THE DAMS THAT DAMN US: HOW THE WATER WARS BEGIN

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> *The system becomes unsettled either if a state considers that it is so militarily dominant that it can disregard its neighbors, or if a state concludes that their interests are so compromised by the existing situation that even a military defeat is better than continuing the present situation without challenge*.[1]

I. Introduction

A freshwater river flows through Country A and into Country B. Country B and its lower riparian neighbors agree on how to reasonably and equitably use the river—for irrigation, fishing, and drinking water. Country A has historically used the river in the same manner, doing so without a treaty or formal agreement with Country B. Yet over the past twenty years, and in response to climate change, Country A has dammed the river to harness its hydroelectric power and diverted it to irrigate drier regions. Country B is feeling the effect. Their river has dried up, the fish are fewer and smaller, and the country is suffering a drought, in significant part due to the damming of their lifeblood river.

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[1] Joseph W. Dellapenna, *The Berlin Rules on Water Resources: The New Paradigm for International Water Law*, *in* WORLD ENVIRONMENTAL AND WATER RESOURCE CONGRESS 2006: EXAMINING THE CONFLUENCE OF ENVIRONMENTAL AND WATER CONCERNS 3 (Randall Graham ed., 2006).

Country A does not believe it is doing anything wrong; it is their sovereign right to use their river as they see fit, and besides, climate change has exacerbated Country A's need for both hydroelectric power and clean drinking water. Country B wants Country A to use the river equitably, reasonably, and without doing significant harm to County B's own interests. Country A ignores Country B, does not agree to arbitration, and does not recognize the jurisdiction of any international bodies to rule on the matter. Neither judgment nor arbitration decision will end the drought, provide more fish, or water crops in Country B. At what point can Country B destroy the dams in Country A to set the freshwater river flowing again?

As climate change increases the risk of drought and the scarcity of fresh water, upper riparian states will seek to secure their portion of transboundary watercourses for their own use.[2] The combination of climate change and actions by upper riparians will intensify fresh water scarcity issues in lower riparians.[3] If an upper riparian damming a transboundary river exacerbates drought in lower riparian states, what recourses do those lower states have? If Country A is China—a powerful country with a strong view of sovereignty that is intent on damming the transboundary Mekong River—at what point can those lower riparian countries resort to force?[4]

This article will explain that the instruments in place for water-sharing agreements will fail, that resorting to force will be the last remaining consideration for lower riparians, and that the international community will need to act quickly to restore the balance of power over transboundary watercourses. Within the context of China's damming of the Mekong and

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[2] OFF. DIR. NAT'L INTEL., GLOBAL WATER SECURITY, INTELLIGENCE COMMUNITY ASSESSMENT, ICA 2012-08 (Feb. 2, 2012).

[3] *Id.*; *see also* David Michel, *What Causes Water Conflict?*, CTR. FOR STRATEGIC & INT'L STUDS. (Nov. 8, 2024), https://www.csis.org/analysis/what-causes-water-conflict.

[4] "The Mekong River is 4300 kilometers long and runs through or forms the borders of China, Myanmar, Laos, Thailand, Cambodia, and Vietnam. Its headwaters originate high in China's Qinghai-Tibetan Plateau, and more than half of its entire length passes through China. In China, it is called the Lancang Jiang or Lancang River." BRIAN EYLER, THE LAST DAYS OF THE MIGHTY MEKONG 4 (2019). "Despite its length, China's portion of the Mekong contributes on average less than twenty percent of all the water in the Mekong Basin." *Id.* at 6. "More than sixty-six million people live in the Mekong Basin. This number includes most of the population of Laos and Cambodia, one-third of Thailand's sixty-five million, and one-fifth of Vietnam's ninety million people." *Id.*

the likelihood of conflict, this article will examine: (1) the legal regimes for transboundary watercourses, (2) how China will justify their actions, and (3) whether the unilateral damming of a transboundary river is an internationally wrongful act. This article will further argue that the lower riparians will inevitably consider using force due to the failure of the current legal regime to provide them equitable and reasonable use of the river. Lastly, this article will argue the international community must resist lowering the armed attack threshold and must pressure China to comply with its customary international law obligations.

II. Background

The United States and the international community have recognized the growing impact water disputes will play in the near future. The 2022 U.S. National Defense Strategy,[5] the 2024 Annual Threat Assessment of the U.S. Intelligence Community,[6] and the U.S. Intelligence Council[7] all warn of increased likelihood of transboundary conflict over water due to climate change. The United Nations (U.N.) recently stated that "[h]uman-induced climate change is the largest, most pervasive threat to the natural environment and societies the world has ever experienced."[8]

Further, conflict over freshwater is inevitable: there are 276 transboundary basins overlaying 148 countries in the world.[9] As such, water utilization by one riparian always affects co-riparians within the same basin.[10]

There have been conflicts over transboundary watercourses in the recent past. The Six-Day War between Israel and its neighbors was

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[5] U.S. DEP'T OF DEF., 2022 NATIONAL DEFENSE STRATEGY 6 (Oct. 27, 2022).

[6] OFF. DIR. NAT'L INTEL., ANNUAL THREAT ASSESSMENT OF U.S. INTELLIGENCE COMMUNITY 6 (Feb. 5, 2024).

[7] OFF. DIR. NAT'L INTEL, NAT'L INTEL. COUNCIL, NATIONAL INTELLIGENCE ESTIMATE: CLIMATE CHANGE AND INTERNATIONAL RESPONSES INCREASING CHALLENGES TO US NATIONAL SECURITY THROUGH 2040, at 10 (Oct. 21, 2022) [hereinafter NATIONAL INTELLIGENCE ESTIMATE].

[8] Press Release, U.N. Human Rights Office of the High Commissioner, Climate Change the Greatest Threat the World has Ever Faced, UN Expert Warns, U.N. Press Release A/77/226 (Oct. 21, 2022).

[9] Mark Giordano et al., *A Review of the Evolution and State of Transboundary Freshwater Treaties*, 13 INT'L ENV'T AGREEMENTS: POL., L. & ECON., no. 2, 2013, at 2.

[10] CHRISTINA LEB, COOPERATION IN THE LAW OF TRANSBOUNDARY WATER RESOURCES 17-18 (2013).

fomented in part by plans to divert transboundary water.[11] After a breakdown in discussions between Israel, Jordan, Lebanon, and Syria in 1955 over the use of the resources in the Jordan River Basin, Israel and the Arab States sought independent plans to divert the river and its tributaries for irrigation purposes.[12] The Arab States believed Israel's plan was to divert the river in order to irrigate the demilitarized zone of the Negev to expand their population and control into that area.[13] In response, the Arab States sought to divert the Jordan River's tributaries, which would have reduced or halted transboundary flow into Israel.[14] In March and May 1965, Israel fired rockets across the border into Syria, destroying their diversion equipment, which Syria replied to with artillery.[15] After two incidents of sabotage by Syria where Israelis were killed by mines, in July 1966, Israel sent warplanes into Syria to destroy diversion equipment and the anti-aircraft guns protecting them. Soldiers and civilians died.[16]

In *International Waters: Identifying Basins at Risk*, researchers reviewing conflicts over international freshwater resources from 1948-1999 found that indicators for conflict were: (1) rapid or extreme change to physical or institutional systems within a basin (especially the density of dams on a river) and (2) the absence of transboundary institutional mechanisms able to manage the effects of that change.[17] Essentially, conflict was more likely if there was substantial dam building without a treaty to govern those changes.[18]

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[11] Moshe Shemesh, *Prelude to the Six-Day War: The Arab-Israeli Struggle over Water Resources*, 9 ISR. STUD. 1, 1 (2004).
[12] *Id.* at 3-5.
[13] *Id.* at 6-7.
[14] *Id.* at 15-16.
[15] *Id.* at 27-28.
[16] *Id.* at 33-34.
[17] Aaron T. Wolf et al., *International Water: Identifying Basins at Risk*, 5 WATER POL. 29, 44 (2003); *see also* Shim Yoffe, Aaron Wolf & Mark Giordano, *Conflict and Cooperation over International Freshwater Resources: Indicators of Basins at Risk*, 39 J. OF AM. WATER RES. ASS'N 1109, 1123 (2003).
[18] Shira Yoffe et al., *Geography of International Water Conflict and Cooperation: Data Sets and Applications*, 40 WATER RES. RSCH, no. 5, 2004, at 8. "[W]ater events [are defined] as instances of conflict and cooperation that occur within an international river basin; involve the nations riparian to that basin; and concern freshwater as a scarce or consumable resource (e.g., water quality, water quantity) or as a quantity to be managed

The *International Waters* study found that the Mekong basin was at risk for conflict.[19] The Mekong runs from China along the Thailand-Laos border into Cambodia and exits into the South China Sea through Vietnam.[20] China does not have a water-sharing treaty with the lower Mekong riparians[21] and is unlikely to agree to one.[22] Dam development on the Mekong has increased exponentially since that study was published.[23] This suggests the Mekong basin is even more at risk for conflict than previously assessed.[24]

If an increase in dam density is an indicator for conflict, China is expediting the likelihood of conflict. Since the early 1990s, China has been damming parts of the Mekong, but the main river remained unaltered largely due to cooperation between the four members of the Mekong River Commission (MRC)—Laos, Thailand, Cambodia, and Vietnam—which agreed to a water-sharing treaty in 1995.[25] The MRC oversees management of the Mekong River, but does not have enforcement

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(e.g., flooding or flood control, water levels for navigational purposes)." *Id.* at 3. *See also* Yoffe, *supra* note 17, at 1124; Thomas Bernauer & Tobias Böhmelt, *Basins at Risk: Predicting International River Basin Conflict and Cooperation*, 14 GLOB. ENV'T POL. 116, 133 (2014).

[19] Yoffe et al., *supra* note 18, at 1121.

[20] EYLER, *supra* note 4.

[21] *See infra* section III.D.

[22] Ariel Dinar et al., *Why are There so Few Basin-Wide Treaties? Economics and Politics of Coalition Formation in Multilateral International River Basins*, 44 WATER INT'L, 463, 465 (2019).

[23] Wei Jing Ang et al., *Dams in the Mekong: A Comprehensive Database, Spatiotemporal Distribution, and Hydropower Potentials*, EARTH SYST. SCI. DATA, 16, 1209, 1216 (2024).

[24] *See* Yoffe et al., *supra* note 17, at 1113. However, the study found that just 21 of the 1831 total water events (just over one percent) between 1948-1999 were categorized as extensive war acts, which were those "causing deaths, dislocations, or [involved] high strategic cost." *Id.* tbl.1. *But see* NATIONAL INTELLIGENCE ESTIMATE, *supra* note 7; *see also* CHINA AND TRANSBOUNDARY WATER POLITICS IN ASIA (Hongzhou Zhang & Mingjiang Li eds., 2019).

[25] Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Apr. 5, 1995, 2069 U.N.T.S. 3; *see also* Stefan Lovgren, *Southeast Asia May Be Building Too Many Dams Too Fast*, NAT'L GEOGRAPHIC (Aug. 23, 2018), https://www.nationalgeographic.com/environment/article/news-southeast-asia-building-dams-floods-climate-change.

power.[26] China has never been a member of the MRC.[27] As such, although member states have a notification and consultation requirement before building dams, China does not have a treaty-based consultation requirement with the lower riparians.[28] Over the past several years, China has constructed eleven hydropower dams—of which two are large storage dams[29]—along the mainstream in the upper Mekong basin.[30] There are currently "745 dams complete or under construction on the mainstream and tributaries of the Mekong Basin," and "nearly every tributary in every country of the Mekong is now blocked by a dam."[31]

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[26] *See* Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, *supra* note 25, ch. IV and arts. 34-35.

[27] Rémy Kinna & Alistair Rieu-Clarke, *The Governance Regime of the Mekong River Basin: Can the Global Water Conventions Strengthen the 1995 Mekong Agreement?*, 2.1 INT'L WATER L. 1, 22 (2017). The PRC does have a data-sharing agreement with the Mekong River Commission, and has varying degrees of relationships with the four member countries, including via the Lancang-Mekong Cooperation Mechanism. *See* Ren Junlin, Peng Ziqian & Pan Xue, *New Transboundary Water Resources Cooperation for Greater Mekong Subregion: the Lancang-Mekong Cooperation*, 23 WATER POL'Y 684, 690 (2021) ("Although the MRC focuses on water resources, especially on the development, utilization, and protection of transboundary water resources, China and Myanmar have not joined as members, but have only participated in a limited way as observers.").

[28] *See* Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, *supra* note 25, art. 26; Frauke Urban et al., *Transboundary River Management in Southeast Asia*, *in* CHINA AND TRANSBOUNDARY WATER POLITICS IN ASIA 43, 60 (Hongzhou Zhang & Mingjiang Li eds., 2019).

[29] These dams can store as much water as the Chesapeake Bay. Brian Eyler & Courtney Weatherby, *How China Turned Off the Tap on the Mekong River*, STIMSON CTR. (Apr. 13, 2020), https://www.stimson.org/2020/new-evidence-how-china-turned-off-the-mekong-tap/.

[30] Hydropower dams, which in theory recycle their water, can reduce the amount of water in the river in two ways. First, reservoirs produce high evaporation rates which consumes water. Second, water is over-utilized while the dam is filled, which means the river flow is reduced, at least temporarily. The downriver effects of this can be devastating. The filling of the Ataturk Dam reservoir, located on the Turkish part of the Euphrates River which flows into Syria, "took more than four years," and the "[r]educed flow and temporary stoppage of the river's flow led to failed harvests and interrupted water services in Syria." LEB, *supra* note 10, at 18.

[31] Brian Eyler & Courtney Weatherby, *All Dams Map of the Mekong Basin*, STIMSON CTR. (May 7, 2024), https://www.stimson.org/2024/all-dams-map-of-the-mekong-basin.

Climate change increases the need for freshwater storage and water appropriation through infrastructure,[32] thus increasing the risk of conflict over water. Climate change has led to an increase in the intensity and duration of heatwaves in China.[33] China suffered a heatwave during summer 2022 which reached sustained temperatures of 104 degrees Fahrenheit, and dried up lakes and rivers.[34] This drought in China arrived after a sustained period of heavy rainfall in the spring.[35] If these climate trends continue, it will likely cause China to further develop freshwater storage and diversion, to the inevitable detriment of the lower riparians. Further, China imports large amounts of hydropower from its downstream neighbors.[36] Given the threats from climate change, it will continue to seek greater independence via its own hydropower development.[37] Finally, climate change and increasing demand for water have put additional stress on China's groundwater resources. Given these resources were already

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[32] Paolo D'Odorico, Jampel Dell'Angelo, & Maria Cristina Rulli, *Appropriation Pathways of Water Grabbing*, WORLD DEV., Sept. 2024, at 1, 1-12.

[33] Ning An & Zhiyan Zuo, *Changing Structures of Summertime Heatwaves over China During 1961–2017*, 64 SCI. CHINA: EARTH SCIS. 1242, 1252 (2021); *see also* Christian Shepherd & Ian Livingston, *China's Summer Heat Wave is Breaking All Records*, WASH. POST (Aug 24, 2022, 11:20 AM), https://www.washingtonpost.com/world/2022/08/24/china-drought-heat-wave-climate-change/; *see also* John Kemp, *Beset by Drought, China Turned to Coal to Keep Lights On*, REUTERS (July 21, 2023, 12:51 PM), https://www.reuters.com/business/energy/beset-by-drought-china-turned-coal-keep-lights-kemp-2023-07-21/.

[34] Dennis Wong & Han Huang, *China's Record Heatwave, Worst Drought In Decades*, S. CHINA MORNING POST (Aug. 31, 2022), https://multimedia.scmp.com/infographics/news/china/article/3190803/china-drought/index.html; *see also* Shepherd, *supra* note 33; *see also* Keith Bradsher & Joy Dong, *China's Record Drought Is Drying Rivers and Feeding Its Coal Habit*, N.Y. TIMES (Aug. 26, 2022), https://www.nytimes.com/2022/08/26/business/economy/china-drought-economy-climate.html.

[35] *China Gears Up for Disasters as Flood Season Enters 'Critical Period,'* REUTERS (July 8, 2022, 2:19 AM), https://www.reuters.com/world/china/china-tells-regional-officials-ready-disasters-after-months-torrential-rain-2022-07-08/.

[36] David Devlaeminck, *Revisiting the Substantive Rules of the Law of International Watercourses: An Analysis Through the Lens of Reciprocity and the Interests of China*, 20 WATER POL'Y 323, 332 (2018).

[37] The PRC leads the world in hydroelectric dam energy production, and with the decrease in water levels, PRC has reverted back to a reliance on coal power plants. Keith Bradsher & Clifford Krauss, *China Is Burning More Coal, a Growing Climate Challenge*, N.Y. TIMES (Nov. 3, 2022), https://www.nytimes.com/2022/11/03/business/energy-environment/china-coal-natural-gas.html.

severely stressed due to increases in demand for irrigation, China is increasingly diverting fresh water from the south to the north.[38]

Climate change and the acceleration in large-scale dam construction has caused numerous problems on the Mekong, including floods and droughts accompanied by crop loss and the destabilization of the ecological system of the Mekong.[39] Experts expect droughts and disruptions to the water flow of the Mekong to become more common, and warn that it could lead to the collapse of the entire ecosystem.[40] At risk are the world's largest inland fisheries, which provide food security and livelihoods for sixty million people in the lower Mekong basin and provide twenty percent of the world's freshwater fish catch.[41]

These ecological disasters have already begun. China's damming of the Mekong caused a devastating drought in Laos and the lower riparians in 2019, which caused death, destroyed crops, and severely affected the ecological balance of the river.[42] The Mekong was wetter than usual

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[38] UNITED NATIONS EDUC., SCI. & CULTURAL ORG., THE UNITED NATIONS WORLD WATER DEVELOPMENT REPORT 2020: WATER AND CLIMATE CHANGE 142 (2020); *see also South-to-North Water Diversion Project*, WATER TECH., https://www.water-technology.net/projects/south_north/ (last visited July 23, 2024).

[39] Yadu Pokhrel et al., *A Review of the Integrated Effects of Changing Climate, Land Use, and Dams on Mekong River Hydrology*, 10 WATER 266, 267 (2018).

[40] Stefan Lovgren, *Mekong River at Its Lowest in 100 Years, Threatening Food Supply*, NAT'L GEOGRAPHIC (July 31, 2019), https://www.nationalgeographic.com/environment/article/mekong-river-lowest-levels-100-years-food-shortages; *see also* Lovgren, *supra* note 25.

[41] Brian Eyler, *Science Shows Chinese Dams Are Devastating the Mekong*, FOREIGN POL'Y (Apr. 22, 2020, 12:56 PM), https://foreignpolicy.com/2020/04/22/science-shows-chinese-dams-devastating-mekong-river/; *see* Tom Fawthrop, *Dams and Climate Change Kill the Mekong*, YALE GLOB. ONLINE (Nov. 28, 2019), https://archive-yaleglobal.yale.edu/content/dams-and-climate-change-kill-mekong.

[42] Alan Basist & Claude Williams, *Monitoring the Quantity of Water Flowing Through the Mekong Basin Through Natural (Unimpeded) Conditions*, SUSTAINABLE INFRASTRUCTURE P'SHIP (Apr. 13, 2020) https://www.pactworld.org/library/monitoring-quantity-water-flowing-through-upper-mekong-basin-under-natural-unimpeded; *see* Kay Johnson, *Chinese Dams Held Back Mekong Waters During Drought, Study Finds*, REUTERS (Apr. 13, 2020, (8:11 AM), https://www.reuters.com/article/us-mekong-river/chinese-dams-held-back-mekong-waters-during-drought-study-finds-idUSKCN21V0U7/. From 2019 to 2020, Thailand, Cambodia, and Vietnam suffered through the worst drought in their history. *See* Eyler & Weatherby, *supra* note 29; *see also* Lovgren, *supra* note 40; Hoang Nam, *Mekong Delta Struggles to Find Freshwater as Drought, Salt Intrusion Continue*,

during the drought, yet China dammed nearly all upper Mekong wet season flow.[43] But for China's damming of the Mekong, "portions of the Mekong along the Thai-Laos border would have experienced significantly higher flows from July 2019 to the end of the year instead of suffering through severe drought conditions."[44] Incredibly, China's actions "came after [China] 's upstream dams released nearly all of their water between January and June 2019 to produce an unprecedented amount of hydropower for sale to markets in [China]."[45] China's use of the shared river for profit caused the lower riparians to suffer their worst drought in decades.[46] This drought in China has continued into 2024, indicating that these are not temporary issues.[47]

The likelihood of conflict will continue to increase as the damaging effects of China's damming of the Mekong are further exacerbated by climate change. This article will next review current transboundary watercourse law and what recourses may be available to the Mekong's lower riparian states in the event China's actions continue to escalate.

III. Transboundary Watercourse Legal Regimes

There is no universally-accepted U.N. Convention on the law of transboundary watercourses.[48] Customary international law has largely filled the gaps, but the basis for conflict generally stems from competing visions of sovereignty over transboundary water.[49] Because of the ubiquity of transboundary basins,[50] much of the history of transboundary watercourse law developed to balance sovereignty and the desire to

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VNEXPRESS (Mar. 21, 2020, 11:39 PM), https://e.vnexpress.net/news/news/mekong-delta-struggles-to-find-freshwater-as-drought-salt-intrusion-continue-4071219.html.

[43] Eyler & Weatherby, *supra* note 29; *see also* Eyler, *supra* note 41.

[44] Eyler & Weatherby, *supra* note 29.

[45] *Id.*; *see also* Eyler, *supra* note 41.

[46] Basist & Williams, *supra* note 42; Eyler & Weatherby, *supra* note 29.

[47] Richard Bernstein, *China's Mekong Plans Threaten Disaster for Countries Downstream*, FOREIGN POL'Y (Sept. 27, 2017), https://foreignpolicy.com/2017/09/27/chinas-mekong-plans-threaten-disaster-for-countries-downstream/; *see* John Kemp, *China's Hydro Generators Wait for the Rains to Come*, REUTERS (June 18, 2024), https://www.reuters.com/markets/commodities/chinas-hydropower-generation-surges-coal-ebbs-kemp-2024-06-18.

[48] Giordano et al., *supra* note 9.

[49] Dellapenna, *supra* note 1, at 269.

[50] Giordano et al., *supra* note 9, at 2.

promote cooperation and avoid conflict.[51] The principles of transboundary watercourse law are likely considered customary international law, although whether China recognizes it as such, is a separate issue.

A. Theories of Sovereignty in Transboundary Watercourse Law

There have been four historical theories of sovereignty related to transboundary watercourses: the Harmon doctrine of territorial sovereignty ("no restraint on a state's use of waters in its territory");[52] Sovereign Equality ("a state is entitled to the flow of the waters undiminished in quantity and unchanged in quality unless it consents otherwise");[53] Prior Appropriation ("existing uses cannot be adversely affected by subsequent uses");[54] and Limited Territorial Sovereignty and the obligation to do No Significant Harm ("each co-basin state is entitled to a reasonable and equitable share of the beneficial uses of the waters" so long as they do not cause significant harm to co-riparians).[55] Each is likely to be cited in some form during any discussion over the Mekong River.

1. The Harmon Doctrine

The Harmon Doctrine is an extension of the axiom that a state is sovereign within its territory.[56] Under this theory, the upper riparian "could do virtually as it pleased with the portion of an international watercourse within its territory,"[57] which has been reflected as "the right of peoples freely to use and exploit their natural wealth and resources is inherent in their sovereignty."[58] While the Harmon Doctrine is widely-

[51] LAURENCE BOISSON DE CHAZOURNES, FRESH WATER IN INTERNATIONAL LAW 3 (2013); ITZCHAK KORNFIELD, TRANSBOUNDARY WATER DISPUTES 49 (2019).
[52] Charles B. Bourne, *The International Law Association's Contribution to International Water Resources Law*, 36 NAT. RES. J. 155, 156 (1996); *see also* Tamar Meshel, *The Harmon Doctrine is Dead, Long Live the Harmon Doctrine!*, 63 VA. J. OF INT'L L. 3 (2022).
[53] Bourne, *supra* note 52; *see also* KORNFIELD, *supra* note 51, at 57.
[54] Bourne, *supra* note 52; *see also* John E. Thorson et al., *Dividing Western Waters: A Century of Adjudicating Rivers and Streams*, 8 U. DENV. WATER L. REV. 355, 379 (2005).
[55] Bourne, *supra* note 52; *see also* KORNFIELD, *supra* note 51, at 61.
[56] Stephen C. McCaffrey, *The Harmon Doctrine One Hundred Years Later: Buried, Not Praised*, 36 NAT. RES. J. 965, 981 (1996).
[57] *Id.* at 967.
[58] G.A. Res. 626 (VII) (Dec. 21, 1952); *see also* LEB, *supra* note 10, at 44.

rejected, it is often the argument made by upper riparians[59] and reflects China's position on the Mekong.[60]

The Harmon Doctrine is based upon an opinion by U.S. Attorney General Judson Harmon during an 1890s dispute between the United States and Mexico over the diversion of the Rio Grande by upstream American farmers.[61] In response to a query by the Secretary of State on the relevant international law, Attorney General Harmon stated "[t]he fundamental principle of international law is the absolute sovereignty of every nation, as against all others, within its own territory."[62] Quoting Chief Justice John Marshall, he expanded:

> The jurisdiction of the nation within its own territory is necessarily exclusive and absolute. It is susceptible of no limitation not imposed by itself. Any restriction upon it, deriving validly from an external source, would imply a diminution of its sovereignty to the extent of the restriction, and an investment of that sovereignty to the same extent in that power which could impose such restriction. All exceptions, therefore, to the full and complete power of a nation within its own territories must be traced up to the consent of the nation itself. They can flow from no other legitimate source.[63]

Attorney General Harmon analyzed the Rio Grande issue under this principle, stating:

> [T]hat the Rio Grande lacks sufficient water to permit its use by the inhabitants of both countries does not entitle Mexico to impose restrictions of the USA which would hamper the development of the latter's territory or deprive its inhabitants of an advantage with which nature had

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[59] Joseph W. Dellapenna, *The Customary International Law of Transboundary Fresh Waters*, 1 INT. J. GLOB. ENV'T ISSUES 264, 269 (2001).
[60] *See* infra section III.D.
[61] KORNFIELD, *supra* note 51, at 44-45.
[62] McCaffrey, *supra* note 56, at 981.
[63] KORNFIELD, *supra* note 51, at 4; *see also* McCaffrey, *supra* note 56, at 981-82 (*citing* 21 Op. Att'y Gen. 274, 281-82 (1895) (*quoting* Schooner Exchange v. McFadden, 11 U.S. 116 (1812))).

> endowed it and which is situated entirely within its territory. To admit such a principle would be completely contrary to the principle that USA exercises full sovereignty over its natural territory.[64]

Harmon's theory was not applied as both countries referred the problem to their joint Boundary Water Commission to find each country's "legal and equitable rights and interests in said water."[65] In fact, the U.S. State Department concluded that the United States had never considered the Harmon Doctrine to be anything more than special pleading and repudiated the Doctrine.[66] The theory was also rejected in later Supreme Court cases and U.S. treaties, and it has been disfavored in international courts and tribunals.[67]

Despite this rejection,[68] its simple premise makes it suitable for non-legal, public affairs arguments as to why an upper riparian state should control its waters. The similarity of the Harmon Doctrine to arguments made by China in discussions over transboundary water and other issues[69] is an interesting insight into the historical, and cyclical nature of how water wars could begin.

2. Sovereign Equality

The principle of Sovereign Equality is that "any act potentially altering either the quantity or quality of the water reaching [a lower riparian] constitute[s] an infringement of *its* territorial integrity."[70] While it has been rejected in practice, this theory—usually proffered by the lower riparian—provides the counterargument to the Harmon Doctrine. The two competing theories therefore provide a basis for understanding the currently accepted theory of sovereignty underpinning customary international law of transboundary watercourses—limited territorial sovereignty.[71]

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[64] KORNFIELD, *supra* note 51, at 56.
[65] McCaffrey, *supra* note 56, at 986.
[66] Dellapenna, *supra* note 59, at 270.
[67] KORNFIELD, *supra* note 51, at 45-46; *see also* McCaffrey, *supra* note 56, at 1006-07.
[68] KORNFIELD, *supra* note 51, at 46.
[69] *See infra* sections III.B.2, III.D, IV.E.
[70] BOISSON DE CHAZOURNES, *supra* note 51, at 26 (emphasis added).
[71] *See infra* section III.A.4.

A famous use of the sovereign equality theory was the Spanish argument in the Lake Lanoux Arbitration in 1957. Spain and France were arguing over France's plan to divert (yet fully replace) the waters of a tributary of Lake Lanoux in the Pyrenees,[72] which had been the subject of an 1866 treaty between the two countries, and whose waters flowed into Spain. Although the arbitration principally concerned the interpretation of the treaty, the Lake Lanoux tribunal considered customary international law principles.[73] The Spanish argument was one of sovereign equality: that even outside the terms of the treaty, upper riparian France could not alter the flow of the transboundary watercourses without prior *agreement* with lower riparian Spain, even if all of the diverted water was replaced.[74] That is, Country A could do nothing with the river within its territory without the consent of Country B even if it ultimately had no effect on Country B's water. As the tribunal stated, this interpretation "would imply either the general paralysis of the exercise of State jurisdiction whenever there is a dispute, or the submission of all disputes, of whatever nature, to the authority of a third party; international practice does not support either the one or the other of these consequences."[75]

The principle of sovereign equality necessarily infringes on the sovereignty of the upper riparian—that is, the upper riparian can no longer use its territory as it sees fit. This would prevent any action by upper riparians and its absolutist nature is more of an argumentative position than a statement of law. The Lake Lanoux tribunal rejected "such an absolute rule of construction," stating that "[t]erritorial sovereignty plays the part of a presumption. It must bend before all international obligations, whatever their origin, but only before such obligations."[76] The tribunal ultimately decided France had taken every step necessary to ensure the rights of Spain had been heard and considered in good faith, and could continue the project.[77]

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[72] Lake Lanoux Arbitration (Fr. v. Spain), 12 R.I.A.A. 281 (Perm. Ct. Arb.1957), at 1, http://leap.unep.org/sites/default/files/court-case/COU-143747E.pdf [hereinafter Lake Lanoux Arbitration].
[73] *Id.* at 25.
[74] *Id.* at 20.
[75] *Id.* at 27.
[76] *Id.* at 16.
[77] *Id.* at 34-35.

3. Prior Appropriation

The doctrine of prior appropriation is similar to that of sovereign equality, and is based on a 'first in time, first in right' principle: the earliest beneficial use of the water has the greater right to it.[78] There are three elements to this principle: "(1) intent to apply the water to beneficial use, (2) an actual diversion of water from a natural source of surface water, and (3) application of the water to a beneficial use within a reasonable time."[79] Primarily used in the American West, this principle was initially used by gold rush miners, who recognized that those who came before them to a water source had a greater right to it.[80]

In an international context, this principle is similar to sovereign equality with the added buttress of reliance. For example, if a lower riparian state developed their irrigation infrastructure and requirements faster than an upper riparian state, under the prior appropriation principle the upper riparian's future development would be stunted, since any impact on the water's flow would infringe on the prior beneficial use—and more senior claim—of the lower riparian. If the lower riparian used a specific volume of water before the upper riparian had developed their uses of it, under this principle the upper riparian would not be able to alter the quality of water reaching the lower state. As with the sovereign equality principle, this necessarily infringes on the sovereignty of upper riparians.

The use of the Nile River provides an example of this argument being used by lower riparians. Ethiopia, an upper riparian, built the Grand Ethiopian Renaissance Dam (GERD) to harness the hydroelectric power of the Nile.[81] As identified in a recent article, "although [eighty-five percent] of Nile waters originate in Ethiopia, nearly all consumptive use

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[78] Irwin v. Phillips, 5 Cal. 140, 147 (1855).

[79] DAVID H. GETCHES, SANDRA B. ZELLMER & ADELL L. AMOS, WATER LAW IN A NUTSHELL 71 (5th ed. 2015); *see also* Kait Schilling, *Addressing the Prior Appropriation Doctrine in the Shadow of Climate Change and the Paris Climate Agreement*, 8 SEATTLE J. ENV'T L 97, 98 (2018).

[80] Douglas R. Littlefield, *Water Rights During the California Gold Rush: Conflicts over Economic Points of View*, 14 W. HIST. Q. 415, 416 (1983).

[81] Max Bearak & Sudarsan Raghavan, *Africa's Largest Dam Powers Dreams of Prosperity in Ethiopia—and Fears of Hunger in Egypt*, WASH. POST (Oct. 15, 2020, 1:29 PM), https://www.washingtonpost.com/world/interactive/2020/grand-ethiopian-renaissance-dam-egypt-nile/.

occurs downstream in Egypt and Sudan." [82] Egypt, as the furthest downstream, contributes no water to the Nile. However, Egypt has relied on water from the Nile for thousands of years, and the GERD will have a significant effect on the amount of water that reaches Egypt and Sudan.[83] Egypt has claimed rights over the upstream use of the Nile based on British colonial era treaties that guaranteed it a portion of the Nile's flow.[84] Over the past several decades Egypt has claimed that "[e]ach riparian country has the full right to maintain the status quo of rivers flowing on its territory." [85] Without an enforcement mechanism over those upper riparians, however, Egypt has been disregarded, and discussions between the Egyption and Ethiopian governments have been fruitless—Ethiopia built the GERD and it is being filled.[86] Egyptian leaders from Anwar Sadat to Abdel Fatah al-Sissi have threatened war over Ethiopia's use and damming of the Nile.[87] Climate change is exacerbating drought and raising tensions over water, and arguments over prior use are degenerating into threats of armed conflict.

4. Limited Territorial Sovereignty & No Significant Harm

The current favored international water allocation theory is based on the principle of Limited Territorial Sovereignty and the obligation to do No Significant Harm. The principle of limited territorial sovereignty over shared watercourses is largely considered to be a principle of customary international law and is articulated in many of the international and bi-lateral treaties on the uses of transboundary watercourses.[88]

Under this principle, a riparian sovereign can use the waters within its territory equitably and reasonably so long as that use does not cause

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[82] Kevin G. Wheeler et al., *Understanding and Managing New Risks on the Nile with the Grand Ethiopian Renaissance Dam*, 11 NATURE COMMC'N, no. 1, 2020, at 2.
[83] *Id.*; Bearak & Raghavan, *supra* note 81.
[84] Wheeler et al., *supra* note 82, at 2.
[85] KORNFIELD, *supra* note 51, at 60.
[86] Bearak & Raghavan, *supra* note 81.
[87] Olivier Caslin & Hossam Rabie, *Is a War Between Egypt and Ethiopia Brewing On the Nile?*, AFR. REP. (May 6, 2021, 6:37 PM), https://www.theafricareport.com/85672/is-a-war-between-egypt-and-ethiopia-brewing-on-the-nile/; *Egypt Says Talks Over Grand Ethiopian Renaissance Dam Have Failed -Statement*, REUTERS (Dec. 20, 2023), https://www.reuters.com/world/africa/egypt-says-talks-over-grand-ethiopian-renaissance-dam-have-failed-statement-2023-12-19/.
[88] LEB, *supra* note 10, at 50.

significant harm with the uses of its co-riparians.[89] This equitable principle is an attempt at compromise between the absolutist theories of sovereignty articulated above. An upper riparian may use their river as they see fit, but only if it does not significantly harm co-riparians. Alternately, a lower riparian cannot object to the use of the watercourse by the upper riparian if it does not interfere with their use and does not cause them *significant* harm. This allows for restricted use of water by a sovereign but within negotiable bounds of equity. Justice Oliver Wendell Holmes articulated the competing values in *New Jersey v. New York* regarding the diversion of the Delaware River for drinking water purposes:

> A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. New York has the physical power to cut off all the water within its jurisdiction. But clearly the exercise of such a power to the destruction of the interest of lower States could not be tolerated. And on the other hand equally little could New Jersey be permitted to require New York to give up its power altogether in order that the River might come down to it undiminished. Both States have real and substantial interests in the River that must be reconciled as best they may be. The different traditions and practices in different parts of the country may lead to varying results, but the effort always is to secure an equitable apportionment without quibbling over formulas.[90]

This principle was applied by the International Court of Justice (ICJ) in the *Case Concerning the Gabčíkovo-Nagymaros Project* dispute between Hungary and Slovakia in 1997.[91] After Hungary appeared to withdraw from a water sharing treaty with Czechoslovakia, Czechoslovakia unilaterally constructed a dam which appropriated "between 80 and 90 percent of the waters of the Danube before returning

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[89] KORNFIELD, *supra* note 51, at 62; *see also* LEB, *supra* note 10, at 50; *see also* Salman M. A. Salman, *The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law*, 23 INT'L J. OF WATER RES. DEV. 619 (2007).

[90] New Jersey v. New York, 283 U.S. 336, 342-43 (1931); *see also* KORNFIELD, *supra* note 51, at 63.

[91] Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), Judgment, 1997 I.C.J. 7 (Sept. 25).

them to the main bed of the river."[92] The Court found that despite Hungary's apparent withdrawal from a treaty, Czechoslovakia "unilaterally assum[ed] control of a shared resource . . . . thereby depriving Hungary of its right to an *equitable* and *reasonable* share of the natural resources of the Danube,"[93] and found that Czechoslovakia was not entitled to unilaterally dam the transboundary Danube in that manner.[94] The Court has reiterated this principle several times.[95]

The counterbalancing obligation to do no significant harm in international watercourse law stems from the 1927 Constitutional Law Court of Germany case *Württemberg and Prussia v. Baden* (the Donauversinkung case).[96] In that case, Württemberg and Baden were German states separated by the Danube. There was natural seepage from the river through the limestone, after which the water reemerged in the basin of the Rhine, which favored Baden. Württemberg and Prussia brought suit against Baden alleging that Baden had exacerbated the seepage loss, which at times dried up the Danube almost completely. Baden alleged that Württemberg had taken actions that reduced the seepage loss to Baden's detriment. In 1927, the Court declared as a matter of international law that "no State may substantially impair the natural use of the flow of such river by its neighbor,"[97] requiring that both states had to maintain the river's natural flow. But the Court went beyond the "duty not to injure the interests of other members of the international community"

> The application of this principle is governed by the circumstances of each particular case. The interests of the States in question must be weighed in an equitable manner against one another. One must consider not only the absolute injury caused to the neighbouring State, but also

[92] *Id.* ¶¶ 33, 61, 78.
[93] *Id.* ¶ 85 (emphasis added).
[94] *Id*. ¶ 87.
[95] *See*, *e.g.*, Pulp Mills on the River Uruguay Case (Arg. v. Uru.), Judgment, 2010 I.C.J. 14 (Apr. 20); *see also* Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicar.), Judgment, 2015 I.C.J. 665 (Dec. 16).
[96] Württemberg & Prussia v. Baden (Donauversinkung case) (1927), *in* INTERNATIONAL ENVIRONMENTAL LAW REPORTS, VOLUME 1 EARLY DECISIONS (Robb ed., 1999).
[97] *Id*.

> the relation of the advantage gained by one to the injury caused to the other.[98]

This principle of no significant harm is often seen as a counterweight to the principle of limited territorial sovereignty, although its prominence in articulations of customary international law has been controversial at times. The two principles, acting in concert, have been established as the preeminent theory of sovereignty underpinning customary international law.

B. Attempts to Codify Customary International Law of Transboundary Watercourses

International transboundary watercourse law developed significantly in the second half of the twentieth century in the forms of treaties and international agreements. The International Law Association's (ILA) 1966 Helsinki Rules, the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, and the ILA's 2004 Berlin Rules all build upon one another, documenting and developing the law of transboundary watercourses over the decades.[99] Most importantly, the obligation to do no harm has been elevated from one of several factors to consider in determining what is a reasonable and equitable use, to a principle of equal prominence.[100]

1. The Helsinki Rules on the Uses of the Waters of International Rivers

The Helsinki Rules on the Uses of the Waters of International Rivers[101] was an ILA attempt to codify a standard of sovereignty for all transboundary watercourses and thereby affect customary international law. Although the Helsinki Rules are not a treaty and had neither an enforcement mechanism nor authority, they are important for how customary international law of transboundary watercourses developed.

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[98] *Id*.

[99] The United Nations Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes is an important document, but not relevant to this article.

[100] Tamar Meshel, *Swimming Against the Current: Revisiting the Principles of International Water Law in the Resolution of Fresh Water Disputes*, 61(1) HARV. INT'L L. J. 135, 140 (2020).

[101] Int'l Law Ass'n, *The Helsinki Rules on the Uses of the Waters of International Rivers*, Report of the Fifty-Second Conference (1966) [hereinafter *Helsinki Rules*].

By the middle of the 1950s, there were several ongoing transboundary water disputes, including between France and Spain in the Lake Lanoux Arbitration, India and Pakistan over the Indus, Egypt and Sudan over the Nile, Israel and its neighbors over the Jordan, and between the United States and Canada over the Columbia.[102] At that time, however, there were no rules of international law applicable to these disputes, only the four theories of sovereignty in varying degrees of acceptance.[103] Because there was no consensus on how to handle the legal disputes, the ILA formed a committee in 1954 to develop a common understanding of the state of the law of transboundary watercourses.[104]

After several conferences debating which of the principles of sovereignty should be codified,[105] the Report of the Committee to the 1966 Helsinki Conference listed thirty-seven articles over seven chapters. These were adopted by the Conference as the Helsinki Rules.[106]

The Rules, unenforceable but intended to reflect customary international law,[107] state as its principal rule in Article IV that, "[e]ach basin State is entitled, within its territory, to a *reasonable* and *equitable* share in the beneficial uses of the waters of an international drainage basin."[108] Article V lists eleven "relevant factors" that are to be considered holistically to determine "what is a reasonable and equitable share," including "the degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State."[109] The commentary to Article X clarifies, "Certainly, a diversion of water that denies a co-basin State an equitable share is in violation of international law."[110]

This constituted a settling of the scholarly legal debate that "the principle of equitable utilization of the waters of an international drainage basin is the dominant theory of law,"[111] and indicated "a middle ground

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[102] Bourne, *supra* note 55, at 156.
[103] *Id*.
[104] *See* Int'l Law Ass'n, *Statement of Principles, Report of the Forty-Seventh Conference* (1956).
[105] *See* Bourne, *supra* note 55, at 159-66; Salmon, *supra* note 89, at 628.
[106] *Helsinki Rules*, *supra* note 101.
[107] Dellapenna, *supra* note 59, at 273.
[108] *Helsinki Rules*, *supra* note 101, art. IV (emphasis added).
[109] *Id.* art. V.
[110] *Id.* art. X, Comment; *see* Bourne, *supra* note 55, at 162-65.
[111] Bourne, *supra* note 55, at 165.

between the two extremes" of prior appropriation and territorial sovereignty.[112] The Helsinki Rules established the principle of reasonable and equitable utilization as the "cardinal rule of international water law," and "placed the obligation not to cause harm as one of the elements for determining such reasonable and equitable utilization."[113]

The principles were accepted as customary international law soon after publication, and were reflected in numerous treaties and court decisions, further solidifying their status as "the single most authoritative and widely quoted set of rules for regulating the use and protection of international watercourses."[114] Although the Helsinki Rules are not legally binding, they were the foremost recitation of the principles of customary international law with regard to transboundary watercourses until the U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses was issued in 1997.

2. The United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses

Although the Helsinki Rules were an accepted articulation of customary international law, the unenforceability of the rules, the nature of customary international law, and the nature of the ILA as a promulgating body meant they would remain guidance. As Professor Joseph Dellapenna wrote: "Relying upon an informal legal system alone to legitimate and limit claims to use shared water resources is inherently unstable."[115]

In 1970, the U.N. saw the need to codify these customary international law principles in a treaty, and the General Assembly called upon the International Law Commission to prepare a set of "draft articles" on the "non-navigational uses of international watercourses."[116] As a result of this effort, the General Assembly approved the Convention on the Law of Non-Navigational Uses of International Watercourses in May 1997.[117]

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[112] *Helsinki Rules*, *supra* note 101, art. VIII, Comment; *see* Bourne *supra* note 55, at 166.
[113] Salman, *supra* note 89, at 630.
[114] *Id.*; *see* Bourne, *supra* note 55, at 215.
[115] Dellapenna, *supra* note 1.
[116] *Id.*
[117] Convention on the Law of the Non-Navigational Uses of International Watercourses, May 21, 1997, 29999 U.N.T.S. 77 [hereinafter U.N. Watercourses Convention].

As a U.N. treaty, it is the most prominent international watercourse legal standard. However, as of 2024, only 39 states are party to the Convention.[118] China has rejected the principles (described below), and the only East Asian country who has ratified it is Vietnam.[119] The United States voted in favor at General Assembly without reservation,[120] but is not a signatory to the Convention.[121] Yet insofar as they reflect customary international law, the Watercourses Convention's principles are relevant to future arbitration between co-riparians and discussion of whether violation of these principles are an internationally wrongful act.

The first of the General Principles of the Watercourses Convention is stated in Article 5, *Equitable and Reasonable Utilization and Participation*:

> Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.[122]

As with the Helsinki Rules, the Convention provided seven factors to be "considered together and a conclusion reached on the basis of the whole" to determine what is a reasonable and equitable use.[123] The factors to be considered are:

> (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
>
> (b) The social and economic needs of the watercourse States concerned;

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[118] *Id*. at 79.
[119] *Id*.
[120] U.N. GAOR, 51st Sess., 99th plen. mtg, at 7-8, U.N. Doc. A/51/PV.99 (May 21, 1997).
[121] U.N. Watercourses Convention, *supra* note 117.
[122] *Id*. art. 5.
[123] *Id*. art. 6.

> (c) The population dependent on the watercourse in each watercourse State;
>
> (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;
>
> (e) Existing and potential uses of the watercourse;[124]
>
> (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; and
>
> (g) The availability of alternatives, of comparable value, to a particular planned or existing use.[125]

None of these factors outweigh any others, although Article 10 indicates special regard is to be given to "the requirements of vital human needs."[126]

The development by this convention, which was accompanied by some controversy in the International Law Commission and in the General Assembly, was over the relation of the rule of equitable utilization to the obligation to do no harm.[127] This obligation was articulated in Article 7 (immediately after the equitable utilization rule of Article 5 and the relevant factors in Article 6) as the *Obligation Not to Cause Significant Harm*. Article 7 states: "Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States" and that states shall, when such harm does occur in the absence of an agreement to the harmful use, "take all appropriate measures… in consultation with the affected State, to eliminate or mitigate such harm

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[124] A reflection of prior appropriation as a factor to determine reasonable and equitable use. Stephen C. McCaffrey, *Non-Navigational Uses of International Watercourses*, U.N. AUDIOVISUAL LIB. OF INT'L L. (June 30, 2008), https://legal.un.org/avl/ls/McCaffrey_IW.html#.

[125] U.N. Watercourses Convention, *supra* note 117, art. 6.

[126] *Id*. art. 10.

[127] Devlaeminck, *supra* note 36, at 324.

and, where appropriate, to discuss the question of compensation."[128] As one of the Special Rapporteurs wrote: "[t]he emphasis on prevention is important, since it is often difficult to stop or modify an activity once it has begun, and it can be very complicated and expensive, if indeed it is possible, to remedy harm once caused."[129]

The obligation to do no significant harm,[130] elevated in the Watercourses Convention to complement the principle of equitable utilization, creates a standard of review for actions that a harmed state can raise to its neighbor and international adjudicative bodies. If Country B believes it has sustained significant harm due to Country A's use of an international watercourse, it can raise the issue with Country A. Articles 5, 6 and 7 direct that follow-on negotiations should reach a solution that is equitable and reasonable with regard to the uses of the transboundary watercourse and benefits both Country A and Country B.

These principles work together. Equitable and reasonable use, without the no significant harm obligation, could allow an upper riparian to assert absolute territorial sovereignty.[131] The obligation to do no significant harm without the equitable and reasonable use principle could lead to absolute sovereign equality.[132] In practice, upper riparians favor equitable and reasonable use whereas lower riparians favor the obligation to not cause significant harm, both perceiving these rules to provide protection for their uses.[133] Consequently both principles must be articulated together.

The Watercourses Convention also provides means of dispute resolution. Under Article 33, the Convention states that if the parties cannot negotiate, they can seek assistance by a third party or can "agree to submit the dispute to arbitration or to the International Court of Justice."[134]

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[128] U.N. Watercourses Convention, *supra* note 117, art. 7; *c.f.*, Section IV.C (language mirrors that of Consequences for Internationally Wrongful Acts).
[129] McCaffrey, *supra* note 124.
[130] *See infra* Section III.A.4.
[131] Francesco Sindico, *National Sovereignty Versus Transboundary Water Cooperation: Can You See International Law Reflected in the Water?*, 115 AM. J. INT'L L. UNBOUND 178 (2021).
[132] *Id*.
[133] Devlaeminck, *supra* note 36, at 324.
[134] U.N. Watercourses Convention, *supra* note 117, art. 33. The timeline outlined in Article 33 could take up to nine months to appoint a fact-finder, and relies on the consent of the

While the dispute resolution clauses are not binding on non-signatories, the ICJ could be the adjudicative body for dispute resolution for the Mekong hypothetical, as explained below.

The Convention was adopted in Resolution 51/229 in May 1997 by a vote of 103 states in favor, three against, and twenty-seven abstentions.[135] China, Turkey, and Burundi voted against the Resolution. In its statement, China representative objected to the major clauses of the articles, the view of territorial sovereignty, the balance of responsibilities between upper and lower riparians, and the fact-finding requirement in the mandatory procedures for dispute settlement.[136] China representative stated:

> Territorial sovereignty is a basic principle of international law. A watercourse State enjoys indisputable territorial sovereignty over those parts of international watercourses that flow through its territory. It is incomprehensible and regrettable that the draft Convention does not affirm this principle.[137]

Despite the 1997 vote, the Watercourses Convention entered into force in 2014 after the ratification by its thirty-fifth State.[138] The issue hindering wider acceptance seems to be between upper riparians believing the obligation to do no significant harm in Article 7 favors lower riparians, and lower riparians believing the principles in Articles 5 and 6 to use transboundary watercourses equitably and reasonably—which does not mean that each state is entitled to an *equal* share—as favoring upper riparians.[139] As a U.N.-promulgated document, it is the legal standard with

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parties to "to have access to their respective territory and to inspect any facilities, plant, equipment, construction or natural feature relevant for the purpose of its inquiry." *Id*.

[135] U.N. GAOR, 51st Sess., 99th plen. mtg, at 7-8, U.N. Doc. A/51/PV.99 (May 21, 1997).

[136] *Id.*; *see also* Devlaeminck, *supra* note 36, at 328 ("When before the General Assembly, China was one of three states to vote against the resolution stating that: (1) it did not represent general agreement by all countries; (2) it did not reflect a state's sovereignty over the parts of a watercourse that flow through a state's territory; (3) citing its preference to choose the method of dispute settlement; and (4) reaffirming its belief that provisions regarding rights and obligations of states contain an 'obvious imbalance between those of States on the upper reaches of an international watercourse and those of States on the lower reaches.'").

[137] U.N. GAOR, 51st Sess., 99th plen. mtg, at 6, U.N. Doc. A/51/PV.99 (May 21, 1997).

[138] U.N. Watercourses Convention, *supra* note 118.

[139] Devlaeminck, *supra* note 36, at 324.

the most support and is the closest articulation to customary international law on the subject of transboundary watercourses.

C. Current State of Transboundary Watercourse Law[140]

Despite the U.N. attempt to create a worldwide understanding of the use of transboundary watercourses, its acceptance was limited. China voted against the measure and Paraguay and Venezuela are the only countries from North, Central, or South America that are signatories. While the United States voted in favor of the Convention, it is not a signatory.[141] There have been other successful regional or bilateral watercourse agreements which reflect the principles of equitable and reasonable use and the obligation to do no significant harm—primarily the United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes[142]—and attempts at regional cooperation, such as the Amazon Cooperation Treaty,[143] the Nile River Basin Cooperative Agreement,[144] and the Canada-U.S. Boundary Waters Treaty.[145] There are additional multi- and bi-lateral treaties covering most of the international basins, but no universal or consistent coverage of all transboundary watercourses.[146]

In 2004, the ILA published the Berlin Rules to "express rules of law as they presently [stand] and, to a small extent, rules not yet binding legal obligations but which…are emerging as rules of customary international

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[140] Sindico, *supra* note 131; LEB, *supra* note 10; GABRIEL ECKSTEIN, INTERNATIONAL LAW OF TRANSBOUNDARY GROUNDWATER RESOURCES (1st ed. 2017).

[141] U.N. GAOR, 51st Sess., 99th plen. mtg, at 7-8, U.N. Doc. A/51/PV.99 (May 21, 1997).

[142] U.N. Economic Commission for Europe, Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Oct. 6, 1996, 1936 U.N.T.S. 269 [hereinafter UNECE Watercourse Convention].

[143] Treaty for Amazonian Cooperation, July 3, 1978, 1202 U.N.T.S. 51.

[144] Agreement on the Nile River Basin Cooperative Framework, May 14, 2010, NILE BASIN INITIATIVE, https://nilebasin.org/sites/default/files/attachments/CFA%20-%20English%20FrenchVersion.pdf.

[145] Treaty Between the United States and Great Britain Relating to Boundary Waters between the United States and Canada, U.K.-U.S., Jan. 11, 1909, 36 Stat. 2448, T.S. 548.

[146] Gabriel Eckstein, *The Status of the UN Watercourses Convention: Does it Still Hold Water?*, 36 INT'L J. WATER RES. DEV. 429, 26 (2020); Sindico, *supra* note 131, at 180; ECKSTEIN, *supra* note 140.

law"[147] and to place emphasis on environmental aspects of water law.[148] The significant update of the Berlin Rules was putting both principles in the same rule (including in the inverse). Basin States must "manage the waters of an international drainage basin in an equitable and reasonable manner having due regard for the obligation not to cause significant harm to other basin States."[149] As with the Helsinki Rules, the Berlin Rules reflect a scholarly view, but not necessarily that of states.[150]

Given the lack of comprehensive international treaty law, transboundary watercourse conflicts and "the resolution of the tension between national sovereignty and transboundary water cooperation will often be left to customary international law."[151] Customary international law takes effect due to consistent State practice out of a sense of legal obligation.[152] Principles of customary international law apply to all states[153] unless a state has "actively, unambiguously and consistently" objected to the principle of customary law "while it is in process of becoming one, and before [the principle] has crystallized into a defined and generally accepted rule of law."[154] These states are known as "persistent objectors."[155] Even when a customary international law principle exists, a state that has objected persistently since its inception cannot have that rule invoked against it.[156]

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[147] Int'l Law Ass'n, *The Berlin Rules on Water Resources,* at 4 (2004), https://www.internationalwaterlaw.org/documents/intldocs/ILA/ILA_Berlin_Rules-2004.pdf [hereinafter *Berlin Rules*].

[148] DANTE A. CAPONERA & MARCELLA NANNI, PRINCIPLES OF WATER LAW AND ADMINISTRATION 70 (3rd ed. 2019).

[149] *Berlin Rules*, *supra* note 147, arts. 12, 16.

[150] The Berlin Rules are unlikely to have an effect on the Mekong dispute.

[151] Sindico, *supra* note 131, at 178.

[152] North Sea Continental Shelf (Ger. v. Den. / Ger. v. Neth.), Judgment, 1969 I.C.J. 3, ¶ 77 (Feb. 20).

[153] *See also* Patrick Dumberry, *Incoherent and Ineffective: The Concept of Persistent Objector Revisited*, 59 INT'L & COMPAR. L. Q. 779, 780 (2010).

[154] *Id.* at 781.

[155] Report of the Int'l Law Comm'n, Seventy-Third Session, at 14, U.N. Doc. A/77/10 (2022). That objection is only recognized if the principle in question is not considered jus cogens, or a peremptory norm of international law. This article does not conclude the transboundary water principles are jus cogens.

[156] Colombian-Peruvian Asylum Case (Colom. v. Peru), Judgment, 1950 I.C.J. 266, at 276 (Nov. 20).

The principle of equitable and reasonable use and the obligation to do no significant harm are likely customary international law.[157]As outlined above, both principles have been articulated in some form in international court decisions, the U.N. Watercourses Convention, the ILA's Helsinki Rules and the Berlin Rules, the UNECE Watercourses Convention, and various multi- and bilateral treaties covering transboundary watercourses over the past seventy-five years.[158]

Some procedural steps are likely to be considered customary international law as well. The requirement to notify co-riparians of planned uses of transboundary watercourses was defined in the Lake Lanoux case[159] and has been codified in many treaties since.[160] As a principle, co-riparians "generally accept that they have a duty to provide prior notification of planned measures that may have a significant adverse effect upon co-riparians."[161]

Although these principles of watercourse law are generally considered customary international law, China tends to have a stronger view of state sovereignty, and therefore may not consider themselves bound by these principles.

D. China's View of Transboundary Watercourse Law

Given the statement by China's representative at the signing of the Watercourses Convention, China will likely argue that it is sovereign within its territory, and the principles as stated in the U.N. Convention are not applicable to it.[162] China is not party to an overall watercourse treaty

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[157] *See* Sindico, *supra* note 131, at 180-82.

[158] Dispute Over the Status and Use of the Waters of the Silala (Chile v. Bol.), Judgment, 2022 I.C.J 614 (Dec. 1); Gabčíkovo-Nagymaros Project, *supra* note 91; Pulp Mills on the River Uruguay Case, *supra* note 95; Certain Activities Carried Out by Nicaragua in the Border Area, *supra* note 95; UNECE Watercourse Convention, *supra* note 117.

[159] Lake Lanoux Arbitration, *supra* note 72, at 15 ("A State wishing to do that which will affect an international watercourse cannot decide whether another State's interest will be affected; the other State is the sole judge of that and has the right to information on the proposals.").

[160] Mara Tignino, *Prior Notification and Water Rights*, 115 AM. J. INT'L L. UNBOUND, 189, 189 (2021).

[161] *Id.*

[162] *See* U.N. GAOR, 51st Sess., 99th plen. mtg, at 6-7, U.N. Doc. A/51/PV.99 (May 21, 1997).

with its co-riparians,[163] although those states have an agreement between themselves (Mekong River Commission). Their agreements with the individual states of the Mekong River Commission in this context are generally of a data-sharing nature.[164] China is "party to approximately fifty treaties that govern or are related to its transboundary waters."[165] Therefore, customary international law governs China's responsibilities to its Mekong co-riparians, to the extent that PRC has not disavowed the principles.

Since China voted against the Watercourses Convention and disavowed the theory of limited territorial sovereignty articulated therein, China may argue (1) the Watercourses Convention does not apply to it because it is not signatory and it objected to it at the time; (2) its principles are not customary international law; and (3) even if they are customary international law, China is a persistent objector and thus is not bound by it.

Arguments that the reasonable and equitable use principle and obligation to do no significant harm do not apply to China should fail. In China's bilateral watercourse treaties with the non-Mekong River Commission countries, they *do* endorse the principle to reasonably and equitably use transboundary rivers (although with less specificity in the factors than the Watercourses Convention),[166] and, at least where it is

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[163] *See* Dinar et al., *supra* note 22, at 469-70.

[164] Huiping Chen et al., *Exploring China's Transboundary Water Treaty Practice Through the Prism of the UN Watercourses Convention*, 38(2) WATER INT'L 217, 219 (2013); *see also* Devlaeminck, *supra* note 36, at 327 ("Given that China is primarily an upstream country with a strong stance on state sovereignty and a preference for bilateral agreements with its riparian neighbors, reciprocity will arguably play a strong role in its transboundary water cooperation, and thus it is not surprising that it would strive for greater balance in these provisions. China is party to approximately 50 treaties that govern or are related to its transboundary waters.").

[165] Devlaeminck, *supra* note 36, at 327.

[166] Chen et al., *supra* note 164, at 220 (citing the Agreement on Protection and Utilization of Transboundary Waters between PRC and Mongolia, China.-Mong., Apr. 29, 1994, LEX-FAOC017921; Agreement between the Government of the Republic of Kazakhstan and the Government of the People's Republic of China Concerning Cooperation in Use and Protection of Transboundary Rivers, China-Kaz., Sept. 12, 2001, LEX-FAOC065815; and Agreement Between the Government of the People's Republic of China and the Government of the Russian Federation Concerning Reasonable Use and Protection of Transboundary Waters, China-Russ., Jan. 29, 2008, LEX-FAOC094367).

downstream to Mongolia, endorse the obligation not to do harm.[167] While these principles do not exist in treaties with the Mekong River Commission states, China's endorsement of these principles and obligations undercut any potential persistent objector argument.

However, even if customary international law is the basis for holding China accountable for transboundary watercourse issues, it is unclear what forum would hear a complaint about China's alleged violations. If there is a disagreement over a proposed transboundary project and the parties cannot resolve the issue under the principles of equitable and reasonable use and the obligation to do no significant harm, countries generally resort to application to an international body.[168] Many treaties set up their own adjudicative bodies or river commissions, while others—including the Watercourses Convention—resort to the ICJ if the parties cannot resolve the issue. There are no adjudicative bodies specified in the bi-lateral agreements between China and the lower Mekong states. Further, since China is not signatory to the Watercourses Convention, there is no obvious avenue for dispute resolution.

While the ICJ may appear to be the most obvious forum to resolve a transboundary issue, as described below, there are significant barriers for lower Mekong states holding China accountable in the ICJ, especially given the ICJ's voluntary jurisdiction.[169] While the lower riparian states' recourse is unclear, the process, at least initially, would likely follow the procedure of Internationally Wrongful Acts.

IV. Is Damming a Transboundary Watercourse an Internationally Wrongful Act?

The history of the Articles on Responsibility of States for Internationally Wrongful Acts indicates both their importance and their

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[167] Art. 4 provides that "[a]ny development or use of transboundary waters should follow the principle of fairness and equability without impeding any reasonable use of transboundary waters." Agreement between the Government of the People's Republic of China and the Government of Mongolia on the Protection and Utilization of Transboundary Waters, China-Mong., Apr. 29, 1994, UN ENVIRONMENT PROGRAMME LAW AND ENVIRONMENT ASSISTANCE PLATFORM, https://faolex.fao.org/docs/pdf/bi-17921.pdf; *see* Chen et al., *supra* note 164, at 220.

[168] KORNFELD, *supra* note 51, at 42.

[169] *Rules of Court (1978),* INT'L. CT. JUST., art. 38, para. 5, https://www.icj-cij.org/rules (last visited Nov. 13, 2024).

limits. In 1948, the U.N. General Assembly established the International Law Commission (ILC), and selected the law of State Responsibility as one of the first topics to be analyzed and codified by the new legal body.[170] After several draft articles over the decades, the General Assembly "took note" of the Draft Articles on Responsibility of States for Internationally Wrongful Acts on 12 December 2001 with U.N. General Resolution 56/83, and "commend[ed] them to the attention of Governments without prejudice to the question of their future adoption or other appropriate action."[171] The General Assembly brought attention to the Articles again in 2004,[172] 2007,[173] and 2010[174] with pledges to further examine whether the articles should be the basis of a convention on State Responsibility.

There is not yet such a convention on State Responsibility. According to the U.N.'s official history on the Articles, "[a]lthough some delegations have pressed for a diplomatic conference to consider the Articles, others have preferred to maintain their status as an ILC text approved *ad referendum* by the General Assembly."[175]

The fifty-nine articles published on the law of State Responsibility sought to dictate the basic rules of international law for how states interact with each other, what constitutes a violation of an obligation toward another state, and the remedies for such violations.[176] The Articles termed these violations "internationally wrongful acts."

A. Internationally Wrongful Acts and the *Gabčíkovo-Nagymaros Project*

Pursuant to Article 2 of the Articles of Responsibility of States for Internationally Wrongful Acts, "[t]here is an internationally wrongful act of a State when conduct consisting of an action or omission: (a) is attributable to the State under international law; and (b) constitutes a

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[170] James Crawford, Articles on Responsibility of States for Internationally Wrongful Acts 1 (2012) (U.N. Audiovisual Library of International Law).
[171] *Id.*; G.A. Res. 56/83 (Jan. 28, 2002).
[172] Crawford, *supra* note 170; G.A. Res. 59/35 (Dec. 2, 2004).
[173] Crawford, *supra* note 170; G.A. Res. 62/61 (Dec. 6, 2007).
[174] Crawford, *supra* note 170; G.A. Res. 65/19 (Dec. 6, 2010).
[175] Crawford, *supra* note 170, at 2; *see also* Press Release, General Assembly, Legal Committee Delegates Differ on Applying Rules for State Responsibility: Convention Needed, or Customary Law Adequate?, U.N. Press Release GA/L/3395 (Oct. 19, 2010), https://press.un.org/en/2010/gal3395.doc.htm.
[176] ROBERT KOLB, THE INTERNATIONAL LAW OF STATE RESPONSIBILITY 15 (2017).

breach of an international obligation of the State."[177] Article 12 clarifies that "[t]here is a breach of an international obligation by a State when an act of that State is not in conformity with what is required of it by that obligation, regardless of its origin or character."[178] This reflects that "[i]nternational practice shows that the obligation breached flows from agreements, customary rules, general principles of law, unilateral undertakings, acquiescence and estoppels, or international judgments, and so on."[179] Therefore, a state's violation of a customary international law principle or obligation can be considered an internationally wrongful act (IWA).[180]

The *Gabčíkovo-Nagymaros Project* case is an IWA case similar to the Mekong hypothetical. In 1977, Hungary and Czechoslovakia signed a treaty to construct dams along the Danube, which served as the border between the two countries for approximately eighty-eight miles .[181] The purpose of the treaty was to use "the natural resources of the Bratislava-Budapest section of the Danube River for the development of water resources, energy, transport, agriculture," and particularly to develop hydroelectricity and manage flooding.[182]

The treaty called for building two series of locks; one at Gabčíkovo (in Czechoslovak territory) with an adjacent hydroelectric powerplant and the other at Nagymaros (in Hungarian territory) with another hydroelectric powerplant, to constitute "a single and indivisible operational system of works."[183] The costs and benefits were to be borne equally, with locks at Gabčíkovo and Nagymaros "jointly owned" by the contracting parties "in equal measure," although each to be managed by the state on whose territory they were located.[184]

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[177] Int'l Law Comm'n, *Responsibility of States for Internationally Wrongful Acts*, art. 2 (2001), *as adopted by* G.A. Res. 56/83 (Jan. 28, 2002) [hereinafter IWA].
[178] *Id*. art. 12.
[179] KOLB, *supra* note 176, at 25.
[180] This article does not delve into issues of attribution, as the PRC's dam development is state-run.
[181] Gabčíkovo-Nagymaros Project, *supra* note 91, ¶¶ 15-16. Although this case involved a bi-lateral treaty, much of the language stems from the law of state responsibility rather than the law of treaties.
[182] *Id.* ¶ 15.
[183] *Id.* ¶ 18.
[184] *Id.*

Work began in 1978, but due to domestic political pressure concerning both economic viability and ecological impact, the Hungarian Government decided in 1989 to suspend the work at Nagymaros.[185] In response, Czechoslovakia began "Variant C," which involved the *unilateral* diversion of the Danube by Czechoslovakia on its territory, and included the construction of an overflow dam and a levee linking that dam to the south bank of a canal.[186] In 1991, Czechoslovakia began work on this project over the objections of the Hungarian Government, and by 1992 had prepared the Danube to be closed and started damming the river.[187] The ICJ found that "the operation of Variant C led Czechoslovakia to appropriate, essentially for its use and benefit, between 80 and 90 percent of the waters of the Danube before returning them to the main bed of the river."[188]

After diplomatic discussions and countermeasures, in 1994 Hungary and Slovakia[189] submitted the matter to the International Court of Justice (ICJ). In the meantime, Slovakia's filling of the overflow dam had led to a major reduction in the flow and in the level of the downstream waters in the Danube, to the detriment of Hungary.[190]

Hungary maintained that they had not withdrawn from the treaty itself, but instead justified their conduct by relying on a "state of ecological necessity."[191] The ecological concern was over potential flooding, reduced water levels in the Danube, the quality of the drinking water after development, and damage to flora and fauna.[192]

Despite the treaty between the two countries, the ICJ considered the principles reflected in the draft Articles of Responsibility of States for Internationally Wrongful Acts (as submitted to the U.N. in 1991) as reflecting customary international law, stating: "when a State has

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[185] *Id.* ¶ 22.
[186] *Id.* ¶ 23.
[187] *Id.*
[188] *Id.* ¶ 78.
[189] In 1992, Czechoslovakia became Slovakia and the Czech Republic, with the relevant portion of the treaty occurring in Slovakia. The ICJ found that Slovakia succeeded from Czechoslovakia and the treaty was binding on Slovakia. *Id.* ¶ 123.
[190] *Id.* ¶ 25.
[191] *Id.* ¶ 40. Further analysis on the invocation of necessity as a circumstance precluding wrongfulness below.
[192] *Id.*

committed an internationally wrongful act, its international responsibility is likely to be involved whatever the nature of the obligation it has failed to respect."[193]

The ICJ found Hungary's invocation of necessity was improper, and therefore they had no right to violate the terms of the treaty—the source of *their* international obligation. This violation of the treaty was considered an internationally wrongful act. The ICJ also found that Czechoslovakia's unilateral damming in Variant C constituted an internationally wrongful act as a violation of customary international law, the source of *their* obligation.[194] As a consequence, the ICJ found that, in accordance with Article 5 of the Watercourses Convention, Hungary and Slovakia should run Variant C jointly by using the Danube in an equitable and reasonable manner.[195] Both countries were entitled to reparations.

As stated in the case, the customary international law principles of transboundary watercourses—reasonable and equitable use and the obligation to do no significant harm—are considered international obligations of the state under IWA Article 2. The unilateral damming of a transboundary watercourse that causes significant harm to a lower riparian is likely a breach of those obligations. However, getting an offending state to acknowledge and rectify that obligation, or a court to enforce the IWA process, will be challenging.

There is no judicial enforcement mechanism created by or articulated in the Articles of Responsibility of States. The enforcement mechanisms

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[193] *Id.* ¶ 47. The ICJ considered the law of State responsibility distinct from the law of treaties, specifically from the Vienna Convention of the Law of Treaties (1969). The ICJ stated:

> A determination of whether a convention is or is not in force, and whether it has or has not been properly suspended or denounced, is to be made pursuant to the law of treaties. On the other hand, an evaluation of the extent to which the suspension or denunciation of a convention, seen as incompatible with the law of treaties, involves the responsibility of the State which proceeded to it, is to be made under the law of State responsibility. . . .It is moreover well established that, when a State has committed an internationally wrongful act, its international responsibility is likely to be involved whatever the nature of the obligation it has failed to respect.

Id.

[194] *Id*. ¶ 110.

[195] *Id*. ¶¶ 146-47.

are between states and assume diplomacy and good faith.[196] An injured state invokes the responsibility of the offending state by giving notice of its claim to that state, and may specify in particular "the conduct that the responsible State should take in order to cease the wrongful act, if it is continuing," and "what form reparation should take."[197] An offending state, however, can claim that it should not be held responsible by citing one of six "circumstances precluding wrongfulness."[198]

B. Circumstances Precluding Wrongfulness for Internationally Wrongful Acts

The Articles spell out six "circumstances precluding wrongfulness" to "erase the [internationally wrongful act], and as a further consequence, the duty to make reparation and the faculty to take [countermeasures]."[199] The circumstances precluding wrongfulness are: consent, self-defense, force majeure, distress, necessity, and countermeasures. As the commentary to the Articles states:

> Circumstances precluding wrongfulness are to be distinguished from other arguments which may have the effect of allowing a State to avoid responsibility. They have nothing to do with questions of the jurisdiction of a court or tribunal over a dispute or the admissibility of a claim. They are to be distinguished from the constituent requirements of the obligation.[200]

In the Mekong hypothetical, if the lower Mekong states specified to China that China's damming of the Mekong violated China's customary international law obligations, China may argue that their own climate change impacts necessitated their damming, and therefore they should not be held responsible for the injuries to the lower riparians. China will likely argue one of three circumstances precluding wrongfulness allows them to avoid responsibility: necessity, distress, and force majeure.

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[196] *See* KOLB, *supra* note 176, at 5.
[197] IWA, *supra* note 177, art. 43.
[198] *See id*. arts. 20-25.
[199] KOLB, *supra* note 176, at 110.
[200] Int'l Law Comm'n, *Draft Articles on Responsibility of States for Internationally Wrongful Acts with Commentary*, ch. V ¶ (7) (2001), https://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf [hereinafter IWA Commentary].

1. Necessity

Under Article 25 of the Articles of Responsibility of States, necessity may not be invoked by the offending state unless the violative act: "(a) is the only way for the State to safeguard an essential interest against a grave and imminent peril; and (b) does not seriously impair an essential interest of the State or States towards which the obligation exists, or of the international community as a whole."[201] Necessity has been invoked to preclude the wrongfulness of acts contrary to both customary law and treaty obligations, and "has been invoked to protect a wide variety of interests, including safeguarding the environment, preserving the very existence of the State and its people in time of public emergency, or ensuring the safety of a civilian population."[202]

Case law supports a strict reading of the circumstances allowing an invocation of necessity. In *Gabčíkovo-Nagymaros Project*, the Court stated "necessity can only be invoked under certain strictly defined conditions which must be cumulatively satisfied; and the State concerned is not the sole judge of whether those conditions have been met."[203] Thus, the test was that the invocation of necessity:

> [M]ust have been occasioned by an "essential interest" of the State which is the author of the act conflicting with one of its international obligations; that interest must have been threatened by a "grave and imminent peril;" the act being challenged must have been the "only means" of safeguarding that interest; that act must not have "seriously impair[ed] an essential interest" of the State towards which the obligation existed; and the State which is the author of that act must not have "contributed to the occurrence of the state of necessity." Those conditions reflect customary international law.[204]

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[201] IWA, *supra* note 177, art. 25.
[202] IWA Commentary, *supra* note 200, art. 25, ¶ 14.
[203] Gabčíkovo-Nagymaros Project, *supra* note 91, ¶ 52.
[204] *Id.* ¶ 52. That the ICJ reiterated that this test represented customary international law will be important to the PRC's inevitable argument that there is no convention regarding state responsibility.

Further, environmental concerns can be an essential interest of the State. The ICJ found in *Gabčíkovo-Nagymaros Project*, citing its earlier advisory opinion in *Legality of the Threat or Use of Nuclear Weapons*:

> [T]he environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.[205]

If climate change continues to severely impact China, they can argue in good faith that securing fresh water is an essential interest of the state; drought and starvation of its citizens, along with the increase in unlivable heat conditions, will lead to a grave and imminent peril; and that using sovereign freshwater resources is the "only means" of safeguarding the interest.

In *Gabčíkovo-Nagymaros Project*, however, Hungary could not convince the ICJ of their invocation of necessity. Although environmental concerns are an essential interest of the state, the Court found that "'extremely grave and imminent' peril must 'have been a threat to the interest at the actual time'" and Hungary's concern was merely the "apprehension of a possible 'peril.'"[206] The Court also found that despite valid concerns about the quality of drinking water, Hungary "had means available to it, other than the suspension and abandonment of the works, of responding to that situation."[207] Thus the claim of necessity in that case failed on multiple fronts, and Hungary was found to have no justification for not continuing its legal obligation to Slovakia.[208]

China's argument of necessity will similarly fail. First, damming the Mekong "seriously impairs the essential interest" of the lower riparians, as they have interest in the fresh water—it provides food to sixty million

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[205] *Id*. ¶ 53 (*citing* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C J. Reports 241, ¶ 29 (July 8, 1996)).
[206] *Id*. ¶ 54.
[207] *Id*. ¶ 55.
[208] *Id*. ¶ 57.

people and the entire ecological system is at risk. Second, the peril of mass drought in China may not yet be imminent and may be too attenuated—just as the future damage to the Danube was considered too attenuated. Third, damming and diverting the Mekong may not be the "only means" of safeguarding available fresh water for China. Lastly, all circumstances precluding wrongfulness must be temporary; China's large-scale dam building project is not temporary.[209]

Further, an argument against China's position lies in the second part of the necessity definition, which is that "necessity may not be invoked by a State as a ground for precluding wrongfulness if . . . .the State has contributed to the situation of necessity." [210] If China's actions "contributed to the situation of necessity" by their greenhouse gas emissions and thereby aggravated the climate issues they claim are causing them to dam the Mekong, the invocation of necessity may be inappropriate.[211]

Both China and lower riparians will find support for their position in the *Gabčíkovo-Nagymaros Project* case. However, the defense of necessity has been argued in arbitration and Courts several times over the last two centuries and it is firmly established as a principle of customary international law.[212] As such, if the opportunity arises, China will likely claim that damming and diverting the Mekong was necessary, although that argument should fail under the standard set in *Gabčíkovo-Nagymaros Project* case.

2. Distress

China may also claim distress as a "circumstance precluding wrongfulness" for its damming of the Mekong. Under Article 24:

> The wrongfulness of an act of a State not in conformity with an international obligation of that State is precluded if the author of the act in question has no other reasonable way, in a situation of distress, of saving

[209] IWA Commentary, *supra* note 200, pt. 3, ch. II(4), pt. 1, ch. V(4).
[210] IWA, *supra* note 177, art. 25.
[211] Keith Bradsher & Clifford Krauss, *China Is Burning More Coal, a Growing Climate Challenge*, N.Y. TIMES (Nov. 3, 2022), https://www.nytimes.com/2022/11/03/business/energy-environment/china-coal-natural-gas.html.
[212] *See* IWA Commentary, *supra* note 200, art. 25, ¶¶ 1-21.

> the author's life or the lives of other persons entrusted to the author's care.[213]

However, this defense does not apply if the situation of distress is due, either alone or in combination with other factors, to the conduct of the state invoking it or the act in question is likely to create a comparable or greater peril.[214]

Distress is most often claimed in situations involving the violation of sovereignty, where the immediate concern is saving people's lives, irrespective of their nationality.[215] As such, distress is generally argued for individual actions or for a limited group of people, as statewide emergencies are covered by the claim of necessity.[216]

China, however, will likely use distress language to preclude their responsibility. China can make the argument that the fresh water damming and diversion will save the lives of their people, even if it violates the sovereign interests of the lower riparians. Their citizens are "entrusted to [their] care," and thus the state's obligation to save the lives of its citizens—in China's argument—is greater than the state's customary international law obligation to not do significant harm to the lower riparians. As the Lake Lanoux Arbitration stated, "[t]erritorial sovereignty plays the part of a presumption. It must bend before all international obligations, whatever their origin, but only before such obligations."[217] China has the presumption of territorial sovereignty, but it bends to customary international law.

As strong as these arguments are, China is hampered by the second part of Article 24, which states that distress is not applicable if the situation is due, "either alone or in combination with other factors, to the conduct of the State invoking it" or if "the act in question is likely to create a comparable or greater peril."[218] The lower riparians can argue that the situation of distress is due to China's ecological conduct, which "in combination with other factors" is a cause of the heatwaves and droughts

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[213] IWA, *supra* note 177, art. 24.
[214] *Id*. art. 24, ¶ 2.
[215] *See* IWA Commentary, *supra* note 200, art. 24, ¶¶ 2-4.
[216] *Id*. art. 24, ¶ 7.
[217] Lake Lanoux Arbitration, *supra* note 72, at 16.
[218] IWA, *supra* note 177, art. 24.

that are causing the issues. China emits more manmade greenhouse gases than the United States, Europe, and Japan combined, which has exacerbated the climate issues.[219] Further, the lower riparians will argue that damming the Mekong is "likely to create a comparable or greater peril." The 2019 drought in Laos is the harbinger. To the lower riparians, the Mekong drying up is a greater peril not just to the lower riparians, but to the global food supply chain.

3. Force Majeure

The last potential argument for China's violation of its obligation to do no significant harm to the lower riparians is under Article 23, Force Majeure. Under that article, the violative act "is precluded if the act is due to force majeure".[220] The article and the commentary then clarify (1) "the act in question must be brought about by an irresistible force or an unforeseen event;" (2) "which is beyond the control of the State concerned;" and (3) "which makes it materially impossible in the circumstances to perform the obligation."[221]

Climate change is likely not force majeure as the Articles of Responsibility of States foresaw its use. "Force majeure differs from a situation of distress (art. 24) or necessity (art. 25) because the conduct of the State which would otherwise be internationally wrongful is involuntary or at least involves no element of free choice."[222] Force majeure is commonly invoked to account for a violation of territorial sovereignty due to the loss of control of an aircraft or ship due to an unforeseen technical issue, or for a state's claim of the impossibility of honoring contract obligations due to an "extremely strained economic situation."[223]

It is unlikely that China can make an argument that force majeure caused them to build the dams. While there may not have been other obvious solutions to the issue, the act of damming or diverting the Mekong was not involuntary and involved an element of free choice. That climate change is beyond the control of the state, however, means China may use

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[219] Bradsher & Krauss, *supra* note 211.
[220] IWA, *supra* note 177, art. 23.
[221] *Id.*; IWA Commentary, *supra* note 200, art. 23, ¶ 2.
[222] IWA Commentary, *supra* note 200, art. 23, ¶ 1.
[223] KOLB, *supra* note 176, at 123.

force majeure language to make their necessity and distress arguments. In doing so, China will attempt to avoid the consequences of an internationally wrongful act.

All of these arguments regress into a balancing act between the state's responsibility to its own citizens and its responsibility to its neighboring states. Further, it results in a weighing of the right of China to have fresh water against those lower riparian states to the same water.

These claims, therefore, become a rehashing of the 100-year-old debate over the sovereignty of transboundary watercourses. While customary international law has settled on the two overarching principles of reasonable and equitable use and the obligation to do no significant harm, the value of those principles, and their underlying compromise over sovereignty, will be pushed to their limit when one state has to weigh the lives of its neighbors' citizens over its own.

C. Consequences of an Internationally Wrongful Act

If a state accepts that it has committed an IWA—rather than trying to preclude the wrongfulness of its acts—it may face consequences. As the scholar Robert Kolb wrote:

> There are two main consequences of an IWA: first, the duty of the wrongdoing party to make reparation; and second, residually, the faculty of the aggrieved party to take [countermeasures]. The first tells the responsible State what it must do; the second tells the aggrieved State what it could do.[224]

First, an offending state has the duty to cease its breach of the international obligation, which should be done upon notification.[225] Once the IWA has ceased, an offending state that accepts fault can remedy the situation via reparations in several ways: restitution, compensation, and satisfaction, either singly or in combination.[226]

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[224] *Id.* at 148.
[225] IWA, *supra* note 177, art. 30.
[226] *Id*. arts. 31, 34.

1. Restitution

Restitution is the obligation to "re-establish the situation which existed before the wrongful act was committed, provided and to the extent that restitution: (a) is not materially impossible; (b) does not involve a burden out of all proportion to the benefit deriving from restitution instead of compensation." [227] Restitution is an attempt to "wipe out" the consequences of the IWA.[228] "Restitution may take the form of material restoration or return of territory, persons or property. . . .or some combination of them."[229] In some cases, however, it may not be possible to restore the injured state to the situation before it existed.[230] In those cases, restitution may be accompanied by compensation.

2. Compensation

Compensation is reparations for the financial losses from the injury. It is the obligation to compensate for the damage caused by the IWA, if such damage is not made good by restitution, and "shall cover any financially assessable damage including loss of profits insofar as it is established."[231] To be compensable, these material damages must have been proximately caused by the act or omission of the offending State.[232] While restitution is the principal obligation, compensation is available "to fill in any gaps so as to ensure full reparation for damage suffered."[233]

In the *Gabčíkovo-Nagymaros Project* case, the ICJ declared: "It is a well-established rule of international law that an injured State is entitled to obtain compensation from the State which has committed an internationally wrongful act for the damage caused by it."[234] The Court

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[227] *Id*. art. 35.
[228] IWA Commentary, *supra* note 200, art. 31, ¶ 2 (quoting The Factory at Chorzów (Ger. v. Pol), Judgment, 1928 P.C.I.J. 47 (Sept. 13) which stated that "the essential principle contained in the actual notion of an illegal act—a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals—is that reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed.").
[229] *Id*. art. 35, ¶ 5.
[230] *See* McCaffrey, *supra* note 124.
[231] IWA, *supra* note 177, art. 36.
[232] IWA Commentary, *supra* note 200, art. 31, ¶¶ 5, 7.
[233] *Id*. art. 36, ¶ 3.
[234] Gabčíkovo-Nagymaros Project, *supra* note 91, ¶ 152.

found "Hungary shall compensate Slovakia for the damage sustained by [Slovakia] on account of the suspension and abandonment by Hungary of works for which it was responsible" and that "Slovakia shall compensate Hungary for the damage it has sustained on account of the putting into operation of the 'provisional solution' [Variant C] by Czechoslovakia and its maintenance in service by Slovakia."[235] Although the Court did not decide on specific amounts, it did suggest that "compensation could satisfactorily be resolved in the framework of an overall settlement if each of the Parties were to renounce or cancel all financial claims and counter-claims."[236]

Compensation for ecological damages is possible. The U.N. assessed Iraq's liability "for any direct loss, damage—including environmental damage and the depletion of natural resources. . . . as a result of its unlawful invasion and occupation of Kuwait."[237] In environmental IWA cases, "[d]amage to such environmental values (bio-diversity, amenity, etc.—sometimes referred to as 'non-use values') is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify."[238]

3. Satisfaction

Lastly, satisfaction is the obligation to give moral redress for the injury caused by that act *if* it cannot be made good by restitution or compensation. This may consist of an acknowledgment of the breach, an expression of regret, or a formal apology, but which cannot humiliate the responsible State.[239] Satisfaction "is the remedy for those injuries, not financially assessable, which amount to an affront to that State."[240] "One of the most common modalities of satisfaction provided in the case of moral or non-material injury to the State is a declaration of the wrongfulness of the act by a competent court or tribunal."[241] Because of the counter-IWAs in the *Gabčíkovo-Nagymaros Project* case, no satisfaction was ordered.

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[235] *Id*. ¶ 155(2)D.
[236] *Id*. ¶ 153.
[237] S.C. Res. 687, ¶ 16 (Apr. 3, 1991).
[238] IWA Commentary, *supra* note 200, art. 36, ¶ 15.
[239] IWA, *supra* note 177, art. 37.
[240] IWA Commentary, *supra* note 200, art. 37, ¶ 3.
[241] *Id*. art. 37, ¶ 6.

Consequently, in response to notification of a state's breach of an obligation, the offending state should cease the act, pay the injured state to bring them back to pre-breach status, pay for additional damage, and, if necessary, apologize in some form for their breach.

If a state's entire ecological and economic system has been destroyed by the damming of a transboundary river, these actions may not suffice. As climate change makes water scarcer, it will be exceedingly difficult for the international community or the courts to understand the real and "non-use value" of fresh water. Even if damages for ecological concerns are possible, it may be impossible to satisfy the loss of a lifeblood river. The offending state may also offer rationale for their actions which may limit their state responsibility. Further, if a state refuses to acknowledge their obligation to remedy via restitution, compensation, or satisfaction, the injured state can resort to countermeasures.

D. Countermeasures

Countermeasures are the method of self-help authorized by the Articles, and are "taken by an injured state to induce the responsible state to comply with its obligations" in the event the offending state has not accepted responsibility.[242] In fact, countermeasures "may be regarded as synonymous with non-forcible reprisals."[243] A countermeasure is itself a breach of an obligation but is justified because it responds "within certain strict legal limits to the previous breach of an obligation by the other State."[244]

Countermeasures are an injured state's ability to withhold an obligation owed to the state responsible for the injury.[245] However, a countermeasure must meet certain conditions: they must respond to a previous IWA, the injured state must call upon the offending state to discontinue its wrongful act or make reparations, the injured state must notify the offending state of its intent to take countermeasures, and the countermeasure must be proportional to the injury suffered "taking into account the rights in question."[246] Once the administrative steps are

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[242] IWA Commentary, *supra* note 200, ch. II, ¶ 2; *see* KOLB, *supra* note 176, at 121.
[243] KOLB, *supra* note 176, at 175 (citing OMER Y. ELEGAB, THE LEGALITY OF NON-FORCIBLE COUNTERMEASURES IN INTERNATIONAL LAW 4 (1988)).
[244] *Id*.
[245] IWA Commentary, *supra* note 200, art. 49, ¶ 6.
[246] Gabčíkovo-Nagymaros Project, *supra* note 91, ¶¶ 83-85; IWA, *supra* note 177, art. 52.

complete, the injured state can withhold performance of one of its obligations owed to the offending state. For example, in response to a violation of U.N. Convention on the Law of the Sea by State A within State B's territorial seas, State B may close its territorial seas to State A until State A desists its offending act.[247]

In the *Gabčíkovo-Nagymaros Project* case, Czechoslovakia framed their "Variant C" unilateral damming of the Danube as a countermeasure to Hungary's failure to continue the joint project. The ICJ found that because Czechoslovakia unilaterally assumed control of a shared resource, "thereby depriving Hungary of its right to an equitable and reasonable share of the natural resources of the Danube," the countermeasure failed to be proportionate in response to Hungary's actions.[248]

Restrictions on the ability of an injured state to take countermeasures may limit its effect on the offending state if there is a significant power imbalance.[249] Countermeasures shall not affect "(a) the obligation to refrain from the threat or use of force as embodied in the Charter of the United Nations; (b) obligations for the protection of fundamental human rights; (c) obligations of a humanitarian character prohibiting reprisals; (d) other obligations under peremptory norms of general international law."[250] As such, countermeasures must be peaceful, and it is only because countermeasures are a response to an IWA and do not involve force that countermeasures are not reprisals.[251]

However, countermeasures are a "function of power."[252] The ability to take meaningful countermeasures depends largely on equal power dynamics. Whereas self-defense is a forcible self-help measure that

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[247] Michael N. Schmitt, *Responding to Malicious or Hostile Actions Under International Law*, ARTICLES OF WAR (Apr. 26, 2022), https://lieber.westpoint.edu/white-paper-responding-malicious-hostile-actions-international-law/.
[248] Gabčíkovo-Nagymaros Project, *supra* note 91, ¶ 85.
[249] KOLB, *supra* note 176, at 178-83.
[250] IWA, *supra* note 177, art. 50.
[251] KOLB, *supra* note 176, at 174, 175; MARTIN DAWIDOWICZ, THIRD-PARTY COUNTERMEASURES IN INTERNATIONAL LAW 18-19, 28 (2017).
[252] KOLB, *supra* note 176, at 177 ("Further, CM are bluntly a function of power. Powerful States may easily resort to CM. Even the mere threat to apply CM can in such cases suffice for obtaining the desired result. Less powerful States will hardly succeed with CM, especially against a more powerful State. The application of the law here depends ultimately on a political fact, i.e. the power involved.").

applies in response to an "armed attack"—and is thus about military power—countermeasures are non-forcible self-help measures in response to any breach of an obligation owed to that state.[253] Countermeasures therefore are a balance between the damage done to the injured state and the ability of the injured state to respond proportionately enough to re-set the legal balance.[254] As Professor Joseph Dellapenna stated with regards to the informal legal regime prior to the Watercourses Convention:

> The system becomes unsettled either if a state considers that it is so militarily dominant that it can disregard its neighbors, or if a state concludes that their interests are so compromised by the existing situation that even a military defeat is better than continuing the present situation without challenge.[255]

Along the Mekong, China has the power. They are economically dominant over the lower Mekong states,[256] and whether the lower Mekong states have the ability to influence China's decision-making in the long term is debatable.[257] As such, unilateral or collective countermeasures by the lower Mekong states may not affect China's continued dam building. Emphasis by the broader international community may be required to affect change.

The next option, if countermeasures are ineffective, would be for the lower riparians to take China to a judicial or administrative body to enforce the customary international law principles of IWAs. Getting heard, and getting a result, is significantly more difficult.

E. A Judgment Will Have No Effect on China

If China does not respond to the lower Mekong states, all of the above is moot if there is no judicial body to adjudicate and enforce the rights of the lower riparians. If China and lower riparians were signatories to the

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[253] *Id*. at 177, 121.
[254] *See* DAWIDOWICZ, *supra* note 251, at 19-20.
[255] Dellapenna, *supra* note 1.
[256] JONATHAN STROMSETH, BROOKINGS INST., COMPETING WITH CHINA IN SOUTHEAST ASIA: THE ECONOMIC IMPERATIVE 3 (2020).
[257] Shuxian Luo, *Provocation Without Escalation: Coping with a Darker Gray Zone*, BROOKINGS INST. (June 20, 2022), https://www.brookings.edu/articles/provocation-without-escalation-coping-with-a-darker-gray-zone/.

Watercourses Convention, the International Court of Justice (ICJ) is the mandatory Court for dispute resolution (if no arbitration or settlement occurs). Even if China was a member of the Mekong River Commission, that agreement has no reference to an external body, no internal dispute resolution mechanism, and no enforcement power.[258] If there is to be any judicial relief for the lower riparians, they will likely need to appeal to the ICJ for jurisdiction.

Whereas access to the ICJ is available for all U.N. member states (which includes all of the relevant Mekong states), the ICJ has jurisdiction over contentious cases between states which have consented to the ICJ settling that dispute. [259] Contentious jurisdiction consent may be established by unilateral declarations, in treaties, or through special agreements.[260] The ICJ, however, cannot resolve disputes for a state that does not consent to its jurisdiction.[261]

There is no indication that China would consent to a dispute submission from any of the lower riparians, either through a unilateral declaration or special agreement. In that case, the only available method for getting a case into the ICJ is through a mandatory contentious jurisdiction clause in a treaty to which China is already a signatory.

The lower riparians may have an avenue to contentious jurisdiction via the 1992 United Nations Framework Convention on Climate Change (hereinafter Climate Change Convention). [262] China, Cambodia, Laos, Thailand, and Vietnam are all signatories to the Climate Change Convention, which has the ICJ as a mandatory adjudicative body.[263] The Convention states that Parties may declare, in respect of any dispute concerning the interpretation or application of the Convention, that they

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[258] *See* Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, *supra* note 25, art. 4 ("cooperate on the basis of sovereign equality and territorial integrity in the utilization of the water resources of the Mekong Basin.").

[259] *How the Court Works*, INT'L CT. JUST., https://www.icj-cij.org/how-the-court-works (last visited Mar. 17, 2023).

[260] *Id*.

[261] *Id*.

[262] U.N. Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107 [hereinafter Climate Change Convention].

[263] *Status of Treaties, U.N. Framework Convention on Climate Change*, UNITED NATIONS TREATY COLLECTION, https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXVII/XXVII-7.en.pdf (last visited July 11, 2024).

"[recognize] as compulsory ipso facto and without special agreement, in relation to any Party accepting the same obligation: (a) Submission of the dispute to the International Court of Justice, and/or (b) Arbitration in accordance with procedures to be adopted by the Conference of the Parties. . . ."[264] As such, China may be treaty-bound to accept mandatory jurisdiction of the ICJ or arbitration for disputes that arise under the Climate Change Convention.

The Climate Change Convention has language that relates to the exploitation of resources and international water rights. The Convention acknowledges the balance between sovereignty and duty to other states within its preamble:

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.[265]

Further, within Article 4, Commitments, the Parties agree to "[c]ooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods."[266] There have been no contentious cases under Article 4 of the Climate Change Convention at the ICJ, although the ICJ intends on releasing an advisory opinion on the responsibility of states to address climate change next year.[267]

The Climate Change Convention may be an avenue for ICJ jurisdiction if the lower riparians submit the dispute to the ICJ under the mandatory jurisdiction clause of the Convention under Article 14, and the

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[264] Climate Change Convention, *supra* note 262, art. 14.
[265] *Id.* pmbl.
[266] *Id.* art. 4(1)(e).
[267] Obligations of States in Respect of Climate Change, Request for Advisory Opinion, Order 187 (Dec. 15, 2023), https://www.icj-cij.org/node/203376.

ICJ recognizes China is in violation of Article 4 and the language in the preamble to "not cause damage to the environment of other States." The ICJ can consider both the terms of the Convention and relevant customary international law.[268] Once at the ICJ, the Court may find an IWA by China against the lower states.[269]

However, there is no guarantee China will accept ICJ jurisdiction, as they recently ignored a mandatory jurisdiction provision in a different U.N. Convention. In the South China Sea Arbitration, the Philippines relied on the mandatory jurisdiction clause of the U.N. Convention of the Law of the Sea (UNCLOS) to bring a dispute before the tribunal regarding China's maritime rights and actions within the South China Sea.[270] China "consistently rejected the Philippines' recourse to arbitration and adhered to a position of neither accepting nor participating in these proceedings."[271] China considered "non-participation in the arbitration to be its lawful right" under UNCLOS, and did not send a delegation or submit documentation recognizing the jurisdiction of the body.[272] When the results of the tribunal favored the Philippines on every major point, the Ministry of Foreign Affairs of China "solemnly declare[d] that the award is null and void and has no binding force. China neither accepts nor recognizes it."[273] Since the arbitral ruling, it is unclear whether China is in

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[268] Statute of the International Court of Justice, art. 38, June 26, 1945, 33 U.N.T.S. 993.
[269] *See* Obligations of States in Respect of Climate Change, Request for Advisory Opinion, Order 187 (Dec. 15, 2023), https://www.icj-cij.org/node/203376; *see also* Jake Spring, *Climate Court Cases that Could Set Precedents Around the World*, REUTERS, (May 29, 2024, 6:17AM), https://www.reuters.com/sustainability/climate-energy/climate-court-cases-that-could-set-new-precedents-around-world-2024-05-21; *see also* Stephen L. Kass, *Suing the United States for Climate Change Impacts*, N.Y.L.J. (Sept. 25, 2020), https://www.clm.com/suing-the-united-states-for-climate-change-impacts.
[270] South China Sea Arbitration (Phil. v. China), Award, Case No. 2013-19, ¶ 4 (Perm. Ct. Arb. 2016).
[271] *Id*. ¶ 11.
[272] *Id*. ¶¶ 11, 13.
[273] Statement of the Ministry of Foreign Affairs of the People's Republic of China on the Award of 12 July 2016 of the Arbitral Tribunal in the South China Sea Arbitration Established at the Request of the Republic of the Philippines, MINISTRY OF FOREIGN AFFAIRS OF THE PEOPLE'S REPUBLIC OF CHINA (July 12, 2016, 5:12 PM), https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/201607/t20160712_679470.html.

"stealthy compliance" with the ruling, or continuing military developments and delaying any agreement on the South China Sea.[274]

As the South China Sea Arbitration indicates, China has previously ignored mandatory jurisdiction of an international tribunal and disregarded their binding determination,[275] so the possibility of justice for the lower riparians in a Court for China's internationally wrongful acts are limited. Even if the Climate Change Convention provided an avenue, there is no reason to believe China will alter their behavior and stop damming the Mekong.

Therefore, if countermeasures and an international judgment do not pressure China into complying with their obligations under customary international law, the lower riparians may consider whether forcible measures would be more effective.

V. Can Aggrieved Lower Riparians Respond with Force?

Article 2(4) of the U.N. Charter states "[a]ll 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."[276] There are two relevant exceptions to this prohibition in the U.N. Charter: authorization by the Security Council in response to an act of aggression, breach of the peace, or threat to the peace, and the inherent right of self-defense in response to an armed attack.[277] Neither exception permits the lower Mekong states to use force against China.

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[274] Mark Raymond & David A. Welch, *What's Really Going on in the South China Sea?*, 41(2) J. CURRENT SE. ASIAN AFF. 214, 222 (2022).

[275] The PRC has participated as a third party in disputes in the ICJ since the Philippines v. China Arbitration, including in March 2018 when the PRC submitted a statement in *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965 (Request for Advisory Opinion)*, ICJ, Written Statement of the People's Republic of China, March 1, 2018. The PRC also regularly participates in the mandatory procedures of the World Trade Organization Dispute Settlement Body as the complainant, the defendant and as a third party. *See* CONGYAN CAI, THE RISE OF CHINA AND INTERNATIONAL LAW 288-292 (2019).

[276] U.N. Charter art. 2, ¶ 4.

[277] U.N. Charter arts. 39, 51.

A. Damming a Transboundary Watercourse is Not Likely to Lead to an Authorization by the Security Council of an Armed Response

The U.N. Security Council has the power to "determine the existence of any threat to the peace, breach of the peace, or act of aggression."[278] It takes an affirmative vote by nine of fifteen Security Council members to declare this, including the concurrence or abstention of the permanent members: the United States, United Kingdom, France, Russia, and China.[279] An affirmative vote permits the U.N. and injured state several options, including armed force.

If the Security Council were to vote on the Mekong hypothetical, it is very unlikely China will concur or abstain in a vote regarding whether their actions constitute a threat to the peace, breach of the peace, or act of aggression. Even if the hypothetical were shifted to another transboundary dispute, the damming of a transboundary watercourse does not meet the precedential threshold of either.

Damming is not an act of aggression. G.A. Resolution 3314 defines an act of aggression as: "the use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations . . . ."[280] All of the examples provided in the Resolution involve the use of the armed forces of a state or acts of armed force against another state.[281] Further, all thirty-four Security Council resolutions regarding aggression reference the state's use of armed attacks, incursions, occupations, military attacks, bombings or air raids.[282]

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[278] U.N. Charter art. 39.

[279] U.N. Charter art. 27, ¶ 3. The other ten non-permanent Members of the Security Council are elected for two-year terms by the General Assembly. *Id*. art. 23, ¶ 2. Once a State is adjudged to have threatened the peace, breached the peace, or committed an act of aggression, the U.N. can initiate sanctions and other forcing mechanisms against the offending State under Articles 41-49.

[280] G.A. Res. 3314 (XXIX), Annex, art. 1 (Dec. 14, 1974).

[281] *Id.* Annex, art. 3.

[282] Nicolaos Strapatsas, *The Practice of the Security Council Regarding the Concept of Aggression*, *in* THE CRIME OF AGGRESSION: A COMMENTARY 178, 181, 186 (Claus Kreß & Stefan Barriga eds., 2016).

Damming is not a breach of the peace. The Security Council has declared a breach of the peace explicitly only a handful of times.[283] These involve either significant uses of armed force that are indistinguishable from acts of aggression, or domestic issues so egregious that the Security Council overcomes its reluctance to interfere in domestic matters, such as South African apartheid or Iraq's non-compliance regarding weapons of mass destruction.[284] The Mekong hypothetical does not involve the "use of armed force by a state," and does not obviously rise to the level of prior resolutions on domestic matters.

Further, damming is not a threat to the peace, although the U.N. has considered the impact of climate change on peace and security. According to the U.N., "the range of situations which the Security Council determined as giving rise to threats to the peace includes country-specific situations such as inter- or intra-State conflicts or internal conflicts with a regional or sub-regional dimension," such as the genocides in Rwanda and Kosovo, and "potential or generic threats as threats to international peace and security, such as terrorist acts, the proliferation of weapons of mass destruction and the proliferation and illicit trafficking of small arms and light weapons."[285]

The Security Council in recent years has discussed climate change's effect on peace.[286] In 2011, the U.N. Secretary-General released a report

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[283] Including the North Korean invasion of South Korea (S.C. Res. 82 (June 25, 1950)), the policies of apartheid in South Africa (S.C. Res. 311 (Feb. 4, 1972)), the Iraq invasion of Kuwait (S.C. Res. 660 (Aug. 2, 1990); S.C. Res. 678 (Nov. 29, 1990)), and Iraq's failure to cooperate with United Nations to inspect for weapons of mass destruction, (S.C. Res. 1441 (Nov. 8, 2002)), among a few other incidents.

[284] *See* U.N. Charter art. 2, ¶ 7.

[285] *FAQ*, UNITED NATIONS SEC. COUNCIL, https://www.un.org/securitycouncil/content/faq (last visited Mar. 17, 2023). The Security Council has labelled suppressive or genocidal acts (including in Somalia (S.C. Res. 733 (Jan 23,1992)); Yugoslavia (S.C. Res. 713 (Sept. 25, 1991)); Bosnia and Herzegovina (S.C. Res. 836 (June 4, 1993)); Rwanda (S.C. Res. 918 (May 17,1994)); Kosovo (S.C. Res. 1199 (Sept. 23, 1998)) and global concerns such as "international terrorism" (S.C. Res. 1373 (Sept. 28, 2001)) and the "proliferation of nuclear, chemical and biological weapons" (S.C. Res. 1540 (Apr. 28, 2004)) as threats to the peace. In 2020, the Security Council acknowledged the "COVID-19 pandemic is likely to endanger the maintenance of international peace and security," which mirrors the "threat to" language in prior Resolutions. S.C. Res. 2532 (July 1, 2020).

[286] U.N. President of the S.C., Letter dated July 28, 2020 from the President of the Security Council to the Secretary-General and the Permanent Representatives of the members of the Security Council, U.N. Doc. S/2020/751 (July 30, 2020).

entitled *Climate Change and its Possible Security Implications*, which identified climate change as a threat multiplier which may manifest "in the form of localized conflicts or spill over into the international arena in the form of rising tensions or even resource wars."[287] In 2011, the President of the Security Council acknowledged "that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security."[288] The U.N. held high-level debates in July 2020,[289] February 2021,[290] and September 2021[291] regarding climate change and security.[292] While there are several resolutions that recognize the impact of climate change on security,[293] there are no Security Council resolutions declaring a state's domestic action—whose effects are exacerbated by climate change—as a threat to the peace.

Consequently, there has not previously been a finding that unilateral damming of a transboundary watercourse is an act of aggression, breach of the peace, or threat to the peace, and the Mekong hypothetical does not meet any precedential threshold. Even if the Mekong damming is considered a threat to international peace and security, there is no realistic version of events where all five permanent members concur or abstain for the resolution. The remaining option for a state to legally respond with force is in self-defense, and only if the damming of a transboundary watercourse amounts to an armed attack.

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[287] U.N. Secretary-General, *Climate Change and its Possible Security Implications*, ¶ 16, U.N. Doc. A/64/350 (Sept. 11, 2009).

[288] U.N. President of the S.C., Statement by the President of the Security Council, U.N. Doc. S/PRST/2011/15 (July 20, 2011).

[289] Permanent Rep. of Germany to the U.N., Letter dated July 18, 2020 from the Permanent Rep. of Germany to the United Nations addressed to the Secretary-General, U.N. Doc. S/2020/725 (July 20, 2020).

[290] U.N., *Climate and Security – Security Council Debate, 23 February 2021*, YOUTUBE (Feb. 23, 2021), https://www.youtube.com/watch?v=T0ZV7vV6Mdc.

[291] Press Release, Security Council, Differences Emerge over Appropriate Forum for Discussing Climate Change, as Delegates Hold Debate on Links between Global Crisis, Security, U.N. Press Release SC/14644 (Sept. 23, 2021).

[292] In December 2021, Russia vetoed and the PRC abstained a Security Council resolution on integrating climate related security risk as a central component of U.N. conflict prevention strategies. S.C. Draft Res. S/2021/990 (Dec. 13, 2021).

[293] *See*, *e.g.*, S.C. Res. 2349 (Mar. 31, 2017) (linking the "adverse effect of climate change . . . on the stability of the [Lake Chad Basin] Region" to "violence by terrorist groups Boko Haram and [ISIL]").

B. Self-Defense is Not Permitted in Response to Damming a Transboundary Watercourse

It is unlikely the U.N. Security Council would declare unilateral damming of a transboundary watercourse a violation of Article 2(4) given the novelty and real-world political concerns of the permanent members. Therefore, the next option for the lower riparians is to determine whether damming allows them to respond in self-defense. The U.N. Charter does not "impair the inherent right of individual or collective self-[defense] if an armed attack occurs against a Member of the United Nations."[294] Historic practice confirms "an armed attack is by no means the only form of aggression, of imperilling [sic] a state's rights so that it may be compelled to resort to the exercise of a right of self-[defense]."[295]

There have been uses of force and threats of force in self-defense over transboundary water issues in the past. As described above, Israel flew planes into Syria in 1965 and destroyed diversion equipment and killed soldiers.[296] In response to potential upper riparian development on the Nile, Egyptian President Anwar Sadat declared that "[a]ny action that would endanger the waters of the Blue Nile will be faced with a firm reaction…even if that action should lead to war."[297] In 2016, the foreign affairs advisor to the Pakistani Prime Minister stated that if India unilaterally revoked the Indus Water Treaty between India and Pakistan, it could be considered an "act of war."[298]

There are instances when using water could be an armed attack. Armies throughout history used water as a weapon—they flooded their enemies, burst dikes, poisoned wells, and dammed rivers.[299] Despite

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[294] U.N. Charter art. 51.

[295] D.W. BOWETT, SELF-DEFENSE IN INTERNATIONAL LAW 192 (1958).

[296] Shemesh, *supra* note 11, at 34.

[297] KORNFELD, *supra* note 51, at 60.

[298] Manav Bhatnagar, *Reconsidering the Indus Waters Treaty*, 22(2) TUL. ENV'T L. J. 271, 271 (2009); Drazen Jorgic & Tommy Wilkes, *Pakistan Warns of 'Water War' With India if Decades-Old Treaty Violated*, REUTERS (Sept. 27, 2016), https://www.reuters.com/article/idUSKCN11X1ON/.

[299] Charlotte Grech-Madin, *Water and Warfare: The Evolution and Operation of the Water Taboo*, 45(4) INT'L SEC. 84, 89 (2021) Researcher Charlotte Grech-Madin classifies water weaponization based on two actions: deprivation—"the reduction or complete denial of water needed for basic subsistence"—and inundation—"the rapid release of a large

historical use, weaponization of water in armed conflict has been prohibited,[300] and its current use has been universally denounced.[301] In the last decade, ISIS withheld water as a tool of compliance,[302] Turkey disrupted water flow into Syria,[303] and Russian forces destroyed a dam in southern Ukraine.[304] While these occurred during armed conflicts, China's actions have the same cause and effect on the lower Mekong states. Yet effects alone, even those caused by a prohibited weapon of armed conflict, does not elevate domestic acts into armed attacks.

A state using force to respond to the incidental effects of domestic acts would be a substantial shift in the definition of armed attack and the inherent right of self-defense—even if those effects are an existential threat. The cyber operations paradigm provides an example of an effects-based analysis for whether a state's actions reach the level of an armed attack.

Under the U.S. view, a state attacking a civilian population with water via a cyber operation can be an armed attack. As articulated by Harold Hongju Koh, "[c]yber activities that proximately result in death, injury, or significant destruction would likely be viewed as a use of force" within

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quantity of water through destroying storage infrastructure or opening floodgates." *Id.*; *see also* CAPONERA ET AL., *supra* note 148, at 297; Peter Schwartzstein, *The History of Poisoning the Well*, SMITHSONIAN MAG. (Feb. 13, 2019), https://www.smithsonianmag.com/history/history-well-poisoning-180971471/.

[300] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) art. 56, June 8, 1977, 1125 U.N.T.S. 3 [hereinafter Additional Protocol I] ("Works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population."); *see* Grech-Madin, *supra* note 299, at 90.

[301] Grech-Madin, *supra* note 299, at 90; Ben Waldman & Michel Paradis, *The Biden Administration Faces a Reckoning Decades in the Making Over the United States' Use of Air Power and Civilian Harm*, LAWFARE (Feb. 23, 2022), https://www.lawfaremedia.org/article/biden-administration-faces-reckoning-decades-making-over-united-states-use-air-power-and-civilian.

[302] Schwartzstein, *supra* note 299.

[303] Grech-Madin, *supra* note 299, at 118.

[304] Chloe Sorvino, *Water Emerges as Weapon of War in Ukraine and Beyond*, FORBES (Apr. 27, 2022), https://www.forbes.com/sites/chloesorvino/2022/04/27/water-emerges-as-weapon-of-war-in-ukraine-and-beyond/.

the meaning of Article 2(4).[305] In considering whether a cyber operation constitutes a use of force, Koh cited several non-exhaustive factors to be considered, including: the context of the event, the actor perpetrating the action, the target and location, state *intent*, and "whether the direct physical injury and property damage resulting from the cyber event looks like that which would be considered a use of force if produced by kinetic weapons."[306] One of the examples Koh cited as a cyber action that would be considered a use of force is "operations that open a dam above a populated area causing destruction."[307]

The 2019 drought in Laos and the lower riparians is worth considering under the Koh factors. The damming and use of the abundant wet season flow occurred while China is an ascendant global power amid the region most susceptible to climate change. The intermittent droughts and floods destroyed crops, damaged millions of dollars of property, and resulted in death along the lifeblood river of four states.[308] China's damming was the proximate cause of those injuries.[309] The effects were similar to those of kinetic force: "death, injury, [and] significant destruction." Had a state cyber operation caused these effects, the United States would likely consider these actions a use of force under the Koh standard.

Extrapolating the U.S. view on cyber operations to the Mekong hypothetical, China's damming of a transboundary watercourse appears to be a use of force, but it is missing a key factor: state *intent*. During armed conflict between Country A and Country B, a wayward missile shot by Country A toward Country B but which accidentally diverts course into Country C is generally not considered an armed attack on Country C.[310] Country C would be entitled to damages from Country A, but would not be able to respond in self-defense.[311] Absent intent, an accidental or incidental effect by one state which causes damages to another is an

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[305] Harold Hongju Koh, Legal Advisor, U.S. Dep't of State, Keynote Address at USCYBERCOM Inter-Agency Legal Conference (Sept. 18, 2012).
[306] *Id*.
[307] *Id*.
[308] Eyler, *supra* note 41; Lovgren, *supra* note 25; Eyler & Weatherby, *supra* note 29.
[309] Eyler & Weatherby, *supra* note 29.
[310] Solon Solomon, *Can Oblique Intent Trigger an Armed Attack and Activate Article 5 of NATO?*, LAWFARE (Nov. 17, 2022), https://www.lawfaremedia.org/article/can-oblique-intent-trigger-armed-attack-and-activate-article-5-nato.
[311] *Id*.

internationally wrongful act, but not an armed attack.[312] Given that armed attacks are historically committed by a state's armed forces under state control, intent can generally be presumed.[313] Declaring an armed attack due to incidental effects of *domestic* acts would be a significant lowering of the intent threshold for self-defense.[314]

Further, as Professor Craig Martin explained, any movement to "relax the [jus ad bellum] regime should be resisted"[315] in response to climate change's increased threat to national security.[316] Lowering the threshold for self-defense "would introduce such ambiguity into the triggering mechanism for the use of force that it would excessively increase the risk of a radically higher incidence of international armed conflict." [317] Reframing incidental effects of domestic acts, even those that result in environmental harm to neighbors, as an armed attack would increase the risk of conflict over transboundary watercourses.[318]

Even if forcible measures were available to the lower riparians, they would be prohibited from striking the dams under Additional Protocol I (AP I). AP I prohibits making "objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works" the "object of reprisals."[319] Therefore, even if force was permitted in self-defense, making the dams the object of a reprisal violates international law.

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[312] *Id*.

[313] Although dicta, in Oil Platforms, Iran v U.S., Judgment, 2003 I.C.J. 161 (Nov 6.) indicated an attack must have been carried out with the specific intent of harming a specific state before that state can respond in self-defense, that theory is not supported by state practice or international law. William H. Taft, IV, *Self-Defense and the Oil Platforms Decision*, 29 YALE J. OF INT'L L. 295, 302 (2004).

[314] *See* Jens David Ohlin, *Targeting and the Concept of Intent*, 35 MICH. J. INT'L L. 79, 85 (2013); *but see also* TALLINN MANUAL 2.0 ON THE INTERNATIONAL LAW APPLICABLE TO CYBER OPERATIONS, 343-44 (Michael N. Schmitt ed., 2d ed. 2017) ("The majority of the International Group of Experts was of the view that intention is irrelevant in qualifying an operation as an armed attack and that only the scale and effects matter.").

[315] Craig Martin, *Atmospheric Intervention? The Climate Change Crisis and the Jus ad Bellum Regime*, 45(S) COLUM. J. OF ENV'T L. 331, 416 (2020).

[316] *Id*. at 376.

[317] *Id*. at 400.

[318] *Id*. at 401.

[319] Additional Protocol I, *supra* note 300, art. 54(4).

Further, forcible measures in self-defense which are too attenuated from an armed attack—even from an existential threat—may be viewed as an unlawful use of force. In 1981, Israel believed Iraq's completion of the Osirak nuclear reactor, which may have allowed Saddam Hussein to obtain nuclear weapons, constituted a threat to its existence.[320] In response, Israeli warplanes destroyed the reactor before it was operational under a theory of anticipatory self-defense.[321] The Security Council declared Israel's actions an "armed attack" and a "premeditated and unprecedented act of aggression in violation of the Charter of the United Nations and the norms of international conduct, which constitute[d] a new and dangerous escalation in the threat to international peace and security."[322] The Security Council found Iraq was entitled to "appropriate redress for the destruction,"[323] including "prompt and adequate compensation for the material damage and loss of life suffered."[324]

Consequently, the lower Mekong states may believe they are facing an existential threat, but that is not the end of the analysis. Force has never been authorized in self-defense for domestic actions which are not a use of force or an armed attack. Absent state intent to "proximately [cause] death, injury, or significant destruction," unilateral damming or diverting the Mekong cannot rise to the level of an armed attack. As such, any use of force by the lower riparians to attempt to coerce China would be illegal.

VI. Conclusion

One need not assume bad faith on the part of any actor for the Mekong hypothetical to develop. China is damming and diverting the Mekong to water arid regions, providing affordable electricity, and reducing their climate impacts caused by greenhouse gases. In a vacuum, these would be positive acts. Instead, these acts are causing significant harm—and potential ecological disasters—in Laos, Thailand, Cambodia, and Vietnam.

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[320] Donald G. Boudreau, *The Bombing of the Osirak Reactor*, 10(2) INT'L J. ON WORLD PEACE 21, 23 (1993); Strapatsas, *supra* note 282, at 193.
[321] Boudreau, *supra* note 320, at 24; Strapatsas, *supra* note 282, at 193.
[322] S.C. Res 36/27, ¶¶ 1, 2 (Nov. 13, 1981).
[323] S.C. Res. 487, ¶ 6 (June 19, 1981).
[324] S.C. Res 36/27, *supra* note 323, ¶ 6.

The requirement to use a transboundary watercourse in a reasonable and equitable manner and the obligation to do no significant harm are customary international law principles. The unilateral damming or diverting of a transboundary river violates these principles. Violations of customary international law principles can be the basis for internationally wrongful acts. Because China is violating these principles, it is therefore committing internationally wrongful acts against the lower Mekong states.

China should be held responsible for its internationally wrongful acts. However, the reparations available to the lower riparians may not be able to "wipe out" the permanent damage to the environment and ecology of the Mekong. There may not be a solution that will make the lower riparians whole again.

If China does not accept responsibility and offer reparations, countermeasures are available to the lower riparians. Countermeasures, however, are acts of political strength, and are therefore unlikely to force the powerful PRC into compliance.

The lower riparians may seek a judicial avenue to order China to comply with its obligations. That plan will fail for several reasons. China will likely not agree to the jurisdiction of any court. Even where they agreed to a mandatory body in UNCLOS, China refused to participate or recognize adverse findings. There is no indication China will comply with the ruling of an international court.

Appeals to the U.N. Security Council will likely go unheard. Lower Mekong states may consider resorting to force in self-defense. To the Mekong states, a "river. . . . offers a necessity of life that must be rationed among those who have power over it," and although some have "the physical power to cut off all of the water within its jurisdiction. . . . the exercise of such a power. . . . could not be tolerated."[325] The current damming effects may feel like an armed attack to the lower riparians. However, despite effects comparable to weaponizations of water in armed conflict and cyber operations that constitute a use of force, the incidental effect of domestic acts will likely not be considered an armed attack, and therefore cannot merit force in self-defense.

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[325] New Jersey v. New York, 283 U.S. 336, 342 (1931).

As in the 1950s, there are transboundary water disputes across the globe catalyzed by climate change. How the international community reacts will determine whether the wars over water begin. The international community must restore the balance along the Mekong soon, "since it is often difficult to stop or modify an activity once it has begun, and it can be very complicated and expensive, if indeed it is possible, to remedy harm once caused."[326]

The international community has two options: garner widespread support for the watercourses convention, or pressure China into a more robust agreement with its lower riparian neighbors based on the customary international law principles. As seen after the Phillippines Arbitration, the international community responds to a State's failure to abide by a convention or treaty with condemnation, but are less forceful in their responses for a violation of customary international law. The international community is naïve for relying on customary international law, good faith, or China changing its view of sovereignty to resolve transboundary water disputes. The current system is untenable in a manner that may lead to armed conflict.

Without international community intervention, if the lower Mekong states cannot obtain equitable and reasonable use of the Mekong through peaceful means they may resort to an illegal use of force to get the river flowing again. If there are no consequences to China for committing an internationally wrongful act and ignoring customary international law, the international community should expect a reversion to the pre-Watercourse Convention legal regime. As it was when competing theories of sovereignty caused conflict, the "system becomes unsettled either if a state considers that it is so militarily dominant that it can disregard its neighbors, or if a state concludes that their interests are so compromised by the existing situation that even a military defeat is better than continuing the present situation without challenge."[327] For now, China is disregarding its neighbors, and without a rebalancing of the system through international community intervention, the water wars are inevitable.

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[326] McCaffrey, *supra* note 124.
[327] Dellapenna, *supra* note 1.

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