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RESOLVING INTERNATIONAL WATER DISPUTES:
LESSONS FROM AMERICAN AND CANADIAN FEDERALISM

*Aaron Worthen**

I. INTRODUCTION

Indian officials warned the people of Kashmir to start preparing for a nuclear war between Pakistan and India following “cross-border skirmishes” that resulted in the death of three Pakistani and two Indian soldiers in early 2013.¹ A war between India and Pakistan might not be surprising—the two nations have already fought several wars against each other²—but the main catalyst for this potential nuclear feud might be: water.³ Pakistan, desperate for water, fears that India is cutting off some of Pakistan’s precious water supply.⁴ Because of this fear, one Pakistani militant group adopted inflammatory slogans such as “water flows or blood.”⁵ This belligerent rhetoric comes despite the fact that the two nations previously negotiated a treaty designed to resolve their water dispute.⁶

This shift towards using violence and intimidation in the transboundary water dispute between India and Pakistan⁷ indicates a general trend towards the same throughout the world.⁸ As the world’s supply of fresh water decreases and as demand increases, upstream

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¹ Gardiner Harris, *India Warns Kashmiris to Prepare for Nuclear War*, N.Y. TIMES (Jan. 22, 2013), available at <http://www.nytimes.com/2013/01/23/world/asia/indian-officials-advise-preparations-for-possible-war.html>.

² Niharika Mandhana, *Water Wars: Why India and Pakistan Are Squaring Off Over Their Rivers*, TIME (Apr. 16, 2012), available at <http://content.time.com/time/world/article/0,8599,2111601,00.html> (noting that there have been “three post-independence wars between the hostile nuclear neighbors”).

³ Palash Ghosh, *What Are India And Pakistan Really Fighting About?*, INT’L BUS. TIMES (Dec. 27, 2013, 5:52 AM), available at <http://www.ibtimes.com/what-are-india-pakistan-really-fighting-about-1520856> (“[T]he dominant overriding conflict between India and Pakistan lies with the simplest, but most crucial, necessity of life: water.”); Lydia Polgreen & Sabrina Tavernise, *Water Dispute Increases India-Pakistan Tension*, N.Y. TIMES (July 20, 2010), available at <http://www.nytimes.com/2010/07/21/world/asia/21kashmir.html?pagewanted=all>.

⁴ See generally Polgreen & Tavernise, *supra* note 3.

⁵ Mandhana, *supra* note 2.

⁶ See Polgreen & Tavernise, *supra* note 3.

⁷ The term “transboundary disputes” will be used to refer to disputes among border-sharing nations.

⁸ See e.g. *Water Conflict Chronology List*, PAC. INST., available at <http://www2.worldwater.org/conflict/list/> (last visited Sept. 18, 2015) (listing every known international water dispute from 3000 BC to 2012 AD, and demonstrating that there have been an increasing number of violent water disputes in recent years).

nations (like India) are more likely to hoard water.⁹ Downstream nations (like Pakistan) will likely start taking any necessary actions—including violence—to obtain fresh water supplies for their citizens. Consequently, the international community ought to establish a method of resolving transboundary water disputes that will prevent violence and promote cooperation among the disputing nations.

The international community currently has two main dispute resolution methods, but neither method can adequately deal with all of the major issues inherent to transboundary water disputes. The two traditional methods for resolving transboundary water disputes are first, negotiating treaties, and second, referring the disputes to the International Court of Justice (ICJ). Both methods allow nations to maintain a high level of autonomy because each disputing party must consent to be bound by the methods or else the methods would have no effect. This high level of autonomy comes at a price, though, because under these traditional resolution methods, the international community has no power to appropriate water among disputing parties in the event that the parties do not reach an agreement on their own and fail to submit the dispute to the ICJ. Obviously any dispute resolution mechanism that allows the international community to settle a water dispute without the consent of the disputing parties would limit those parties' autonomy. However, an efficient, yet forceful, dispute resolution mechanism could lessen the severity of the limitation on autonomy.

While there are obvious differences between the way nations interact with the international community and the way states¹⁰ interact with their federal governments,¹¹ there are also similarities that make it worthwhile to use the federalist system as a guide for how the international community can successfully resolve difficult transboundary water disputes in the least intrusive manner possible.¹² Moreover, the American and Canadian methods of resolving interstate water disputes can be instructive for how the international community might resolve transboundary water disputes in the future, due to their differing approaches to federal water law.

This Comment will suggest that, although the international community should continually strive to allow nations to arbitrate, mediate, and otherwise negotiate water treaties among themselves, some

⁹ A 2012 report from the United States Intelligence Director stated that “[w]e judge that the use of water as a weapon will become more common during the next 10 years with more powerful upstream nations impeding or cutting off downstream flow.” INTELLIGENCE COMMUNITY ASSESSMENT, GLOBAL WATER SECURITY 4 (2012), available at http://www.dni.gov/files/documents/Special%20Report_ICA%20Global%20Water%20Security.pdf. (last visited Feb. 2, 2015).

¹⁰ The term “state” will be used in this paper to refer only to local governments within a federal system. It will never be used to refer to states in the global meaning of the term.

¹¹ Most importantly, states delegate some of their sovereignty to a unifying federal government, whereas there is no such government to which nations have delegated their sovereignty.

¹² Most importantly, both states and nations share sources of natural resources with other equally sovereign entities without necessarily sharing any cultural or political ties with any of those entities.

transboundary water disputes require the international community to follow the American Congress' example of taking a more active role in resolving the disputes. Specifically, this Comment will suggest that, in accordance with the United Nations Charter, the UN Security Council should appropriate water between disputing nations in certain circumstances. As is the case with Congressional appropriation in the United States, the UN Security Council's appropriation should be binding, but flexible—disputing nations should be able to override the appropriation if they are able to agree to a different appropriation later on. This appropriation scheme would allow nations to maintain a high level of autonomy while also allowing the international community to prevent outbreaks of violence related to transboundary water disputes. Part II of this Comment will emphasize the need for international cooperation in appropriating water among bordering nations. Part III will examine relevant scholarship pertaining to transboundary water disputes. Parts IV and V will analyze the methods of resolving interstate water disputes in the United States and Canada, respectively. Part VI will analyze how the federalist methods of dispute resolution could work on an international level, and Part VII will propose that the Security Council should, in certain circumstances, unilaterally appropriate water among disputing nations. Finally, Part VIII will defend this proposal from likely criticisms, and Part IX will provide a concluding summary.

II. THE NEED FOR INTERNATIONAL COOPERATION IN WATER APPROPRIATION

The international community is well aware of the need for cooperation in water appropriation.¹³ In fact, the UN established 2013 as the International Year of Water Cooperation.¹⁴ Although the UN celebrates the fact that there has been cooperation regarding water appropriation in the past fifty years—as evidenced by the fact that there have been over 150 water treaties signed in that time frame¹⁵—it also acknowledges that there have been thirty-seven “acute disputes involving

¹³ Indeed, some scholars have argued that the international community has not only understood the need to cooperate when settling disputes, but has been so successful in meeting this need that the community has created a network of cooperation. See e.g. Anne Peters, *International Dispute Settlement: A Network of Co-operational Duties*, EUR. J. INT'L L. (Feb. 2003), available at <https://advance.lexis.com/GoToContentView?requestid=ade028a2-9f43-7dca-75fb-48ab64694975&crd=301f9342-2315-46c7-bb79-66a6fdb392ae> (arguing that “the international law of dispute settlement is not only built on co-operation, but even constitutes a network, as political scientists understand the term”).

¹⁴ International Year of Water Cooperation, G.A. Res. 65/154, U.N. Doc A/RES/65/154 (Dec. 20, 2010) available at http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/65/154.

¹⁵ *International Decade for Action 'Water for Life' 2005–2015*, UN.ORG (last updated Mar. 29, 2014), available at http://www.un.org/waterforlifedecade/transboundary_waters.html.

violence” resulting from transboundary water problems during that same time frame.¹⁶ As the world’s climate continues to change and as the demand for fresh water¹⁷ increases, experts believe that violence stemming from water disputes will increase and become more severe.¹⁸ Even if no violence results from transboundary water disputes, a worldwide decrease in drinkable water should concern the international community because such a decrease may cause potential violations of international law.¹⁹ This Part demonstrates that a decrease in fresh water is inevitable and that this decrease will likely cause nations to violate international law.

A. Inevitable Decrease in Fresh Water

Two current worldwide trends make it likely that the world’s fresh water supply will significantly decrease over the next few decades: climate change and an increasing global population.²⁰

Although there is some debate concerning the cause of the world’s climate change,²¹ it is clear that the climate *is* changing.²² A result of this change is that the earth’s supply of fresh water will become increasingly less abundant in areas where it is already sparse.²³ A study on climate change indicates that, “semi-arid and arid areas are particularly exposed

¹⁶ *Id.*

¹⁷ Fresh water will be used to mean “water of sufficient quality to support its intended purpose—agriculture, electrical power generation, industrial processes, or human consumption.” INTELLIGENCE COMMUNITY ASSESSMENT, *supra* note 9, at i.

¹⁸ *See, e.g., id.* at 3 (“[W]e judge that as water shortages become more acute beyond the next 10 years, water in shared basins will increasingly be used as leverage; the use of water as a weapon or to further terrorist objectives also will become more likely beyond 10 years.”).

¹⁹ *See infra* Part II.B.

²⁰ UNITED NATION HUMAN RIGHTS ET AL., THE RIGHT TO WATER 35 (2010), available at <http://www.ohchr.org/Documents/Publications/FactSheet35en.pdf> (“Water scarcity currently affects four out of every ten people in the world. The situation is worsening owing to population growth, urbanization, pollution of water resources and the impact of climate change.”).

²¹ *See* Dana Nuccitelli, *Global Warming is Being Caused by Humans, Not the Sun, and is Highly Sensitive to Carbon*, *New Research Shows*, GUARDIAN (Jan. 9, 2014, 09:00 EST), available at <http://www.theguardian.com/environment/climate-consensus-97-per-cent/2014/jan/09/global-warming-humans-not-sun>; but *see* Lawrence Solomon, *Why Humans Don't Have Much to Do With Climate Change*, HUFFINGTON POST (9 Dec. 2013, 6:27 PM), available at http://www.huffingtonpost.ca/lawrence-solomon/global-cooling_b_4413833.html (“By the broader standard of the last century of science – and the centuries that preceded it – what’s outlandish is attributing massive changes in climate to increases in carbon dioxide, a trace gas that represents so minuscule a fraction of our atmosphere that it must be measured in parts per million.”).

²² Puneet Kollipara, *Sick of the Winter Chill? New Research Shows Why the Planet is Still Heating Up*, WASH. POST (24 Mar. 2014, 7:52 PM), available at <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/03/24/sick-of-the-winter-chill-new-research-shows-why-the-planet-is-still-heating-up/> (noting that “[t]hirteen of the 14 warmest years on record have occurred in the 21st century”).

²³ Joseph W. Dellapenna, *A Climate of Disruption: Legal Measures for Adaptation and Mitigation: International Water Law in a Climate of Disruption*, 17 MICH. ST. J. INT’L L. 43, 48 (2008) (citing Seth Borenstein, *Weather Drier as Tropics Expand*, SEATTLE TIMES (Dec. 3, 2007)); Noah D. Hall, Bret B. Stuntz & Robert H. Abrams, *Climate Change and Freshwater Resources*, 22 NAT. RESOURCES & ENV’T 30, 31 (2008); Pius Z. Yanda, *Drying of Lake Jipe: Is It a Climatic and/or Human Induced Phenomenon?*, 5 ICFAI J. ENVTL. ECON. 7 (2007) (“We face a world in which the arid regions will become wider and drier, while melting glaciers and mountain snowpack threaten to deprive those regions of their summer water supplies.”).

to the impacts of climate change on water resources.”²⁴ The study further suggests that, “many of these areas (e.g., the Mediterranean Basin, western United States, southern Africa, northeast Brazil, southern and eastern Australia) almost certainly will suffer a decrease in water resources due to climate change.”²⁵ In other words, climate change will make arid areas more arid. The depletion of fresh water in these areas will be exacerbated by the growing demand for water throughout the world.

Based on the current rate of growth, experts predict that the world’s population will reach 9.6 billion by 2050.²⁶ As the world’s population increases, so will the demand for water. More water will be needed to satisfy the increased population’s needs. For example, according to a U.S. Intelligence Community Assessment, “Agriculture, which accounts for approximately 3,100 bcm . . . will, if current practices and efficiencies continue, require 4,500 bcm . . . by 2030.”²⁷ This means that in order to sustain life, humans will collectively have to use more water in the future, even as the amount of water available to them—which is already only marginally sufficient in some areas—is on the decline. Such a predicament could cause nations to violate international law either by failing to provide sufficient water to their citizens or by employing unacceptable means to acquire sufficient water for their citizens.

B. Potential International Law Violations

There are at least three international laws that nations could potentially violate as a result of transboundary water disputes: international law guaranteeing adequate drinking water, international law concerning the sharing of transboundary water resources, and the UN’s prohibition on the use of force.

On July 28, 2010, the UN General Assembly passed resolution 64/292, which officially recognized “the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.”²⁸ The ultimate objective of the resolution was for all nations to take efforts “to provide safe, clean, accessible and affordable drinking water and sanitation for all.”²⁹ The UN stated that the quantitative goal to meet this objective is to provide

²⁴ INTELLIGENCE COMMUNITY ASSESSMENT, *supra* note 9, at 1.

²⁵ *Id.*

²⁶ *World Population Projected to Reach 9.6 Billion by 2050 – UN Report*, UN NEWS CENTRE (June 13, 2013), *available at* <http://www.un.org/apps/news/story.asp?NewsID=45165#.UzZdjf37Ca4>.

²⁷ INTELLIGENCE COMMUNITY ASSESSMENT, *supra* note 9, at 2.

²⁸ G.A. Res. 64/292, U.N. Doc. A/RES/64/292 (July 28, 2010) *available at* http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/64/292.

²⁹ *Id.*

“between 50 and 100 litres of water per person per day” for a cost “not to exceed 3 per cent of household income.”³⁰ Additionally, “the water source has to be within 1,000 metres of the home and collection time should not exceed 30 minutes.”³¹

Although General Assembly resolutions do not automatically constitute binding international law, they may signal binding customary international law when coupled with *opinio juris*.³² Thus, General Assembly resolution 64/292 is binding upon all nations that believe they are legally bound by it. To avoid violating international law, these nations must take steps to meet the UN’s goal of providing safe and clean drinking water to all of their citizens.

If, on the other hand, nations are *too* ambitious to provide their citizens with a sufficient amount of water, they may violate their duties to appropriately share transboundary water resources. Similar to their obligations to provide adequate drinking water, nations’ duties to appropriately share transboundary water may constitute binding customary law.³³ State practice of appropriately sharing transboundary water could be demonstrated by the Convention on the Law of Non-Navigable Uses of International Watercourses.³⁴ The convention directs that “[w]atercourse [nations] shall in their respective territories utilize an international watercourse in an equitable and reasonable manner . . . taking into account the interests of the watercourse [nations] concerned, consistent with adequate protection of the watercourse.”³⁵ Additionally, watercourse nations “shall . . . take all appropriate measures to prevent the causing of significant harm to other watercourse [nations].”³⁶

Despite the fact that the Convention never came into force, the ICJ has implied that the Convention may be sufficient to establish state practice.³⁷ Therefore, nations that believe they are legally bound to follow the Convention will likely have to adhere to its principles. Such

³⁰ *Global Issues: Water*, UN.ORG, available at <https://www.un.org/en/globalissues/water/> (last visited Mar. 29, 2014).

³¹ *Id.*

³² See A. Mark Weisburd, *The International Court of Justice and the Concept of State Practice*, 31 U. PA. J. INT’L L. 295, 330 (2009) (citing *Armed Activities on the Territory of the Congo (Dem. Rep. Congo v. Uganda)*, Dec. 19, 2005, 45 I.L.M. 271, 322–23 (2006)) (noting that in past cases, the International Court of Justice has ruled that a principle “was a matter of customary international law, [relying] solely on several General Assembly resolutions as support for that conclusion, despite the lack of binding legal effect in General Assembly resolutions”). The requirement of *opinio juris* can be summarized as follows: “For a practice of states to become a rule of customary international law it must appear that the states follow the practice *from a sense of legal obligation*.” RESTATEMENT (THIRD) OF FOREIGN RELATIONS § 102 cmt. c (1987) (emphasis added).

³³ Customary law can be established even without a General Assembly resolution as long as there is an established state practice that is combined with *opinio juris*—a sense of legal obligation. RESTATEMENT (THIRD) OF FOREIGN RELATIONS § 102 (1987).

³⁴ Convention on the Law of the Non-Navigational Uses of International Watercourses, G.A. Res. 51/229, U.N. GAOR, 51st Sess. (May 21, 1997).

³⁵ *Id.* at art. 5.

³⁶ *Id.* at art. 7.

³⁷ Weisburd, *supra* note 32, at 324 (“[In] Gabcikovo-Nagymaros Project the Court rested its discussion of riparian states’ CIL rights to the use of international watercourses in part on the adoption of the Convention on the Law of Non-Navigable Uses of International Watercourses by the General Assembly, even though that Convention has never come into force.”).

nations have a duty to use (and impliedly, share) transboundary water in a reasonable manner that does not cause significant harm to their neighbors. Consequently, if these nations consume too much of a transboundary watercourse, they would violate international law.³⁸ However, this is not the worst possible violation of international law that may arise from transboundary water disputes.

In addition to potentially hoarding this valuable resource, nations may become so desperate for water that they could resort to the use of force—or the threat of such use—against their neighbors to acquire or preserve a sufficient water supply.³⁹ Unlike the international laws that have already been discussed, the prohibition of the use of force is binding upon every nation in the world.⁴⁰ The UN has not specifically defined the term “force,” but it is clear that if one nation attacks another nation with military forces, that constitutes a use of force.⁴¹

There are only three scenarios in which a nation’s use of force would be justified within the framework of the UN Charter and would, therefore, not violate international law. The first is if—pursuant to articles 39, 41, and 42 of the UN Charter—the Security Council authorizes the use of force after deeming that other measures have been—or would be—inadequate to preserve international peace and security.⁴² The second is if the nation against whom another nation uses force consents to that use of force.⁴³ The final justification for the use of force is self-defense. Regarding self-defense, Article 51 of the UN Charter clarifies that “[n]othing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack

³⁸ Not allowing a neighboring nation to obtain a significant amount of water from a shared watercourse would almost certainly cause that nation significant harm.

³⁹ Though this may seem far-fetched, there is good reason to believe that some nations may resort to violence to obtain the water they want or need. *See infra, e.g.*, Part VI.B.

⁴⁰ U.N. Charter art. 2, para. 4 (“All Members *shall* refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.”) (emphasis added); *see also* Norman G. Printer, Jr., *The Use of Force Against Non-State Actors Under International Law: An Analysis of the U.S. Predator Strike in Yemen*, 8 UCLA J. INT’L L. & FOREIGN AFF. 331, 339 (2003) (“This prohibition has been extended to nations that are not part of the United Nations as well. The use of force regime outlined above is recognized as customary international law, meaning that it is binding upon all states, even those few states that do not belong to the UN.”).

⁴¹ Jay P. Kesan & Carol M. Hayes, *Mitigative Counterstriking: Self-Defense and Deterrence in Cyberspace*, 25 HARV. J. LAW & TECH 415, 514 (2012) (“Some scholars have noted that it is unclear what a ‘use of force’ is under Article 2(4). [But] [c]onventional weapon attacks definitely fall within the category of ‘use of force’ in Article 2(4) . . .”).

⁴² U.N. Charter art. 42 (“Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. *Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.*”) (emphasis added).

⁴³ *See* THOMAS M. DONNELLY ET AL., OPERATION JUST CAUSE: THE STORMING OF PANAMA (1991). An example of this is when the United States received consent from Panama to use force to reestablish the newly elected President of Panama. Although some considered this action questionable, the action was ultimately allowable within the international community.

occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.”⁴⁴ It is important to note that the right to self-defense exists only after an “armed attack” occurs. A mere use of force—if it constitutes something less than an armed attack—might not justify a nation to use its own force in self-defense.⁴⁵

Although these exceptions to the prohibition of the use of force exist, they are sufficiently narrow that only rarely would a nation be able to employ the use of force to resolve a transboundary water dispute without violating binding international law. It seems unlikely, for example, that one nation would ever consent to allow another nation to use force to settle a water dispute between the two nations. Moreover, unless the conduct of another party to a transboundary water dispute constitutes a threat to the peace, a breach of the peace, or an act of aggression,⁴⁶ neither of the other exceptions will apply. Hence, if nations resort to the use of force against each other to resolve a transboundary water dispute, at least one of them will almost certainly violate international law. Because it is very likely that water-deprived nations will eventually resort to the use of force to resolve transboundary water disputes,⁴⁷ it seems inevitable that some nations will violate international law as a result of such disputes. However, if the international community can step in and help nations resolve their transboundary water disputes before the disputes become too heated, it is possible that all of these disputes could be settled in a way that prevents violations of international law.

III. INTERNATIONAL WATER LAW SCHOLARSHIP

The danger of unresolved transboundary water disputes has become increasingly apparent. Thus, scholars have increasingly suggested methods for how these disputes should be resolved. Relevant scholarship addressing transboundary water disputes can largely be separated into two groups:⁴⁸ 1) scholarship focused on potential resolutions to specific disputes and 2) scholarship focused on providing a general system for resolving all potential transboundary disputes.

⁴⁴ U.N. Charter art. 51.

⁴⁵ U.N. Charter art. 51 (“Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations . . .”).

⁴⁶ “Threat to the peace,” “breach of the peace,” and “act of aggression” are all terms of art used in Article 39 of the UN Charter. U.N. Charter art. 39. These terms will be discussed more in-depth later in the paper. See *infra* Part VII.

⁴⁷ See *infra* Part VI.B.

⁴⁸ A third, less relevant group also exists. This group applies principles of international water law to propose solutions to interstate water disputes in the United States. See e.g. Eva Melody LaManna, *Three’s a Crowd: Examining Georgia’s Options in the Tri-State Water Wars Under Principles of International Law*, 39 GA. J. INT’L & COMP. L. 215 (2010); Robert H. Abrams, *Boundary Water Treaty Centennial Symposium: The Boundary Waters Treaty of 1909 as a Model for Interjurisdictional Water Governance*, 54 WAYNE L. REV. 1635 (2008).

1) A portion of the scholarship addressing transboundary water disputes is centered on individual disputes. These articles suggest which currently-existing dispute resolution mechanisms would best serve the particular disputing nations. Several articles suggest that specific regional water disputes are best resolved through reaching a multilateral agreement.⁴⁹ Others suggest that the specific disputing nations should enact a treaty that establishes a joint management institution.⁵⁰ Still others suggest more unique solutions to specific problems, such as resolving the Israeli-Palestinian water dispute by “progressively establish[ing] a solid basis for long-term sustainable arrangements . . . [starting] with a non-binding flexible arrangement that will serve the short-term need, and gradually [building] up into a final, legally binding arrangement based upon international law.”⁵¹ While the different solutions suggested in these articles could be applied to many transboundary water disputes, the articles were not—strictly speaking—intended to propose a blueprint for how all transboundary water disputes should be resolved.⁵²

2) The second group of scholarship, however, focuses on proposing general solutions that can be applied in settling all transboundary water disputes. Some articles, for example, suggest that in light of the projected effects of climate change, existing international water laws must be reformed.⁵³ According to one article, this reformation must “[strengthen]

⁴⁹ See, e.g., Elizabeth Burleson, *Equitable and Reasonable Use of Water Within the Euphrates-Tigris River Basin*, 35 ENVTL. L. REP. 10041, 10054 (2005) (discussing the water trouble within the Euphrates-Tigris River Basin and concluding that “[u]ntil a multilateral agreement is reached, water projects such as GAP will destabilize Middle Eastern relations. A long-term commitment to equitable and reasonable use allows water allocations to be altered if use becomes inequitable or unreasonable”); Nicholas Maxwell, *The Nubian Sandstone Aquifer System: Thoughts on a Multilateral Treaty in Light of the 2008 UN Resolution on the Law of Transboundary Aquifers*, 46 TEX. INT’L L.J. 379, 409 (2011) (“Hopefully, after the NAP concludes, the Nubian states will make good on this pledge to be an example for the rest of the world by ratifying one of the first comprehensive multilateral transboundary aquifer treaties.”).

⁵⁰ See e.g. Elizabeth Burleson, *Middle Eastern and North African Hydropolitics: From Eddies of Indecision to Emerging International Law*, 18 GEO. INT’L ENVTL. L. REV. 385, 423–24 (2006) (analyzing “Middle Eastern and North African hydropolitics in light of emerging international law” and concluding that “[e]xisting co-aquifer arrangements indicate that establishing a joint management institution would enable versatile and timely responses to variable water conditions.”); Yaser Khalailah, *Prospects for Cooperation and Dispute Over Water in the Middle East*, 5 BERKELEY J. MID. EAST & ISLAMIC L. 73, 117 (2012) (“To achieve genuine success of any conclusive agreement in that direction, it should include provisions for the establishment of an International Joint Commission for the Jordan River Basin along the lines of the International Rhine Commission.”).

⁵¹ Fadia Daibes, *A Progressive Multidisciplinary Approach for Resolving the Palestinian Israel Conflict over the Shared Transboundary Groundwater: What Lessons Learned from International Law?*, 8 U. DENV. WATER L. REV. 93, 94 (2004).

⁵² Admittedly, this may ultimately be the most effective strategy for solving transboundary water disputes because no two disputes—even those involving the same general resource—are likely to be exactly the same.

⁵³ See, e.g., Dellapenna, *supra* note 23, at 94 (2008) (“Global climate disruption is occurring and will challenge many or most aspects of human activity. Perhaps the greatest challenges will relate to the availability of water to meet the needs of humans and other living things. These

the protections of water resources while devising appropriate arrangements for managing those resources to meet multiple needs.”⁵⁴ Another article suggests that instead of allowing heads of state to negotiate transboundary water agreements, “negotiations [should] begin with a committee comprised of stakeholders . . . whose lives are impacted by the stream.”⁵⁵ Other articles suggest that by combining the best attributes of the currently existing dispute resolution methods, nations will be much more able and willing to resolve their disputes.⁵⁶

Within all of the aforementioned scholarship, there is very little suggestion that the Security Council should take a more active role in settling transboundary water disputes.⁵⁷ Moreover, none of the articles suggest that the Security Council should appropriate water between or among nations in any manner. This Comment argues that such appropriation by the Security Council is not only possible and allowable, but also beneficial. This argument starts with an investigation of the interstate water dispute resolution mechanisms employed by the United States and Canada.

IV. UNITED STATES WATER LAW

Although the United States government generally allows states to determine how water will be appropriated within their territories, the federal government has ultimately retained supremacy over water appropriations.⁵⁸ This supremacy gives the federal government the ability to facilitate the resolution of interstate water disputes in three different ways: adjudication, interstate compacts, and congressional appropriation.

challenges will not be met unless existing laws and institutions are reformed to be able to cope with the changing situation.”).

⁵⁴ *Id.*

⁵⁵ Jeffrey S. Dornbos, *All (Water) Politics is Local: A Proposal for Resolving Transboundary Water Disputes*, 22 *FORDHAM ENVTL. L. REV.* 1, 18 (2010) (“Transboundary water agreements should include a rebuttable presumption that negotiations over transboundary water disputes begin with regional committees organized at the ‘lowest’ appropriate hydrological level. This argument has two components. First, it requires regional committees to be organized by hydrologic units, such as watersheds. Second, it requires beginning dispute resolution with the ‘lowest’ - or most local - hydrologic unit. For example, if the dispute is over a small border stream that feeds into Lake Michigan, negotiations would begin with a committee comprised of stakeholders, from both the United States and Canada, whose lives are impacted by the stream, as opposed to the President of the United States and the Prime Minister of Canada, who are not as directly impacted.”).

⁵⁶ *See, e.g.*, Anna Spain, *Beyond Adjudication: Resolving International Resource Disputes in an Era of Climate Change*, 30 *STAN. ENVTL. L.J.* 343, 390 (2011) (suggesting “that one way to [adequately resolve transboundary water disputes] is to combine adjudication with non-judicial forms of IDR in an integrated manner. When we recognize the benefits of mediation and facilitation, we can incorporate them in ways that complement the existing international legal system”).

⁵⁷ *But see* Burleson, *supra* note 49, at 10049 (“If these states prove unable to establish such an institution or the institution is unable adequately to address problems that arise, then the United Nations should once again provide assistance. Gross violations of equitable and reasonable utilization should be subject to U.N. sanctions.”).

⁵⁸ *Arizona v. California*, 373 U.S. 546, 587 (1963) (“While the States were generally free to exercise some jurisdiction over these waters before the Act [which appropriated the Colorado River between California and Arizona] was passed, this right was subject to the Federal Government’s right to regulate and develop the river.”).

A. Adjudication

Perhaps the most well-known method of resolving an interstate water dispute in the United States is adjudication. This method is initiated when one state unilaterally files suit against another state or multiple states. The Constitution of the United States provides that “[i]n all Cases . . . in which a State shall be Party, the supreme Court shall have original Jurisdiction.”⁵⁹ The Supreme Court has held that original jurisdiction in these cases typically equates to exclusive jurisdiction.⁶⁰ Consequently, in the United States all lawsuits involving interstate water disputes go directly to the Supreme Court.

In resolving these disputes, the Supreme Court utilizes the doctrine of equitable apportionment.⁶¹ The Court described how this doctrine functions in *Nebraska v. Wyoming*:⁶²

Priority of appropriation is the guiding principle. But physical and climatic conditions, the consumptive use of water in the several sections of the river, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former—these are all relevant factors. They are merely an illustrative, not an exhaustive catalogue.⁶³

Once the Court decides the equitable resolution, its decision is binding on all of the parties involved. Such a resolution might be enviable for some parties because it allows unbiased judges to settle a dispute through employing principles of equity. The Court will always use these same principles of equity unless there is “special justification” for overriding precedent.⁶⁴ This makes adjudication the most predictable method for settling interstate water disputes. Instead of having to speculate how other states will negotiate or how political pressures will affect

⁵⁹ U.S. CONST. art. III, § 2.

⁶⁰ *Rhode Island v. Massachusetts*, 37 U.S. 657, 657 (1838) (explaining that the Supreme Court has exclusive jurisdiction over cases in which a state is a party, except between a state and its citizens; and except also between a state and citizens of other states or aliens; in which latter case, it shall have original, but not exclusive jurisdiction).

⁶¹ This doctrine was initially set forth in *Kansas v. Colorado*, 206 U.S. 46 (1907).

⁶² 325 U.S. 589 (1945).

⁶³ *Id.* at 618.

⁶⁴ *Dickerson v. United States*, 530 U.S. 428, 443 (2000) (“While stare decisis is not an inexorable command, particularly when we are interpreting the Constitution, even in constitutional cases, the doctrine carries such persuasive force that we have always required a departure from precedent to be supported by some special justification.”) (citations and quotation marks omitted).

congressional appropriation, adjudication allows disputing states to know what factors will determine their fate.

On the other hand, there are also reasons why adjudication might not always be the best method for resolving interstate water disputes. One reason is that it can take several decades for the Supreme Court to reach a decision that entirely settles any given water dispute. One prominent example of how long the adjudication process can take comes from the dispute between Nevada and California over Lake Tahoe.⁶⁵ Litigation in that dispute lasted nearly a century⁶⁶ and the dispute was eventually resolved through other means.⁶⁷ In other words, not only can adjudication take an extremely long time to resolve a water dispute, it also can entirely fail to provide a true resolution.

Another potential drawback of adjudication is that the members of the Supreme Court are not water experts and, consequently, may struggle to be truly equitable in appropriating water between or among states. As one scholar aptly stated, “[t]he sheer complexity of water conflicts alone is enough to keep them out of any court.”⁶⁸ To offset this lack of expertise, the Court routinely delegates fact-finding duties to a Special Master and asks the Special Master for a recommendation for resolving the dispute.⁶⁹ This delegation helps the Court solve the expertise problem, but it does not solve the final problem with adjudication: it is an adversarial system.

The adversarial nature of the United States judicial system makes adjudication a potentially problematic method for resolving interstate water disputes. Instead of helping states work together toward a common goal, adjudication in the United States encourages states to contest each other for every gallon of water.⁷⁰ Thus, adjudication can potentially make water disputes more hostile even while technically settling the underlying dispute itself. The next American method of interstate water

⁶⁵ This dispute was ultimately settled through Congressional appropriation. See Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990, 104 Stat. 3289, 3294 § 202 (1990).

⁶⁶ See E. Leif Reid, *Ripples from the Truckee: The Case for Congressional Apportionment of Disputed Interstate Water Rights*, 14 STAN. ENVTL. L.J. 145, 166 (1995) (analyzing the dispute in great detail and pointing out that “[w]hen Congress opened negotiations and sponsored a new process to apportion the Tahoe Basin’s waters between the numerous feuding claimants, it undertook to untie a knot that nearly one hundred years of litigation and forty years of negotiation had failed to unravel”).

⁶⁷ This dispute ended when, for the second time in its history, Congress stepped in and determined how water would be appropriated between the states on its own. See *id.* at 166–67.

⁶⁸ Susan D. Brienza, *Wet Water v. Paper Rights: Indian and Non-Indian Negotiated Settlements and Their Effects*, 11 STAN. ENVTL. L.J. 151, 166 (1992) (pointing out that in addition to the complexity of water disputes in their own right, “[i]n water law disputes, a single plaintiff against a single defendant is a rarity because multiple competing parties are inherent in the issue”).

⁶⁹ See C. Hansell Watt, *Who Gets the Hooch?: Georgia, Florida, and Alabama Battle for Water From the Apalachicola-Chattahoochee-Flint River Basin*, 55 MERCER L. REV. 1453, 1457 (2004) (“Because courts lack the resources and expertise to evaluate most interstate water rights disputes, a Special Master is usually assigned to hear evidence, preside over hearings, report findings, and recommend a solution.” (citing Dustin S. Stephenson, *The Tri-State Compact: Falling Water and Fading Opportunities*, 16 FLA. ST. U. J. LAND USE & ENVTL. L. 83, 96 (2000)).

⁷⁰ *Aetna Life Ins. Co. v. Haworth*, 300 U.S. 227, 239–41 (1937) (noting that the Constitution limits judicial jurisdiction to “cases” and “controversies” and that “[t]he controversy must be definite and concrete, touching the legal relations of parties having adverse legal interests”).

dispute resolution specifically addresses these problems but comes with drawbacks of its own.

B. Interstate Compacts

If states decide that they would like to settle a water dispute without judicial intervention, federal law permits them to do so through an interstate compact, with the consent of Congress.⁷¹ This is the judicially and congressionally preferred method for settling interstate disputes precisely because it avoids the pitfalls of adjudication and because it allows states to maintain some autonomy in resolving a dispute.⁷²

Interstate compacts allow states to decide their own fate through negotiation. This stems from the fact that interstate compacts function as contracts between states. For a compact to be valid, all of the legal requirements of a contract need to be present: namely, offer, acceptance, and consideration.⁷³ Just as with a traditional contract, the states negotiate the terms of the contract until they reach a result that is acceptable to all of the parties. The negotiation of an interstate water compact is ordinarily “handled by a group of representatives from each state appointed by the governors, often referred to as a ‘joint commission.’”⁷⁴ Once they reach an acceptable compromise, each state must ratify the agreement by passing the exact language of the agreement through the applicable state legislative process.⁷⁵

This process provides disputing states with multiple opportunities to preserve the status quo if they are not completely satisfied with the proposed appropriation. After all, the states’ representatives to the joint commission, the state legislatures, and the governors all have an independent chance to approve or refuse the suggested compact.

However, there is one significant limitation on states’ sovereignty in enacting interstate water compacts: federal law provides that states cannot enter into such compacts “without the Consent of Congress.”⁷⁶

⁷¹ U.S. CONST. art. I, § 10.

⁷² David Elliott Prange, *Regional Water Scarcity and the Galloway Proposal*, 17 ENVTL. L. 81, 88 (1986) (“Judicial and congressional preference for compacts follows primarily because the most frequent alternative to interstate compacts is equitable apportionment litigation. Litigation is less favored because it inevitably results in ad hoc resource allocation and because it requires the courts to delve into technical resource specialty areas with which they are essentially unfamiliar.”).

⁷³ Suzanne Zazycki, *The Legal Structure of an Interstate Water Compact: Implications for a Great Lakes Interstate Water Compact*, 5 TOL. J. GREAT LAKES’ L. SCI. & POL’Y 459, 463 (2003).

⁷⁴ *Id.* at 465 (citing FREDERICK ZIMMERMAN & MITCHELL WENDELL, *THE LAW AND USE OF INTERSTATE COMPACTS* 16 (1976)).

⁷⁵ *Id.* at 466 (“To ratify, the compact is embodied in an ‘enabling statute’ and submitted to each state’s legislature. An enabling statute is merely the statute that includes the language of the compact, as well as other language necessary to pass a statute in each state. Once passed by the state’s legislature, it is submitted to the governor for a signature. If the governor vetoes it, then, like any other statute, it can go back to the state legislature for a veto override.”).

⁷⁶ U.S. CONST. art. I, § 10.

While obtaining congressional consent is not typically a problem, there has been at least one instance where a lack of congressional consent was the only thing that prevented disputing states from resolving their dispute through a compact.⁷⁷ Because Congress has demonstrated that it is willing to negate interstate compacts in certain circumstances, states do not retain as much autonomy through this method as it may originally appear.

Another potential problem with interstate compacts is that states face the same problems faced by individuals entering into a contract. Just as there are occasionally dominant parties among those involved in a traditional contract, there can also be dominant parties among compacting states. California's quest to obtain adequate water for the millions of people who live in the southern portion of the state demonstrates the potential for this sort of dominance.⁷⁸ The main problem is that the more powerful (i.e. more populous and well-funded) states might try to dominate the terms of a compact because they know that Congress will not allow large cities to go without water. However, the requirement for congressional approval might also prevent states from dominating compacts. Additionally, if Congress is really worried about this potential problem, it can circumvent the interstate compact process altogether and unilaterally appropriate water among the disputing states.

C. Congressional Appropriation

The United States has utilized the final American method for resolving interstate water disputes only in extremely rare circumstances, and where neither adjudication nor interstate compact was able to settle a dispute.⁷⁹ In these rare situations, Congress passes legislation that appropriates water between or among disputing states in a binding fashion. Although the Supreme Court has held that Congress has the authority to act in this manner,⁸⁰ Congress has chosen to do so on only two occasions.⁸¹

While this method of resolution may initially seem to undercut any semblance of state sovereignty concerning water rights, a closer

⁷⁷ The same dispute concerning Lake Tahoe between Nevada and California that went through near-endless litigation was hampered by Congressional disapproval of proposed compacts because the compacts did not adequately consider the needs of federally recognized Native American Tribes. See Reid, *supra* note 66.

⁷⁸ See, e.g., MARK REISNER, CADILLAC DESERT 293–94 (3d ed. 1993).

⁷⁹ Although it seems that Congress has the power to appropriate water among disputing parties even before all other dispute resolution methods have failed, Congress has never utilized this power.

⁸⁰ Arizona v. California, 373 U.S. at 557.

⁸¹ See *id.* at 560 (noting that the “Boulder Canyon Project Act of December 21, 1928, 45 Stat. 1057. . . was a complete statutory apportionment intended to put an end to the long-standing dispute over Colorado River waters”); Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990, 104 Stat. 3289, 3294 § 202 (1990) (providing “for the equitable apportionment of the waters of the Truckee River, Carson River, and Lake Tahoe between the State of California and the State of Nevada”).

inspection reveals that states maintain a good deal of sovereignty. In cases where Congress appropriates water between or among states through legislation, state sovereignty is maintained because “[t]he States, subject to subsequent congressional approval, [are] also permitted to agree on a compact with different terms” than the congressional appropriation.⁸² This means that, unlike with adjudication, states can potentially overrule congressional appropriation by subsequently agreeing to an interstate compact. As mentioned above,⁸³ Congress will still have to approve the interstate compact—and representatives may be more likely to veto an interstate compact if it attempts to override Congress’s own appropriation than they would if Congress had not already appropriated the water. However, the possibility remains that a state can reclaim control of its own fate.

In addition to preserving some state sovereignty, this method is helpful because interstate water disputes can be resolved more quickly and with more expertise through congressional appropriation than through the judicial system. Although the process for congressional appropriation may take a few years, this is a very short time compared to the time adjudication can take.⁸⁴ Additionally, instead of having to rely on a single Special Master to perform fact-finding functions and to provide recommendations, Congress can rely on agencies and other experts to provide those services.⁸⁵

Despite its positive characteristics, this method is not immune from shortcomings of its own. One major shortcoming is that Congress might not properly account for the disputing states’ specific needs and cultures. Although each state has a number of representatives in Congress, those representatives might not be capable of actually meeting their state’s needs. For example, although each state has an equal number of

⁸² *Id.* at 565.

⁸³ See *supra* Part IV.B.

⁸⁴ Reid, *supra* note 66, at 178 (pointing out that in the Lake Tahoe dispute, Congressional apportionment helped “a seemingly intractable situation [to] resolve itself in relatively few years [it had failed to be solved after about 100 years of litigation], proving the superior efficiency of congressional division of water rights over both interstate compacting and adjudicatory apportionment”).

⁸⁵ For example, members of Congress receive information from congressional aides, agencies, and experts. Carter Moore, *What Is Daily Life Like for a Member of Congress or Congressional Staffer?*, SLATE, available at http://www.slate.com/blogs/quora/2013/11/07/congressional_staffers_what_s_it_like_to_work_for_a_member_of_congress.html (last visited Sept. 19, 2015) (describing the role of congressional aides); Philip Shabecoff, *Global Warming Has Begun, Expert Tells Senate*, N.Y. TIMES (June 24, 1988), available at <http://www.nytimes.com/1988/06/24/us/global-warming-has-begun-expert-tells-senate.html> (describing an early expert report given to a congressional committee); *Black Carbon Report to Congress*, EPA, available at http://yosemite.epa.gov/sab/sabproduct.nsf/fedrgstr_activites/BC%20Report%20to%20Congress?OpenDocument (last visited Jan. 20, 2015) (“The October 2009 Interior Appropriations bill (P.L. 111-88) requires the EPA, in consultation with other Federal agencies, to prepare a comprehensive report to Congress on the climate effects of black carbon.”).

Senators, states like Wyoming and Montana elect only one of the 435 members of the House of Representatives.⁸⁶ This could be particularly problematic if one of these smaller states is disputing with a state like California—which elects fifty-three members of the House and could assumedly use its weight either to obtain a favorable apportionment or to at least drown out the voices of the smaller states.⁸⁷

The final pitfall of congressional appropriation is that the relevant decision-makers may tend to base an appropriation on what would least offend all of the disputing states rather than basing it on what is truly equitable. While the Justices of the Supreme Court can equitably resolve an interstate water dispute without worrying about any potential negative impact the decision might have on their jobs,⁸⁸ politicians do not have this luxury. Consequently, politicians are much more likely to consider many non-equitable factors when deciding how to appropriate water.⁸⁹ Such considerations might drive Congress to simply appropriate the water according to popular opinion across America, which might not be in the best interest of any of the disputing states.

V. CANADIAN WATER LAW

Unlike in the United States, it is the provinces—and not the federal government—that retain supremacy over water appropriation in Canada.⁹⁰ Consequently, the federal government generally resolves interprovincial water disputes only when the disputing parties explicitly allow federal intervention.⁹¹ Interprovincial agreements usually allow this kind of intervention.⁹²

An important difference between Canadian interprovincial agreements and American interstate compacts is that no federal approval is required for an interprovincial agreement to become law. This means that provinces have a high level of autonomy in deciding how to resolve their own interprovincial water disputes. Despite this fact, some

⁸⁶ See *Directory of Representatives*, HOUSE.GOV, available at <http://www.house.gov/representatives/> (last visited Sept. 19, 2015).

⁸⁷ *Id.*

⁸⁸ U.S. CONST. art. 3, § 1 (“The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behaviour . . .”).

⁸⁹ For example, politicians will likely consider what their constituents would want them to do and what their political allies would want them to do.

⁹⁰ Constitution Act, 1867, 30 & 31 Vict., c. 3 (U.K.), reprinted in R.S.C. 1985, app. II, no. 5 (Can.) § 92(13) (“In each Province the Legislature may exclusively make Laws in relation to . . . Property and Civil Rights in the Province”); see also Frank Quinn, *The Canadian View: Resolving Regulatory Disputes at Home and Abroad*, 5 TOL. J. GREAT LAKES’ L. SCI. & POL’Y 473, 473 (2003) (“Since water, in law, is traditionally regarded as property and land is taken to include water, the provinces have assumed the primary role for managing water in Canada. Within their boundaries, they really are sovereign.”).

⁹¹ Quinn, *supra* note 90, at 475 (“Canadian courts have no authority to resolve interprovincial conflicts comparable to that exercised by the U.S. Supreme Court in interstate conflicts. Canada’s senior governments tend to negotiate arrangements with one another rather than test the legal limits of their power to act unilaterally. In this sense, Canada has a political, as much as a legal, constitution.”).

⁹² *Id.*

provinces have pre-authorized the federal government to settle their water disputes if such disputes arise.⁹³ The Prairie Provinces Water Agreement (PPWA) is one example of such authorization.⁹⁴ The PPWA is an agreement among Alberta, Manitoba, and Saskatchewan that determines how the three provinces will allocate water among and between each other and how any resulting disputes will be resolved.⁹⁵ This is perhaps the most prominent interprovincial water agreement in Canada,⁹⁶ and it appears to be instructive in demonstrating how water disputes are generally resolved in Canada. The PPWA essentially provides for two separate methods for resolving disputes: adjudication and further interprovincial agreements.⁹⁷

A. Adjudication

The Master Agreement for the PPWA authorizes federal adjudication as a primary method for resolving water disputes among and between Alberta, Manitoba, and Saskatchewan. Section 8 of the Mater Agreement reads as follows:

The parties agree, subject to Clause 9 of this agreement that if at any time, any dispute, difference or question arises between the parties with respect to this agreement or the construction, meaning and effect thereof, or anything therein, or the rights and liabilities of the parties thereunder or otherwise in respect thereto, then *every such dispute, difference or question will be referred for determination to the Federal Court of Canada, Trial Division, under the provisions of the Federal Court Act of Canada* and each of the parties hereto agrees to maintain or enact the necessary legislation to provide the Federal Court of Canada with jurisdiction to determine any such dispute, difference, or

⁹³ See, e.g., *1969 Master Agreement on Apportionment*, PRAIRIE PROVINCES WATER BOARD, available at <http://www.ppwb.ca/information/109/index.html> (last visited Sept. 19, 2015) (agreeing among Alberta, Saskatchewan, and Manitoba to take all water disputes to the Federal Court system).

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ J. Owen Saunders & Michael M. Wenig, *Whose Water? Canadian Water Management and the Challenges of Jurisdictional Fragmentation*, in *EAU CANADA: THE FUTURE OF CANADA'S WATER* 129–30 (Karen Bakker, ed., 2007) (noting that the PPWA “was generally considered to be the template for” the water negotiations between provinces and territories in the Mackenzie River basin).

⁹⁷ The agreement also established a water board that makes other decisions. “Board members are senior officials engaged in the administration of water resources in each province of Alberta, Saskatchewan, and Manitoba and in the federal Departments of Environment and Agriculture and Agri-Food.” *Prairie Provinces Water Board*, ENV'T CAN., available at <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=BAB691E4-1> (last visited Sept. 19, 2015).

question in the manner provided under the Federal Court Act of Canada.⁹⁸

In practice, however, “very few jurisdictional disputes involving water resources have been litigated in Canada, compared with the United States.”⁹⁹ This stems from the fact that although “the parties have agreed to take [the dispute] to the Federal Court of Canada for resolution . . . any one of the disputing parties can withdraw from that commitment.”¹⁰⁰ In fact, interprovincial water disputes are litigated so rarely that there does not appear to be an established legal test for Canadian courts to use when they decide interprovincial water dispute cases.¹⁰¹

B. Further Interprovincial Agreements

The more common method for resolving interprovincial water disputes in Canada is simple: the provinces work out additional interprovincial agreements. According to one Canadian water law scholar, when there is a dispute among provinces, “Canada's senior governments tend to negotiate arrangements with one another rather than test the legal limits of their power to act unilaterally.”¹⁰² Additionally, the Master Agreement of the PPWA itself allows provinces to alter the PPWA “by an agreement in writing among the four parties to the Master Agreement.”¹⁰³ One such further agreement came in 1992, when the four parties to the PPWA all agreed to include water quality objectives and “made limited provision for the consideration of groundwater matters that have interprovincial implications.”¹⁰⁴ Further agreements like this one allow the provinces to settle disputes on their own rather than forcing them to relinquish the decision-making power to a court—thus making these agreements the preferred method of water dispute resolution in Canada.

Finally, it is worth noting that unlike the United States, Canada does not use any form of legislative appropriation to settle interprovincial water disputes.

⁹⁸ 1969 *Master Agreement on Apportionment*, *supra* note 93 (emphasis added).

⁹⁹ Quinn, *supra* note 90, at 475.

¹⁰⁰ *Id.*

¹⁰¹ The author could not find any Canadian court cases in which a court appropriated water between or among provinces nor could the author find a summary of any such cases.

¹⁰² Quinn, *supra* note 90, at 473.

¹⁰³ 1969 *Master Agreement on Apportionment*, *supra* note 93.

¹⁰⁴ David R. Percy, *Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin*, 341 C.D. HOWE INST. COMMENT. 1, 11 (2012), available at http://www.cdhowe.org/pdf/Commentary_341.pdf.

VI. TRANSBOUNDARY WATER DISPUTES AND LESSONS TO BE LEARNED FROM THE U.S. AND CANADA

For obvious reasons,¹⁰⁵ the international community generally functions differently than the two federal systems previously discussed. However, because transboundary water disputes arise from the same difficulties that cause interstate water disputes,¹⁰⁶ it seems that the international community can learn from federalist approaches in resolving these disputes. This Part will briefly outline how the international community currently resolves transboundary water disputes. It will then apply federalist approaches to demonstrate how the international community can change to prevent transboundary water disputes from becoming overly hostile.

A. International Water Dispute Resolution Mechanisms

On their face, transboundary water disputes are typically resolved in a manner that is very similar to how interprovincial water disputes are resolved in Canada. The most important similarity is that just as the Canadian provinces are ultimately sovereign over the water within their jurisdictions, individual nations are ultimately sovereign over the water within their boundaries. Another similarity is that, just like Canada, the international community has no dispute resolution mechanism that resembles legislative appropriation.

Due to these similarities, it comes as no surprise that the most common method of resolving transboundary water disputes is simply allowing the disputing nations to negotiate a mutually beneficial treaty.¹⁰⁷ One illustrative transboundary water treaty is the Boundary Waters Treaty of 1909 between the United States and Canada.¹⁰⁸ This treaty serves three major functions. First, it ensures that the navigable waters that intersect the shared boarder will remain “free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally.”¹⁰⁹ Second, it creates a joint commission made up of six commissioners—three from each nation—to examine any transboundary water difficulties that arise between the two nations.¹¹⁰ Third, it creates a base rule for how the water will be appropriated

¹⁰⁵ See *supra* note 11.

¹⁰⁶ See *supra* note 12.

¹⁰⁷ See *supra* note 15 and accompanying text (indicating that there have been over 150 water treaties in the international community in the last 50 years).

¹⁰⁸ Boundary Waters Treaty, U.S.-Gr. Brit. art. 1, Jan. 11, 1909, 36 Stat. 2448 (Can).

¹⁰⁹ *Id.* at arts. 3, 7, 9.

¹¹⁰ *Id.* at arts. 3–7.

between the two nations and requires that future appropriations be approved by the joint commission.¹¹¹

While the treaty is not perfect,¹¹² it has lasted in its original form for over a century and has been instrumental in resolving subsequent water disputes between the two nations.¹¹³ The treaty's ability to resolve water disputes in a peaceful manner makes it a successful treaty by international law standards.¹¹⁴

Other nations involved in transboundary water disputes are encouraged to establish similarly successful treaties through negotiation, mediation, arbitration, and various other means. While each treaty ultimately needs to prevent transboundary water disputes from becoming overly hostile,¹¹⁵ each treaty can otherwise be as unique as the disputing nations desire it to be.¹¹⁶ This flexibility allows disputing nations to base transboundary water treaties on each nation's wants, needs, and culture. Consequently, each nation's sovereignty is completely preserved, subject only to the sovereignty of the neighboring nations.

Resolving a water dispute through a treaty also allows disputing nations to create goodwill between and among each other. For example, if culturally opposed nations are able to cooperate in creating a mutually beneficial boundary water treaty, it could help them become more tolerant of each other in general. This increased tolerance could help the nations resolve other disputes as well.

In addition to creating treaties, disputing nations can also submit the dispute to the ICJ.¹¹⁷ Similar to the Canadian adjudicatory system, the ICJ has jurisdiction over a transboundary water dispute only if the disputing parties mutually agree to be bound by the Court's decision, or if the UN charter or some other treaty mandates ICJ action in the particular dispute.¹¹⁸ Additionally, if nations choose to subject the dispute to the ICJ, they are still able to back out of litigation—even in the middle

¹¹¹ *Id.*

¹¹² Noah D. Hall, *Boundary Waters Treaty Centennial Symposium: Introduction-The Centennial of the Boundary Waters Treaty: A Century of United States-Canadian Transboundary Water Management*, 54 WAYNE L. REV. 1417, 1421 (2008) (describing complaints both the United States and Canada have with the Boundary Waters Treaty).

¹¹³ *Id.* (describing the history of the Boundary Waters Treaty and discussing the role it has played in resolving transboundary water disputes between the United States and Canada).

¹¹⁴ *See, e.g.*, U.N. Charter art. 33 ("The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.").

¹¹⁵ *Id.*

¹¹⁶ For example, each treaty need not create an identical joint commission—or even create one at all—but each must prevent the dispute from escalating.

¹¹⁷ *See, e.g.*, *Gabcikovo-Nagymaros Project (Hung. v. Slov.)*, 37 I.L.M. 162 (1997).

¹¹⁸ Statute of the International Court of Justice art. 36(1) ("The jurisdiction of the Court comprises all cases which the parties refer to it and all matters specially provided for in the Charter of the United Nations or in treaties and conventions in force.").

of the trial.¹¹⁹ These procedural measures allow nations to maintain their self-autonomy throughout the adjudicatory process. Unfortunately, this self-autonomy comes at a price: the international community is unable to use adjudication to settle overly hostile transboundary water disputes where one or more of the disputing nations refuse to participate in the adjudicative process.

B. Lessons from Canadian and American Water Law

Although the international community traditionally resolves water disputes in a manner similar to Canada's approach, it will need to utilize a dispute resolution method not found in Canada in order to avoid an escalation of unresolved transboundary water disputes. Two major differences between Canadian provinces and the nations that are typically involved in transboundary water disputes create the need for a new dispute resolution method in the international community. First, there is less renewable water available in problematic areas of the world than there is in the problematic areas of Canada. Second, citizens of disputing nations do not share patriotic or other unifying ties.

The scarcity of water available to disputing nations will likely lead to unresolved and overly hostile conflicts unless a new method of dispute resolution is established in the international community. One reason Canada is capable of resolving its interprovincial water disputes diplomatically is because the country has an estimated 2,902 km³ of total renewable water.¹²⁰ Contrastingly, the disputing nations of Kenya and Uganda have only an estimated 30.7 km³ and 66 km³ of total renewable water, respectively.¹²¹ This contrast is even more startling when one considers the fact that Kenya is the most populous of the three countries and the fact that Uganda is only slightly less populous than Canada.¹²² The substantial lack of water available to disputing nations creates a significant obstacle to the success of treaty negotiations that is not easy to overcome. Indeed, the scarcer the water supply is, the more desperate nations will become to obtain every ounce of water available, even if

¹¹⁹ See e.g. *Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.)*, 1986 I.C.J. 14 (June 27) (deciding a case after the United States had already backed out of the litigation—to which the United States claims it is not bound).

¹²⁰ *Total Renewable Water Resources, The World Factbook*, CIA, available at <https://www.cia.gov/library/publications/the-world-factbook/fields/2201.html> (last visited Sept. 19, 2015) (listing the estimated total renewable water resources for each country of the world as of 2011).

¹²¹ *Id.*

¹²² Kenya's 2012 estimated population was 40,863,000, Canada's was 34,207,000, and Uganda's was 33,796,000. *Countries of the World*, WORLD ATLAS, available at <http://www.worldatlas.com/aatlas/populations/ctypopls.htm> (last visited Sept. 19, 2014).

acquiring the water comes at the expense of neighboring nations.¹²³ There is evidence that the scarcity of other resources has caused international conflicts in the past,¹²⁴ so conflicts from water scarcity would not be surprising.

Additionally, the lack of patriotic or otherwise unifying ties among the citizens of disputing nations makes transboundary water disputes more difficult to resolve than interprovincial water disputes in Canada. As noted above,¹²⁵ Canadian provinces routinely settle their water disputes by having each province's leaders meet and work through the problems until a solution is agreed upon. It seems likely that this routine works, at least partially, because the relevant leaders—and the people they represent—have an inherent respect for each other as fellow Canadians. However, in transboundary water disputes such respect is not inherent.¹²⁶ In fact, many of the nations that are currently involved in water disputes are also involved in other disputes.¹²⁷ This lack of unity and general cooperation among nations involved in water disputes increases the probability that the nations will have a difficult time agreeing to enter into a water treaty or to submit the dispute to the ICJ.

In light of the unique difficulties of transboundary water disputes (relative to the difficulties of Canadian interprovincial water disputes), it is clear that the international community needs to adopt a new method for resolving water disputes that cannot be resolved by the disputing nations on their own. It is important to resolve such unsettled transboundary water disputes because unresolved disputes will likely escalate into dangerous situations in the future.¹²⁸ This is especially true in light of predicted climate changes, which would increase water scarcity and further exasperate tensions between disputing nations.¹²⁹ Therefore, it is worthwhile to investigate whether legislative appropriation—a water dispute resolution method that has been utilized by the United States but is currently absent in both Canada and the international community—could be successfully employed on an international level.

¹²³ INTELLIGENCE COMMUNITY ASSESSMENT, *supra* note 9, at 4 (“We assess that during the next 10 years a number of states will exert leverage over their neighbors to preserve their water interests.”).

¹²⁴ John W. Maxwell & Rafael Reuveny, *Resource Scarcity and Conflict in Developing Countries*, 37 J. PEACE RES. 301, 315 (2000) (“Our model implies that, in the absence of effective humanitarian interventions, one may observe recurring phases of peace and conflict due to renewable resource scarcity.”).

¹²⁵ See *supra* Part V.B.

¹²⁶ After all, citizens of different nations, by definition, do not share national ties.

¹²⁷ Rose M. Mukhar, *The Jordan River Basin and the Mountain Aquifer: The Transboundary Freshwater Disputes between Israel, Jordan, Syria, Lebanon, and the Palestinians*, 12 ANN. SURV. INT'L & COMP. L. 59, 85 (2006) (noting, in regards to water disputes in the middle east, “the existence of disputes in the region unrelated to water makes the resolution of water disputes much harder to achieve, since they can rarely be dealt with in isolation”).

¹²⁸ See, e.g., *supra* text accompanying notes 120–29 (explaining why transboundary water disputes are likely to become violent).

¹²⁹ See *supra* Part II.A (discussing, in part, the predicted effects of climate change on fresh drinking water).

In rare circumstances,¹³⁰ an international body could, and arguably should, use legislative appropriation to settle overly hostile transboundary water disputes. Without such action, some disputes might never be resolved. After all, before legislative appropriation was employed in the United States, some interstate water disputes went unresolved for many decades.¹³¹ Additionally, as long as nations are allowed to supersede legislative action through a subsequently negotiated treaty, any international legislative action would allow nations to maintain some of their self-autonomy.

VII. PROPOSED SOLUTION

Because it would need to act only rarely—when there is at least a threat to the peace¹³²—the UN Security Council could, and should, resolve certain transboundary water disputes through legislative appropriation, as permitted by the UN Charter. This Part will discuss the relevant articles of the UN Charter and demonstrate that the Security Council could appropriate water between or among disputing nations in a beneficial manner and in accordance with those articles.

Articles 33 through 42 of the UN Charter permit the Security Council to settle international disputes. The first six of these articles require and encourage the peaceful settlement of all disputes. The last four articles instruct the Security Council on the actions it may take to prevent a threat to the peace.

When “the continuance of [a dispute] is likely to endanger the maintenance of international peace and security,”¹³³ Article 33 states that the parties to the dispute¹³⁴ “shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.”¹³⁵ The Security Council is also authorized to “call upon the parties to settle their dispute by such means.”

¹³⁰ The international body would need to follow the United States’ lead and resolve water disputes through legislative appropriation only in rare occasion.

¹³¹ See Reid, *supra* note 66 (explaining the dispute between California and Nevada). See, e.g., *supra* notes 120–29 and accompanying text (explaining why transboundary water disputes are likely to become violent).

¹³² A “threat to the peace” is a term of art used in the UN Charter. See *infra* notes 148–50.

¹³³ The Security Council is authorized to investigate and make such a determination pursuant to Article 34 of the Charter. U.N. Charter art. 34 (“The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.”).

¹³⁴ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY 583–84 (Bruno Simma et al. eds., 2d ed. 2002) (“[I]t must be concluded that the members of the UN are the primary addressees here. . . . [But as] a rule of customary law, the obligation of peaceful settlement applies also to third party States that are not members of the UN.”).

¹³⁵ U.N. Charter art. 33, para. 1.

In other words, parties to a transboundary water dispute that has not led to a breach of the peace are allowed to choose their own method for resolving the dispute, but the parties must actively seek to resolve the dispute in a peaceful manner.¹³⁶ If disputing parties fail to resolve the dispute through a chosen method, the disputing parties may select another method, or resume any previously used method.¹³⁷ They do not, however, become entitled to use an unpeaceful method.¹³⁸

During the dispute, any member of the UN, whether a party to the dispute or not, may “bring [the] dispute . . . to the attention of the Security Council.”¹³⁹ Bringing a dispute to the attention of the Security Council is not simply informing it that the dispute exists. Instead, Article 35 “provides a legal basis for all members of the UN to prompt the Security Council to act, provided certain prerequisites are met.”¹⁴⁰ The Security Council is not obligated to act simply because a dispute has been referred to it under this provision.

On the other hand, the Security Council *is* required to take some action if the requirements in Article 37 are met.¹⁴¹ This obligation is triggered when the following events all occur: first, the disputing nations must fail to resolve the dispute through the methods indicated in Article 33. Second, at least one of the disputing parties must subsequently refer the dispute to the Security Council.¹⁴² Finally, the Security Council must “[deem] that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security.”¹⁴³ Once these requirements are met, the Security Council must make a non-binding recommendation, either recommending a procedure for the disputing parties to use in settling their own dispute—pursuant to Article 36(1)—or

¹³⁶ Despite this flexibility, Article 36(3) seems to indicate that the UN usually prefers that the disputing parties refer disputes to the ICJ. U.N. Charter art. 36, para. 3 (“In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the Statute of the Court.”); THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 583–84 (“In addition, Art. 36(3) provides that disputes should, as a general rule, be referred to the ICJ.”). Additionally, Article 36(1) allows the Security Council—at any time during the dispute, including at its inception—to offer a non-binding recommendation to the disputing parties as to which method of dispute resolution they should employ. U.N. Charter art. 36, para. 1 (“The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.”). THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 628 (“Recommendations of the SC according to Art. 36(1) are not binding.”).

¹³⁷ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 587 (noting that if parties fail to resolve a dispute through any given method, they “are free once again to resort to a procedure already used”).

¹³⁸ *Id.* (“[B]ecause of the responsibility incumbent upon them, even in the event of a failure the parties are not entitled to break off mutual contact, but must continue their efforts with a view to resolving the controversy.”).

¹³⁹ U.N. Charter art. 35, para. 1.

¹⁴⁰ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 610.

¹⁴¹ U.N. Charter art. 37.

¹⁴² U.N. Charter art. 37, para. 1.

¹⁴³ U.N. Charter art. 37, para. 2.

recommending a specific solution to the dispute, such as how the water ought to be appropriated in a water dispute,¹⁴⁴ under Article 37.¹⁴⁵

As it decides whether to take a more active role in the dispute, the Security Council is permitted to “call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable.”¹⁴⁶ Such provisions usually include calling for “the suspension of hostilities, troop withdrawal, and the conclusion of or adherence to a truce,” and cannot go “further than pure ‘holding operations’, or [produce] more than ‘stand-still’ or ‘cooling-off’ effects.”¹⁴⁷ These provisional measures are meant to keep conflicts from boiling over while the Security Council makes a final decision.

Regardless of any recommendations or provisions it makes (or chooses not to make), the Security Council may pass a binding decision—subject to the principals of Articles 41 and 42—upon disputing nations when it determines that a dispute has escalated to become a “threat to the peace, breach of the peace, or act of aggression”¹⁴⁸ Such action “need not be directed against a law-breaker but can be employed whenever this appears conducive to the maintenance of international peace and security.”¹⁴⁹ Therefore, even if a conflict is not international per se, it can still prompt U.N. Security Council action—as was the case where a lack of food and commodities “essential for survival” in Somalia prompted Security Council intervention.¹⁵⁰ Clearly a water dispute between or among different nations could be similarly destabilizing, if not more so,¹⁵¹ and could allow the Security Council to take action.

If the Security Council decides to issue a binding resolution, it must first attempt to resolve the dispute through measures “not involving the use of force.”¹⁵² Article 41 lists several examples of such measures:

¹⁴⁴ U.N. Charter art. 37, para. 2 (“If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.”).

¹⁴⁵ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 643.

¹⁴⁶ U.N. Charter art. 40.

¹⁴⁷ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 732.

¹⁴⁸ U.N. Charter art. 39. Article 39 creates a transition for the Security Council. Once a triggering condition has occurred, the Security Council is no longer constrained to simply giving recommendations, but it can begin to mandate action. The Security Council can still choose to make a non-binding recommendation. (“The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and *shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.*”) (emphasis added).

¹⁴⁹ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 739.

¹⁵⁰ S.C. Res. 751, U.N. Doc. S/RES/751 (Apr. 24, 1992) (condemning “all violations of international humanitarian law occurring in Somalia, including in particular the deliberate impeding of the delivery of food and medical supplies essential for the survival of the civilian population “and “[a]cting under Chapter VII of the United Nations [to authorize] the Security-General and Member States . . . to use all necessary means to establish as soon as possible a secure environment for humanitarian relief operations in Somalia”).

¹⁵¹ See, e.g., *infra* Part VI.B (explaining why transboundary water disputes are likely to become violent).

¹⁵² U.N. Charter arts. 41–42.

“These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.”¹⁵³ The Security Council has relied on Article 41 to create international criminal tribunals and interim administrations.¹⁵⁴ If these peaceful measures are inadequate—or if the Security Council determines they would be inadequate—then the Security Council is permitted to apply stronger enforcement measures,¹⁵⁵ up to and including, in “exceptional cases,”¹⁵⁶ the use of force.

In applying the UN Charter to transboundary water disputes, Article 41 appears to authorize the Security Council to appropriate water among disputing nations when there is a threat to the peace. It additionally appears to authorize the Security Council to create a dispute-specific water commission with neutral experts and representatives from each of the disputing nations to help the Security Council determine what an “equitable and reasonable” intermediate appropriation—the standard under the Convention on the Law of the Non-Navigational Uses of International Watercourses¹⁵⁷—would be.¹⁵⁸ Such a commission could help all of the disputing nations ensure that their needs, wants, and concerns are appropriately considered. Because the Security Council has the ability to take any non-forceful measures to maintain international peace, it is not prohibited from being creative in this manner.

Moreover, the Security Council could determine how the water should be appropriated in a stopgap—rather than a permanent—manner, while also recommending a course of action to help the disputing nations subsequently re-appropriate the water between or among themselves. If the disputing nations were successful in agreeing to their own appropriation plan, such a plan could replace the Security Council’s appropriation—just as a subsequent internally appointed administration has replaced interim administrations created by the Security Council in other cases.¹⁵⁹ Thus, although the disputing nations would lose some self-autonomy because their dispute would be—at least temporarily—settled

¹⁵³ U.N. Charter art. 41.

¹⁵⁴ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 740.

¹⁵⁵ U.N. Charter art. 42 (“Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.”).

¹⁵⁶ THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 134, at 753.

¹⁵⁷ Convention on the Law of the Non-Navigational Uses of International Watercourses art. 5, *opened for signature* May 21, 1997, 51 U.N.T.S. 869.

¹⁵⁸ See Michael Keene, *The Failings of the Tri-state Water Negotiations: Lessons to be Learned from International Law*, 32 GA. J. INT’L & COMP. L. 473, 485 (2004) (“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. It transcends the limitations of the systems of water allocation in the negotiating countries.”).

¹⁵⁹ See, e.g., *U.N. Mission Cuts Down Staff in Kosovo*, CHINAVIEW.CN (Aug. 11, 2008, 23:35), available at http://news.xinhuanet.com/english/2008-08/11/content_9192628.htm (explaining that nine years after UN Security Council Resolution 1244 established an interim administration in Kosovo, the interim administration was being cut back, and also explaining that “[t]he process is expected to last for some months with most authorities transferred to the Kosovo government”).

without their full consent, they would not be deprived of a voice in the decision-making process.

This analysis demonstrates that the Security Council, within the United Nation's established framework, has the authority to enact and enforce water appropriations. Doing so would help balance the international community's need to settle heated transboundary water disputes with the disputing nations' desire for continued self-autonomy. That does not mean, however, that this solution is immune to criticism.

VIII. CRITICISMS AND RESPONSES

One obvious criticism is that no international bodies—including the Security Council—have anywhere near as much binding authority over nations as the American Congress does over states.¹⁶⁰ Consequently, critics might argue that the international community cannot successfully pattern a new dispute resolution mechanism after a mechanism used solely by the American Congress.

It is true that the international community does not own the water involved in the disputes it seeks to resolve. Despite this fact, the Security Council has adequate authority under the UN Charter to enforce any water appropriation it determines is necessary under Articles 39 and 41. After all, the very articles that authorize the Security Council to appropriate water also provide examples of peaceful measures that can be used to enforce the appropriation.¹⁶¹ Additionally, if these peaceful measures prove inadequate at enforcing the appropriations (or the Security Council determines that they would be inadequate), the Security Council could authorize members of the United Nations—including the members of the Security Council itself—to use force in order to support the appropriation.¹⁶² Hence, the Security Council has the authority to make its water appropriations as binding as it wants them to be.

A second potential criticism is that Security Council involvement in water appropriation might be just as likely to cause a war as to prevent one. It is at least plausible that some nations would use force to prevent any deprivation of their sovereignty—especially one that dispossessed them of a resource as vital as water. While several features of the proposed solution (including the fact that nations could supersede the

¹⁶⁰ See Oona Hathaway & Scott J. Shapiro, *Outcasting: Enforcement in Domestic and International Law*, 121 YALE L.J. 252, 259 (2011) (“[I]nternational law is not law because it is (1) not backed by physically coercive sanctions and (2) not administered by members of the system in question.”).

¹⁶¹ See Jeong Hwa Pires, *North Korean Time Bomb: Can Sanctions Defuse It? A Review of International Economic Sanctions as an Option*, 24 GA. J. INT'L & COMP. L. 307 (1994) (discussing a study that concluded that “[e]conomic sanctions are most likely to be successful if they are targeted against a relatively weak and unstable country,” but also noting that “[e]ven if a particular exercise of sanctions is not successful in bringing about the desired policy changes, the imposition of sanctions plays an important role as a signal of disapproval which may cause alterations in political behaviors of other countries”).

¹⁶² U.N. Charter art. 42.

Security Council's appropriation and the fact that the nations' own experts would play a significant role in recommending what the appropriation should be) are aimed at pacifying feuding nations, it must be conceded that a forced appropriation may nevertheless cause some nations to reach their boiling point.

However, the Security Council may appropriate water between or among disputing nations only if it believes such action will "maintain or restore international peace and security."¹⁶³ Therefore, if it is foreseeable that such an action would actually lead to violence, the Security Council is not allowed (under those articles) to appropriate water. Moreover, the very threat that the Security Council might eventually make a binding appropriation may, in itself, encourage some nations to settle their transboundary water disputes before they become overly hostile. These nations might think that it is better to give up a little more water in a mutually beneficial compromise now than to potentially have a less favorable resolution forced upon them later.

Finally, critics might point out that any Security Council appropriation would be susceptible to bias in favor of one of the disputing nations. This could be a serious problem because if a nation involved in a transboundary water dispute knew both that a Security Council appropriation was likely and that such appropriation would likely be favorable to that nation, then that nation might become entirely unwilling to cooperate with other nations involved in the dispute. A similar problem is also seen on the other end of Security Council appropriation. After such appropriation is made, a nation that received all it wanted from the appropriation would likely be unwilling to negotiate a subsequent appropriation with the other disputing nations. In either case, a refusal to cooperate with the other disputing nations would undercut the entire purpose behind Security Council appropriation because disfavored nations would be almost completely deprived of sovereignty over their water and the appropriation might fail to stabilize the dispute to any degree.¹⁶⁴ This danger is counterbalanced by the fact that members of the Security Council can veto a biased appropriation and encourage the other members of the Council to adopt a more neutral appropriation. Thus, although not feasible or beneficial in every situation, Security Council appropriation is a viable dispute resolution mechanism for transboundary water disputes.

IX. CONCLUSION

As the climate continues to change and as the world's population continues to increase, the world's water crises are inevitably going to become more severe. As many other scholars have noted, the current dispute resolution mechanisms utilized by the international community will be insufficient to handle the increasing severity of the water crises.

¹⁶³ U.N. Charter art. 39.

¹⁶⁴ See *supra* Part IV.C (discussing in part the susceptibility the American Congress has to base a legislative appropriation on the allocation that is the least offensive to all of the parties).

This Comment has demonstrated that one solution to this problem is for the international community to adopt a new dispute resolution mechanism that would follow the form of America's past legislative appropriations. This can be accomplished by encouraging the UN Security Council to use its powers under Articles 39, 41, and 42 of the UN Charter to appropriate water among disputing nations when a transboundary water dispute becomes a threat to the peace. Although this mechanism is not perfect, and might not be the best option for every heated transboundary water dispute, it is a viable and beneficial supplement to the dispute resolution mechanisms that currently exist in the international community.