolitical.<sup>188</sup> The ACF Compact attempted to mimic these successes by having its Commission include experts.<sup>189</sup> But clearly the states' delegates were not truly non-political, as evidenced by the effect the 1998 gubernatorial election had on the negotiations.<sup>190</sup>

Of course, the involved state governments must have a say in the direction of the proceedings, but it would be advantageous to give the representatives stated goals, and then allow them to operate autonomously. They will be able

---

<sup>186</sup> Graffy, *supra* note 91, at 427.

<sup>187</sup> *Id.*

<sup>188</sup> *Id.* at 424.

<sup>189</sup> See Stephenson, *supra* note 10, at 101.

<sup>190</sup> *Id.* at 102-03.

to negotiate more effectively if they are not required to check every detail with their governments. For that purpose, a new ACF Compact should include language directing the states to allow their delegates some autonomy once chosen.

### *C. The Threat of Force*

The last important trend of note is the effect that the relative military and economic strengths of the parties have on the negotiating process. This trend can be seen most prominently in the negotiations of the Ganges River Treaty and the Mahakali River Treaty. In both instances, India's strength seemed to show in the resulting bargaining. In the 1996 Ganges Treaty, India again increased its share of the waters from the Farakka Barrage.<sup>191</sup> Its superior size and military might, coupled with its upstream proximity to Bangladesh, allowed India the superior bargaining position in water allocation negotiations. That advantage can be seen in India's increasingly large share of the allocations.

The effect of size and power may also be demonstrated in the Mahakali River Treaty. In the initial Sarada Treaty of 1920, Nepal's sovereignty was impugned upon as it surrendered territory to India.<sup>192</sup> Nepal, however, succeeded in at least gaining territory in that agreement. But in the subsequent Tanakpur Agreement of 1991, Nepal again surrendered its territory, this time gaining only water and an electricity allotment in return.<sup>193</sup> This agreement, highly criticized within Nepal, can fairly be seen as a concession in the face of the compulsions of the more powerful.

The threat of force likewise affects the negotiating process in the absence of a clear sense of superiority. In the instance of the Indus Water Treaty, India is a much larger country than Pakistan.<sup>194</sup> However, in light of their history of conflict, Pakistan could hardly be alleged to view India with any reverence or feeling of intimidation.

It can be argued that the threat of force still assisted in the resolution of the water distribution debates. In fact, the constant imminence of conflict between

---

<sup>191</sup> Salman & Uprety, *supra* note 105, at 325.

<sup>192</sup> *Id.* at 301.

<sup>193</sup> *Id.* at 302.

<sup>194</sup> India has a population of over one billion, with a territory of 1,148,000 square miles; Pakistan has a population of less than 150,000,000 with a territory of 300,700 square miles. THE WORLD ALMANAC AND BOOK OF FACTS 793, 825 (William A. McGovern, Jr. et al. eds., 2003 ed.).

the negotiating countries could well have contributed to their water allotment debate being resolved so expeditiously and equitably. In instances where the parties recognize that there is a threat of outright conflict, those parties have more incentive to negotiate amicably and flexibly.

This effect would unfortunately be difficult to incorporate into the ACF Compact or any other interstate negotiation. The threat of use of force cannot be falsified to compel expeditious negotiation. However, such negotiation might otherwise be compelled. The federal government could threaten to resolve the allotment debate on its own terms if the states are not able to do so. The government could also threaten a loss of appropriations and spending to compel swift negotiations. This threat of economic force could increase the states' willingness to compromise, and thus the parties to the ACF Compact would be wise to attempt to incorporate these effects into their terms of agreement.

## V. CONCLUSION

The negotiations that have taken place under the ACF Compact have thus far proven unproductive. The negotiating process would be furthered if negotiators were to give consideration to aspects of the international water rights mechanisms. First, full implementation of the equitable utilization principle would greatly benefit the negotiations. Equitable utilization allows flexibility that is conspicuously absent from the domestic doctrinal approaches to water allocation. Second, the efficiency of the negotiating process would be improved if the composition of the ACF Commission were modified. Having a strong, autonomous mediator would allow negotiation to proceed more smoothly. In addition, the negotiations could be conducted more efficiently if the delegates were likewise allowed increased autonomy. Last, some method of compulsion is desirable to increase the motivations of the parties. A manner of ultimatum from the federal government could provide the negotiators with an incentive to expedite negotiations.

Interstate water rights negotiations are inherently problematic, but they have in the above mentioned instances been resolved in a manner more efficient than that used in the tri-state water negotiations. Application of these concepts from international law would allow increased efficiency in the negotiation process. Incorporating these concepts into the tri-state negotiations would surely prove advantageous.