COOPERATION WITHIN INTERNATIONAL WATERCOURSE LAW: THE DEVELOPMENT OF CUSTOM AND THE CREATION OF RIVER BASIN ORGANISATIONS

Stefan Robert McClean*

The formation of river basin organisations designed to facilitate basin-wide cooperation between States is often described as a principle of soft law lacking normative force. The article explores whether developments in state practice since the crafting of the United Nations Watercourses Convention has led to the possibility for the creation of regional custom within Europe and Africa. The article traces the nature of cooperation as a general principle of international watercourse law into its current institutionalised form. It is also noted that the continued institutionalisation of international watercourse law may produce new normative effects, such as the broadening of legal regimes to include local communities.

> He who rides the sea of the Nile must have sails woven of patience.
>
> William Golding†

I INTRODUCTION

The United Nations (UN) Convention on the Law of the Non-Navigational Uses of International Watercourses (the UN Watercourses Convention) is one of two universal framework treaties designed to manage watercourses that traverse across international borders.[1] The provision of the general

* LLM Candidate, Public International and European Law KU Leuven. LLB/BA Te Herenga Waka—Victoria University of Wellington (2021). The author would like to especially thank Professor Alberto Costi, Dr Bjørn-Oliver Magsig and Mr Taran Molloy for their invaluable support, encouragement and guidance from the far side of the world.

† William Golding *An Egyptian Journal* (Faber & Faber, London, 1985) at 25.

1 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses 2999 UNTS 77 (opened for signature 21 May 1997, entered into force 17 August 2014) [UN Watercourses

obligation to cooperate, expressed in art 8, provides that watercourse States "may consider" the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on watercourse management.[2] This article explores whether customary international law is emerging, in the form of regional custom, which in time may alter the meaning of art 8 as to require States to create or join river basin management organisations (RBOs) in order to adhere to the cooperation standards of the UN Watercourses Convention and substantive customary law.

The establishment of an emerging customary principle of institutionalised cooperation, created through the formation of RBOs, would be a significant development in international law. While implementing existing legal obligations, RBOs also possess the opportunity to develop and influence international watercourse law to better apply cooperative sovereignty and coherent ecosystem management to international river basins.[3] It is also important to consider that the creation of RBOs inevitably requires the adoption of legal arrangements. As such, the question arises whether, in the event of customary change, States may be required to establish watercourse agreements.[4] While this is an important consideration to note, the purpose of this article is to reflect on the possibility of emerging customary law, and how it may impact the substance or quality of the legal agreements themselves. If an emerging customary norm over time becomes constant, uniform and widespread enough to enforce the establishment of RBOs, the consequent institutionalisation of watercourse management may promote flexibility in design and practice to achieve sustainable development, environmental protection and legitimacy. Throughout the institutionalisation process, local communities and stakeholders ought to have a key role within RBOs alongside States in order to achieve environmental equity.

For the purposes of this article, the terms watercourses, international rivers and river basins are used effectively interchangeably to refer to a transboundary watercourse. However, in order to include further legal or social considerations, such as the relationship between local communities and the watercourse itself, or wider heritage aspects, the term river basin is employed to describe the broader array of features. The UN Watercourses Convention defines a watercourse as a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and

---

Convention]. The second global framework treaty is the Convention on the Protection and Use of Transboundary Watercourses and International Lakes 1936 UNTS 269 (opened for signature 17 March 1992, entered into force 6 October 1996) [UNECE Water Convention].

2 UN Watercourses Convention, above n 1, art 8(2).

3 Ruby Moynihan and Bjørn-Oliver Magsig "The Rising Role of Regional Approaches in International Water Law: Lessons from the UNECE Water Regime and Himalayan Asia for Strengthening Transboundary Water Cooperation" (2014) 23 RECIEL 43 at 44.

4 Currently, States parties may enter into one or more agreements: see UN Watercourses Convention, above n 1, art 3(3).

normally flowing into a common terminus.[5] The system of surface waters and groundwaters must necessarily cross between States to be considered international in nature.[6] Therefore, a watercourse is not limited to the river itself, but also includes tributaries, adjacent wetlands and connected groundwaters. The definition has been labelled "hydrocentric" due to its lack of consideration between the interplay of water flows and other elements of the natural environment.[7] Nevertheless, the definition does capture the hydrological variation across river systems, for example, the Okavango River, which flows from Angola through downstream Namibia and into the Botswana Okavango Delta, where it dissipates into the ground rather than into a common terminus. Thus, while the watercourse does not flow into a common terminus, the use of the term "normally" nevertheless captures the unique difference. The riparian States do consider the watercourse as shared and manage the river basin through the Permanent Okavango River Basin Commission (OKACOM).[8]

Part II of the article examines the importance of transboundary watercourse management and the significant environmental challenges faced in global river basins. Part III then addresses some important historical developments in international watercourses law; in particular, the article traces the role of cooperation, from its origin as a general theory of international law, premised on notions of good faith and sovereign equality, to its application as a fundamental norm within watercourse law. Part IV studies the notion of cooperation within the context of the UN Watercourses Convention, and its interplay with other principles such as the duty to prevent significant transboundary harm and the advancement of the equitable and reasonable use of international watercourses. Part V argues that the institutionalisation of cooperation through the growth of RBO structures creates an opening for new developments within customary international law, such as the formation of regional custom in Africa and Europe. Part VI outlines the significance of a possible regional norm change. To illustrate the impact and significance of such a change, the Omo-Turkana Basin shared between Kenya and Ethiopia will be used as a case study. Lastly, Part VII evaluates the possible consequences of a normative transformation from a pluralist perspective.

II THE NEED FOR INTERNATIONAL COOPERATION OVER INTERNATIONAL WATERCOURSES

Since the early days of human development, the relationship between peoples and water has been of profound importance. As freshwater sustains life, it has enabled communities and civilisations to thrive. The early empires of Mesopotamia, such as Sumer, Assyria and Babylonia, were each enabled, but reliant on, the alluvial landscape, which through the construction of canals, dispersed water onto

5 Article 2(a).

6 Article 2(b).

7 Eyal Benvenisti *Sharing Transboundary Resources: International Law and Optimal Resource Use* (Cambridge University Press, Cambridge, 2002) at 175.

8 At 175.

fertile soil from the Tigris and Euphrates rivers.[9] The Book of Genesis identifies the Tigris and Euphrates as respectively the third and fourth rivers of creation, facilitating the design and formation of human life and the natural world.[10] Indeed, those early nations which developed along the banks of great rivers, from the Nile to the Indus, shared a common cultural, economic and religious philosophy that placed the river at the centre of communal spirituality. Moreover, waterways, as highways for trade and communication, provided the geographic space necessary for the emergence of early forms of international cooperation.[11]

Freshwater, and the rivers distributing it, play no less of an important role today. Water resources are necessary to provide for basic human needs and development. Like ancient societies, modern communities continue to recognise the significance of water and its relationship to people. In Islam, water is a direct gift from Allah granting wisdom and life.[12] Hence, religious decrees have influenced the notion of water as an "original right" for all individuals.[13] For the Christian tradition, water is the symbol of life and thus used in the sacrament of Baptism to "reborn" a person into faith.[14] Water can be both seen as providing physical and spiritual sustenance and as a living entity. Within Te Ao Māori, the Whanganui River Te Awa Tupua is a living spiritual and physical body sustaining life within the geographic Whanganui River.[15] However, while also sustaining the resources of the river, Te Awa Tupua remains connected to the local river communities, providing health and well-being.[16] Therefore, watercourses will often incorporate matters within the context of cultural property, religious practice or indigenous rights.

Today, global freshwater ecosystems, which include the 310 river basins that cross international borders, are experiencing severe pressure.[17] Unprecedented levels of freshwater biodiversity loss and

---

9 Guillermo Algaze *Ancient Mesopotamia at the Dawn of Civilization: The Evolution of an Urban Landscape* (University of Chicago Press, Chicago, 2008) at 124.

10 Gen 2:10.

11 Algaze, above n 9, at 65.

12 The Holy Quran, 25:48–49.

13 Sharif S Elmusa "Water in the Middle East: Legal, Political and Commercial Implications" (1994-1995) 8 Pal YB Intl L 541 at 544.

14 Code of Canon Law (Book IV, De Ecclesiae Munere Sanctificandi), can 849.

15 Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, ss 12 and 13.

16 Section 13(a). See also Māmari Stephens "To Protect and Serve: Finding New Ways to Protect Te Reo Māori as Cultural Property" in Alberto Costi and Susy Frankel (eds) *Do Cultural and Property Combine to Make "Cultural Property"?* (revised ed, New Zealand Association for Comparative Law, Wellington, 2018) 7 at 20–21.

17 Alistair Rieu-Clarke, Ruby Moynihan and Bjørn-Oliver Magsig *UN Watercourses Convention: User's Guide* (IHP-HELP Centre for Water Law, Policy and Science, Dundee, 2012) at 27 and 29. The number of river basins is taken from the Transboundary Freshwater Dispute Database: "Transboundary Freshwater Dispute

increasing water demands from competing interest groups are placing new levels of stress on freshwater management that must also adapt to a changing climate.[18] The strain and pressure on freshwater have been long recognised as risks that will evolve into a "global water crisis" if appropriate mitigation steps are not taken.[19] Climate change, land use, waste and development are critical issues facing freshwater ecosystems that require sophisticated responses. The challenges for global freshwater management at large are particularly prevalent for transboundary watercourses, which are home to 40 per cent of the global population and accounting for 60 per cent of global river flows.[20] Therefore, the state of the world's international rivers determines not only the health of global freshwater, but also that of all communities reliant on the natural environment for livelihoods and secure futures.

International watercourse law does offer important tools to deliver an adequate and comprehensive freshwater management response that can provide answers to modern challenges. The UN Watercourses Convention provides a global framework for the interpretation and use of legal principles designed to achieve optimal utilisation and adequate protection of international watercourses.[21] Such principles include equitable and reasonable use and the duty to prevent significant transboundary harm.[22] Even more importantly, the Convention acknowledges a governing principle of cooperation.[23] However, international law does not enforce a particular method of cooperation that is generally applicable. RBOs operate as fora for the implementation of cooperation. However, as yet, the formation of RBOs is not required by general international law.[24] Many States continue to treat transboundary watercourses individually rather than as a shared resource requiring joint management between riparian States.[25] Effective transnational governance that embraces stakeholders such as local communities remains unequally distributed across international basins.

Database: Data and Datasets" (Oregon State University College of Earth, Ocean, and Atmospheric Sciences, 2018) <www.transboundarywaters.science.oregonstate.edu>.

18 Erica Gaddis and others "Freshwater" in Paul Ekins, Joyeeta Gupta and Pierre Boileau (eds) *Global Environment Outlook GEO-6: Healthy Planet, Healthy People* (UN Environment Programme and Cambridge University Press, Cambridge, 2019) 235 at 238.

19 Munir A Hanjra and M Ejaz Qureshi "Global water crisis and future food security in an era of climate change" (2010) 35 Food Policy 365 at 366.

20 Rieu-Clarke, Moynihan and Magsig, above n 17, at 24. See also World Bank "Water Resources Management" (20 September 2017) <www.worldbank.org/en/topic/waterresourcesmanagement>.

21 Malcolm N Shaw *International Law* (8th ed, Cambridge University Press, Cambridge, 2017) at 671.

22 UN Watercourses Convention, above n 1, arts 5, 6 and 7.

23 Article 8.

24 Ulrich Beyerlin and Thilo Marauhn *International Environmental Law* (Hart, Oxford, 2011) at 95.

25 Alistair Rieu-Clarke and Christopher Spray "Ecosystem Services and International Water Law: Towards a More Effective Determination and Implementation of Equity" (2013) 16(2) Potchefstroom Elec LJ 11 at 49.

Less than half of international watercourses are managed by some form of RBO, and international governance can be limited to single issues such as fisheries or flood prevention, rather than embracing comprehensive resource management principles.[26] Despite a lack of will of some States to embrace RBO structures, strong evidence demonstrates that institutionalised cooperation, when managed effectively, delivers significant positive outcomes for international watercourse management and cooperation.[27] Thus, the international legal architecture remains incomplete due to the absence of a general obligation to establish effective RBOs over international basins.

In order to assess the possibility of an emerging norm of customary law concerning the creation of RBO structures, the principle of cooperation and its role within the general development of international law will be analysed alongside the emergence of other principles, such as the duty to prevent significant transboundary harm and equitable and reasonable use of watercourses. Assessing the role of cooperation, the no-harm rule and equitable and reasonable use within the overall architecture of international watercourse law is important for a deeper analysis into the direction of customary law, and whether cooperation as a principle has become institutionalised.

III THE HISTORIC DEVELOPMENT OF INTERNATIONAL WATERCOURSE LAW

Watercourse law is not separate from public international law, nor can it be detached from historical practices which have over time influenced the perception, use and value that States and communities attach to international watercourses. The present legal environment is characterised by the creation of well-formed, separate, but interdependent principles of customary and treaty law that were advanced in response to the international community's desire to codify and progressively develop in detail the law on international watercourses through the UN system.[28]

The law of sovereign equality within the international system dictates that States must not act prejudicially to the rights of other States.[29] The International Court of Justice (ICJ) in the *Corfu Channel* case expressed what has become later encapsulated by the principle of sovereign equality,

---

26 Ruby Moynihan "Inland Water Biodiversity: International Law on Protection of Transboundary Freshwater Ecosystems and Biodiversity" in Elisa Morgera and Jona Razzaque (eds) *Biodiversity and Nature Protection Law* (Edward Elgar, Northampton (MA), 2017) 189 at 200. As an example of a single-issue treaty, see Convention on Great Lakes Fisheries, United States of America–Canada 238 UNTS 97 (signed 10 September 1954, entered into force 11 October 1955).

27 Susanne Schmeier *Governing International Watercourses: River Basin Organizations and the Sustainable Governance of Internationally Shared Rivers and Lakes* (Routledge, New York, 2013) at 115. See also Benvenisti, above n 7, at 155 and 184.

28 Vernon Rive "International Environmental Law" in Alberto Costi (ed) *Public International Law: A New Zealand Perspective* (LexisNexis, Wellington, 2020) 731 at 738.

29 Charter of the United Nations, art 2(1).

that is, territorial sovereignty cannot impede or surpass the sovereign rights of other States.[30] Although not directly addressing environmental matters, the arbitral tribunal in the 1872 *Alabama Claims Arbitration* indicated that States may be responsible for harm originating from their jurisdiction which undermined territorial integrity, even if such harm was caused by private parties.[31] The Permanent Court of International Justice (PCIJ) in the *River Oder* case provided a significant judgment relating to disagreement over the territorial application of the new international treaty and corresponding river commission on the River Oder.[32] The PCIJ noted that the River Oder was an international watercourse, in consideration of the principle of sovereign equality and subsequent treaty regime, and concluded that a community of interests was established that acknowledged the watercourse as a resource shared equally and in whole:[33]

> [The] community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the user of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others.

Subsequent developments confirmed that territorial sovereignty continued to play an important role despite the creation of a common legal right between riparian States. In the 1957 *Lac Lanoux Arbitration*, French works designed to exploit lake waters shared between Spain and France were considered not to violate Spain's rights due to the absence of significant environmental harm. However, the arbitral tribunal considered that negotiations designed to facilitate dispute settlement must transcend mere formalities and, therefore, be genuine in light of the principle of good faith, hinting at more of a cooperative notion of sovereignty.[34] As such, although international water bodies did create rights and obligations between riparian States, these rights did not extinguish concepts of territorial sovereignty and utilisation of natural resources. However, the conduct of States was subject to limitations as expressed in the early case law. Notably, any use of a transboundary resource must not be prejudicial to the rights of other States. Limitations on territorial sovereignty, due to the necessity of balancing actions against the rights of other States, began to establish themselves as an accepted principle of international law. However, it is arguable that the no-harm principle even dates back to Medieval or Roman law. The maxim *sic utere tuo ut alienum non laedas* (so use your own as

30 *Corfu Channel (United Kingdom v Albania) (Merits)* [1949] ICJ Rep 4 at 35.

31 *Alabama Claims Arbitration (United States of America v Great Britain)* (1872) XXIX UNRIAA 125 at 131. See also Charter of the United Nations, art 2(4).

32 Beyerlin and Marauhn, above n 24, at 92.

33 *Territorial Jurisdiction of the International Commission of the River Oder (United Kingdom, Czechoslovakia, Denmark, France, Germany, Sweden v Poland) (Judgment)* (1929) PCIJ (series A) No 23 at 27.

34 *Lake Lanoux Arbitration (France v Spain) (Award)* (1957) 24 ILR 101 at 119. See also Beyerlin and Marauhn, above n 24, at 93.

not to harm that of another) is merely a rephrasing of the sovereign equality enjoyed between States.[35] McCaffrey notes that the Romans also conceived of watercourse law as an equitable balancing exercise.[36] Therefore, the law may permit harm as such so long as it can be considered equitable.[37] The *Trail Smelter* arbitration strengthened earlier decisions on sovereign equality by offering judgment within the context of an environmental dispute relating to transboundary harm. The arbitral tribunal sought guidance from the jurisprudence of the United States Supreme Court within the context of tort damage.[38] Indeed, it was noted that there would be a misapplication of fundamental principles of justice if the finding of a tort causing damage did not result in the grant of relief to the injured person.[39] Applying the principle of relief from damage to a transnational level, the tribunal stressed the importance of all States to avoid transboundary harm if the damage creates serious consequences.[40]

The 1972 Stockholm Declaration marked a renewed emphasis on the will of States to advance new and existing environmental principles. Principle 2 of the Stockholm Declaration advances an early concept of sustainable development by identifying that natural resources, including water and natural ecosystems, ought to be safeguarded for future generations.[41] Principle 21 specifies that States retain the right to exploit their natural resources subject to the duty to prevent environmental harm, including in areas beyond national jurisdiction. States are encouraged to engage with environmental matters in a cooperative spirit in accordance with Principle 24. Reflecting continual evolution and State interest, the principles were reviewed and adapted in the 1992 Rio Declaration. Rio placed a human-centric approach to earlier principles. For example, Principle 1 states that human beings are central to sustainable development.[42] Citizens are to have the right to participate in environmental decision making while indigenous peoples are recognised to have a vital role in environmental management to support identity, culture and interests.[43] The concepts of sustainable development and State cooperation are further elaborated in the Rio Declaration through Principles 7, 8 and 27. While

35 Stephen C McCaffrey *The Law of International Watercourses* (2nd ed, Oxford University Press, Oxford, 2007) at 416.

36 At 416.

37 At 416.

38 *Trail Smelter Case (United States of America v Canada) (Award)* (1938 and 1941) III RIAA 1905 at 1920.

39 At 1920.

40 At 1965.

41 *Report of the United Nations Conference on the Human Environment (Stockholm, 5–16 June 1972)* UN Doc A/CONF.48/14/Rev.1 (1973), ch 1 [Stockholm Declaration] principle 2.

42 *Report of the United Nations Conference on Environment and Development: (Rio de Janeiro, 3-14 June 1992)* UN Doc A/CONF.151/26 (12 August 1992), annex I [Rio Declaration] principle 1.

43 Principles 10 and 22.

Principle 21 of the Stockholm Declaration largely remained unchanged, through Principle 2 of the Rio Declaration, significantly, States recognised specific procedural principles in light of the emergence of new norms in treaty law. The signing of the Espoo Convention in 1991 underscored the Rio Declaration's reference to environmental impact assessments alongside timely notification to potentially affected States from activities that may produce significant adverse transboundary harm.[44]

The Stockholm and Rio Declarations were, above all, political expressions. The principles, taken as a whole, were not intended to express legal norms in reflection of customary international law. However, some expressions, such as Principle 21 of the Stockholm Declaration, were grounded in international law. The common language between the Declarations and legal norms is exemplified through cases such as the *Trail Smelter* arbitration, which articulates the duty to prevent transboundary harm that is also declared by Principle 21.[45] Interestingly, it can be said that Principle 21 also included State responsibility for harm originating from areas beyond territorial jurisdiction so long as the conduct could be attributed to the State.[46] This rewording of the no-harm principle generated normative effects in both customary and treaty law.[47] Hence, the Declarations have proved influential for the continued strengthening of international law due to equally common and different use in language and formulation. Principles within the Declarations became reflective of consistent and widespread state practice. Four years later, the ICJ in its 1996 *Nuclear Weapons* advisory opinion conveyed that Principle 21 of Stockholm and Principle 2 of Rio were reflective of customary law:[48]

> 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.

Recalling the origins of principles such as the duty to prevent significant transboundary harm, good neighbourliness and sovereign equality, it is important to note that while these principles have specific application to watercourse law, their origins derive from general international law.[49] Therefore, fundamental principles of watercourse law, such as equitable and reasonable use, the no-

---

44 Principles 17 and 19. See also Convention on Environmental Impact Assessment in a Transboundary Context 1989 UNTS 309 (opened for signature 25 February 1991, entered into force 10 September 1997) [Espoo Convention].

45 *Trail Smelter Case,* above n 38, at 1965.

46 Stockholm Declaration, above n 41, Principle 21: "States have … 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" (emphasis added).

47 Shaw, above n 21, at 647.

48 *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 226 at 241–242.

49 On the principle of good neighbourliness as a basis for the obligation to not cause significant harm, see Christina Leb *Cooperation in the Law of Transboundary Water Resources* (Cambridge University Press, Cambridge, 2013) at 101.

harm principle and the notion of cooperation, will have general effects and meanings beyond the realm of international watercourses despite their subsequent reference within the UN Watercourses Convention.[50] Although the UN Watercourses Convention was accepted by the UN General Assembly in 1997 following an extensive inquiry into applicable customary norms by the International Law Commission (ILC), the Convention did not enter into force until 2014.[51] The low uptake of ratification by States (as of May 2022, 37 States are currently parties to the treaty) also raises questions concerning the applicability, phrasing and nature of the principles expressed in the Convention, and how they differ from general customary law.[52] To answer some or part of these questions, the origins of the principle of cooperation will be explored, alongside its applicability relating to watercourse law within the context of the UN Watercourses Convention.

IV THE DUTY OF COOPERATION: A CORNERSTONE PRINCIPLE OF THE CONVENTION

Article 8 of the UN Watercourses Convention describes a general obligation of cooperation. The Convention phrases the principle as follows:

> Watercourse states shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilisation and adequate protection of an international watercourse.

The Convention expressly recognises the legal foundations which give rise to cooperation between riparian States. Sovereign equality and territorial integrity, which are principles embedded in the UN system, provide a platform for States to operationalise sovereign relations. Cooperation is inherent and derives from international law conducted on the basis of good faith, mutual benefit, territorial integrity and sovereign equality. It is the UN's mission to "achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character."[53] The UN Charter thus acts as a primary source from which arises a general principle of cooperation within international law. However, as principles such as sovereign equality, which is a necessary component to cooperation, predate the UN Charter and the *Corfu Channel* case, the emergence of the notion of cooperation under international law has also naturally evolved before and after its inclusion into the

---

50 UN Watercourses Convention, above n 1, arts 5, 6, 7 and 8.

51 Gabriel Eckstein "The status of the UN Watercourses Convention: does it still hold water?" (2020) 36 IJWRD 429 at 429. The International Law Commission (ILC) first adopted its work programme with a view to the progressive development and codification of the rules of international law relating to international watercourses: *Report of the International Law Commission on the work of its twenty-third session* [1971] vol 2, pt 1 YILC 350. The Convention was adopted by the UN General Assembly in 1997. See C*onvention on the law of non-navigational uses of international watercourses* GA Res 51/229 (1997).

52 Eckstein, above n 51, at 434 and 435.

53 Charter of the United Nations, art 1(3).

UN Charter.[54] Nevertheless, the incorporation of cooperation as a separate general principle within part 2 of the UN Watercourses Convention acts as a definitive statement on its role as an essential component of suitable State behaviour.

The purpose of the duty of cooperation is to attain optimal utilisation and adequate protection of an international watercourse. While the objective of cooperation is discoverable directly through art 8, optimal utilisation and adequate protection are principles expressed in part 2 of the UN Watercourses Convention under the doctrine of equitable and reasonable use.[55] Article 5 provides for equitable and reasonable use of international watercourses. The principles are designed to achieve optimal and sustainable utilisation and benefits while taking into account all watercourse States' interests and ensuring adequate protection of the watercourse.[56] The intention of the general principle of cooperation is to implement the principles conveyed in art 5 of the Convention. Cooperation performs a role as a cornerstone principle, which is designed to put into effect the various other principles of watercourse law.

Article 5(2) of the UN Watercourses Convention clarifies the role of cooperation in the achievement of equitable and reasonable use. The provision confirms the sovereign right of riparian States to use international watercourses. However, such use of a watercourse must be undertaken in accordance with the State's duty to cooperate. Cooperation cannot be construed as a requirement of consent delivered by riparian States. The continuation of territorial sovereignty places action or control over watercourse use in the hands of the respective territorial States. Nevertheless, territorial sovereignty is limited as equal rights of use between riparian States create a community of interests.[57] Thus, sovereign equality, territorial integrity, good faith and mutual benefit necessitate the incorporation of cooperation to ensure equitable and reasonable watercourse use in an environment where no sovereign right can extinguish another.[58]

In order to achieve the implementation of equitable and reasonable utilisation, art 6 of the UN Watercourses Convention provides a non-exhaustive list of circumstances that States must take into account as conditions require. Such factors include the geographic, hydrographic, hydrological, climatic or ecological aspects of the watercourse. Furthermore, the social and economic needs of watercourse States, local populations dependent on the watercourse, existing and potential uses,

---

54 Shaw, above n 21, at 33.

55 UN Watercourses Convention, above n 1, art 5.

56 Article 5(1).

57 *Territorial Jurisdiction of the International Commission of the River Oder*, above n 33, at 27. See also *Gabčíkovo-Nagymaros Project (Hungary v Slovakia) (Judgment)* [1997] ICJ Rep 7 at 56.

58 Christina Leb "The Significance of the Duty to Cooperate for Transboundary Water Resources Management Under International Water Law" in Alistair Rieu-Clarke, Andrew Allan and Sarah Hendry (eds) *Routledge Handbook of Water Law and Policy* (Routledge, Abingdon (UK), 2017) 247 at 254.

among other circumstances, are all considered to achieve the principle of equitable and reasonable use of the watercourse. The role of cooperation is incorporated into art 6(2) as it enables States to acquire the necessary transboundary information needed to assess the watercourse in a manner consistent with the Convention. Hydrological, ecological and other information will be held by all riparian States and, therefore, must necessarily be shared between basin States to ascertain the health, mutual benefits or risks associated with the watercourse. The principle of cooperation, expressed in art 8 of the Convention, but embedded across various other provisions, is fundamental for the practical implementation of the general principles of the UN Watercourses Convention, and in particular, equitable and reasonable use defined in arts 5 and 6.

Alongside information sharing, the identification of mutual benefits is an important component of cooperation and expressly recognised in art 8 of the Convention. In order to identify mutual benefits, States enter into consultations or negotiations whereby treaties can be consequently formed to realise acknowledged benefits.[59] Examples of identified mutual benefits include joint environmental protection and development of common infrastructure between riparian States.[60]

The principle of cooperation, which incorporates negotiations or consultations to realise mutual benefits and the undertaking of information sharing, also includes specific duties of negotiation or consultation which arise in relation to planned measures, the obligation to prevent significant transboundary harm, or to achieve the peaceful settlement of disputes.[61] In this way, it is important to recognise the existence of precise rules of cooperation within the UN Watercourses Convention and customary law. Procedural rules of cooperation, such as the duty to notify riparian States of planned measures that may cause significant transboundary harm, operationalise and provide detailed substance to the wider general duty of cooperation expressed in the Convention. The ICJ has provided valuable guidance regarding the customary nature of specific duties of riparian cooperation over transboundary watercourses. The Court in its *Pulp Mills* judgment recognised that Uruguay had a duty in both treaty and custom to notify Argentina as the co-riparian before any undertaking of environmental viability and construction of works.[62]

---

59 At 254.

60 See Convention on the Protection of the Rhine against Pollution by Chlorides 1404 UNTS 59 (opened for signature 3 December 1976, entered into force 1 April 1984), art 1. See also Undala Alam and Ousmane Dione *West Africa – A Regional Approach to Reducing Poverty in the Senegal River Basin* (World Bank, May 2004) at 2. The report describes the 1972 OMVS Convention (Convention Portant Création de l'Organisation pour la Mise en Valeur du Fleuve Sénégal (11 March 1972) <http://archives-omvs.org> (text available in French)) that is designed to develop joint infrastructure projects on the Senegal River.

61 UN Watercourses Convention, above n 1, arts 24 and 33.

62 *Pulp Mills on the River Uruguay (Argentina v Uruguay) (Judgment)* [2010] ICJ Rep 14 at 60.

The ICJ reaffirmed in *Pulp Mills* that the general principle of cooperation is founded on, and governed by, good faith.[63] As the performance of all treaty obligations must be conducted in good faith in light of art 26 of the 1969 Vienna Convention on the Law of Treaties (VCLT), the Court observed that negotiation clauses within bilateral watercourse treaties had to be undertaken in a meaningful way; the conclusion also reflects earlier decisions in the *Lac Lanoux Arbitration* and *North Sea Continental Shelf* cases.[64] In practice, meaningful negotiation required Uruguay to not engage in construction activity during the negotiation period.[65] While there is no legal duty for States to reach an agreement or any substantive outcome, the Court's interpretation regarding the nature of cooperation highlights the independence and consistent application between a general duty of cooperation grounded in customary principles of good faith, and particular treaty clauses which mandate the undertaking of a method of cooperation, whether it be notification, negotiation or consultation.

The articulation of cooperation within the UN Watercourses Convention is significant owing to the ICJ's view that parts of the Convention are reflective of customary international law. Despite its recent signatures and lack of ratifications at the time (the Convention had not yet entered into force), the ICJ deemed that the Convention strengthened the general development of international law.[66] The Court applied the principles of the Convention to the *Gabčíkovo-Nagymaros* case, concluding that the Slovak Federal Republic had deprived Hungary "of its right to an equitable and reasonable share of the natural resources of the Danube."[67]

The elevation of the substantive principles of the Convention to the status of customary law has been subject to much scrutiny.[68] The Convention did largely codify the International Law Commission's Draft Articles on the law of non-navigational uses of international watercourses (1994 ILC Draft Articles).[69] Therefore, perhaps the Court considered the Convention's customary status as

---

63 At 67, quoting Vienna Convention on the Law of Treaties 1155 UNTS 331 (opened for signature 23 May 1969, entered into force 27 January 1980), art 26.

64 *Lake Lanoux Arbitration*, above n 34, at 119; and *North Sea Continental Shelf (Germany v Denmark; Germany v Netherlands) (Judgment)* [1969] ICJ Rep 3 at 46–47.

65 *Pulp Mills on the River Uruguay*, above n 62, at 67.

66 *Gabčíkovo-Nagymaros Project*, above n 57, at 56.

67 At 56.

68 Benvenisti, above n 7, at 199. See also Owen McIntyre "The Proceduralisation and Growing Maturity of International Water Law" (2010) 22 JEL 475 at 493; and Stephen McCaffrey "The Customary law of international watercourses" in Mara Tignino and Christian Bréthaut (eds) *Research Handbook on Freshwater Law and International Relations* (Edward Elgar, Cheltenham (UK), 2018) 147 at 160.

69 *Draft Articles on the Law of the Non-Navigational Uses of International Watercourses* [1994] vol 2, pt 2 YILC 88. Following 30 years of ILC inquiry into customary law, the Draft Articles were adopted by the General Assembly to provide for a basis on which to subsequently negotiate the UN Watercourses

self-evident, as a consequence of its formation from the 1994 ILC Draft Articles, and so did not see the need to present state practice or *opinio juris* for its decision. Nevertheless, scholars have supported, or at least accepted the outcome of, the ICJ's customary view of the Convention.[70] The judgment was declared a milestone towards the development of a legal regime for cooperation over the use of shared watercourses.[71] The significance and application of the principle of cooperation, which is designed as an implementing principle by the Convention, was greatly supported by the *Gabčíkovo-Nagymaros* case. The Court embraced the reading of modern legal principles into the interpretation of the 1977 Soviet-era bilateral treaty (originally between Czechoslovakia and Hungary). In particular, the ICJ viewed that Hungary and Slovakia were subject to a continuing duty to negotiate towards a regime that can realise the objective of sustainable development.[72] The Court's reasoning invokes art 31 of the VCLT, which supports the contextual approach to treaty interpretation to achieve effectiveness through the permissible use of subsequent and relevant rules of international law applicable to the parties.[73] The Convention's role in the codification of custom is also supported by the preamble of the UN Watercourses Convention. While not legally binding, the preamble provides valuable insight regarding the intention of the parties to codify customary norms, and in particular, affirms the role of cooperation relating to watercourses.[74] While the low levels of State ratification of the Convention may at a glance seem to undermine the customary status of the core principles, Leb notes that limited ratification is primarily a consequence of poor understanding over the relationship (and any possible hierarchy) between the principles of equitable and reasonable use and the prevention of significant transboundary harm, rather than any controversy over questions of customary status.[75] In addition, lack of awareness and capacity has historically hindered State ratification.[76] Moreover, if a State does not wish to be bound by the compulsory dispute settlement mechanisms of the Watercourses Convention, it may instead opt for signature and ratification of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention), which although not holding compulsory dispute settlement provisions, does provide for the same object and purpose of the UN Watercourses Convention, namely, the protection of international watercourses

---

Convention. See *Draft articles on the law of the non-navigational uses of international watercourses* GA Res 49/52 (1995).

70 Benvenisti, above n 7, at 199. See also McCaffrey, above n 68, at 161; and Leb, above n 49, at 87.

71 Charles B Bourne "The Case Concerning the Gabčíkovo-Nagymaros Project: An Important Milestone in International Water Law" (1997) 8 YB Intl Env L 6 at 11.

72 At 11.

73 Vienna Convention on the Law of Treaties, above n 63, art 31(3).

74 UN Watercourses Convention, above n 1, preamble.

75 Leb, above n 49, at 103.

76 Alistair Rieu-Clarke and Flavia Rocha Loures "Still not in Force: Should States Support the 1997 UN Watercourses Convention?" (2009) 18 RECIEL 185 at 193.

and the promotion of the optimal and sustainable utilisation for present and future generations through cooperation.[77] Due to subsequent state practice, some ratifications of the Convention, use of the UNECE Water Convention and support for the *Gabčíkovo-Nagymaros* ruling, the customary status of cooperation is widely acknowledged and applicable to all watercourse States.[78]

Cooperation presents itself as a pathway towards the achievement of optimal and sustainable utilisation of international watercourses. This pathway of cooperation is neither discretionary nor vague. States must cooperate over international watercourses in light of the principles of good faith, sovereign equality and territorial integrity. The general principle of cooperation forms procedural obligations, such as the duty to notify over planned measures or negotiations to prevent significant transboundary harm. Cooperation is essential for the implementation of the treaty framework as a whole and must be undertaken in a meaningful way. While the general duty of cooperation and corresponding specific obligations are defined by the UN Watercourses Convention and the UNECE Water Convention, the customary nature of cooperation is firmly rooted in international law.

V THE INSTITUTIONALISATION OF COOPERATION AND GROWTH OF RIVER BASIN ORGANISATIONS

As early as 1815, States have cooperated over the management and use of international watercourses through the establishment of RBOs. The Final Act of the 1815 Congress of Vienna established the Central Commission of the Rhine.[79] Sometimes referred to as the oldest continuing international organisation, but initially sharing features similar to a standing diplomatic conference, the Commission facilitated and managed freedom of navigation on the Rhine through joint management between appointed commissioners from riparian States.[80] Over time, the international organisation evolved into an independent body possessing a degree of legal personality to operate within the international system as a Court of Appeal.[81] Since then, over 119 RBOs have been established between watercourse States to manage approximately 116 international river basins, with many dating their formation back to the 1990s.[82] While the number of RBOs is indeed high, out of a

77 UN Watercourses Convention, above n 1, preamble; and UNECE Water Convention, above n 1, art 2. See also Rieu-Clarke and Loures, above n 76, at 190.

78 Moynihan, above n 26, at 192.

79 Shaw, above n 21, at 33.

80 Claude-Albert Colliard and Aleth Manin *Droit International et Histoire Diplomatique* (Tome 2, Éditions Montchrestien, Paris, 1970) at 7. See also Dale S Collinson "The Rhine Regime in Transition: Relations between the European Communities and the Central Commission for Rhine Navigation" (1972) 72 Colum L Rev 485 at 485–486.

81 Collinson, above n 80, at 491.

82 Andrea K Gerlak and Susanne Schmeier "River Basin Organizations and the Governance of Transboundary Watercourses" in Ken Conca and Erika Weinthal (eds) *The Oxford Handbook of Water Politics and Policy* (Oxford University Press, Oxford, 2016) 532 at 534.

global total of 310 international basins, the majority of international river basins remain without any multilateral institutional regime.[83]

The definition of an RBO ought to be sufficiently broad to encapsulate the variety in structures and mandates that have inevitably developed due to variations in management objectives, State interests and geography. Schmeier, Gerlak and Blumstein present an inclusive definition that acknowledges the relationship between cooperation and RBOs:[84]

> [RBOs are] institutionalized forms of cooperation that are based on binding international agreements covering the geographically defined area of international river or lake basins characterized by principles, norms, rules and governance mechanisms.

This definition captures the cause of RBO creation, namely, State efforts to materialise the principle of cooperation through means of international institutionalisation. Forms of institutionalisation vary, from river commissions encompassing independent secretariats which hold a level of independent legal personality, to authorities that are solely designed to facilitate information exchange.[85] For riparian States party to the UNECE Water Convention, the establishment of new, or the joining of existing, RBOs is required in international law.[86] The Convention not only formally requires the establishment of RBOs, but also guides the mandate and purpose of the regimes. The UNECE Water Convention defines a joint body as any bilateral or multilateral commission or other appropriate arrangement for cooperation between the riparian parties.[87] RBOs' tasks include the collection and evaluation of data to identify transboundary impacts, joint monitoring of water quality, information exchanges and the creation of environmental management objectives alongside implementation programmes.[88] The inclusion of a binding mandate of institutionalised cooperation was attained due to the view that such forms of cooperation were "almost indispensable" in order to attain optimal utilisation and adequate protection of international watercourses.[89]

---

83 Rieu-Clarke, Moynihan, and Magsig, above n 17, at 29. See also "Transboundary Freshwater Dispute Database: Data and Datasets", above n 17.

84 Susanne Schmeier, Andrea K Gerlak and Sabine Blumstein "Clearing the muddy waters of shared watercourses governance: conceptualizing international River Basin Organizations" (2016) 16 Int Environ Agreements 597 at 600.

85 Susanne Schmeier "The institutional design of river basin organizations: empirical findings from around the world" (2015) 13 Intl J River Basin Management 51 at 57.

86 UNECE Water Convention, above n 1, art 9.

87 Article 1(5).

88 Article 9(2).

89 United Nations Economic Commission for Europe *Guide to Implementing the Water Convention* UN Doc ECE/MP.WAT/39 (September 2013) at 70.

The UN Watercourses Convention also references RBOs within its general provision on cooperation:[90]

> In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions.

Article 8(2) of the UN Watercourses Convention does not adopt the approach of the UNECE Water Convention. The UN Watercourses Convention merely recommends the establishment of RBOs in light of the existing well-functioning joint management regimes that have provided a facilitative environment for basin-wide cooperation.[91] The reason for the variance in approach is due to the difference in scope and nature of the two Conventions at the time of drafting. Initially, the UNECE Water Convention was regional in ambition, developed under the auspices of European governance structures, and although currently any State may become a party to the UNECE Water Convention, the negotiation and drafting of the articles were largely undertaken by European States.[92] Therefore, as many riparian European States already held long-standing traditions of cooperation through RBOs, the inclusion of art 9, which enforces RBO membership and creation, changed little with respect to how European States approached transboundary watercourse cooperation. In contrast, the UN Watercourses Convention was developed under the auspices of the ILC and the wider UN system. Like many global framework treaties, strong language enforcing clear changes in State behaviour is often set aside or weakened in order to achieve the necessary compromises for widespread acceptance and global membership of the treaty in question.[93]

After the adoption of the 1994 ILC Draft Articles, the UN General Assembly began the negotiation phase to produce a global framework treaty resulting in the adoption of the UN Watercourses Convention.[94] The ILC's composition and creation of the Draft Articles were founded on an examination of customary law up until the period of 1994.[95] The ILC Draft Articles gave no reference to RBOs within Draft Article 8 on cooperation and corresponding commentary; the only

---

90 UN Watercourses Convention, above n 1, art 8(2).

91 Article 24(1).

92 Moynihan and Magsig, above n 3, at 47. See also Stephen C McCaffrey "Implementation and Relationship to the UNECE Water Convention" (2016) 46 EP & L 35 at 36; and Jan Wouters and others *International Law: A European Perspective* (Hart, Oxford, 2018) at 917 and 923.

93 Moynihan and Magsig, above n 3, at 46.

94 *Draft articles on the law of the non-navigational uses of international watercourses*, above n 69.

95 See initial mandate of the ILC: *Progressive development and codification of the rules of international law relating to international watercourses* GA Res 2669 (1970).

inclusion of RBO structures can be seen in art 24 underneath the umbrella term of management.[96] Therefore, due to the exclusion of joint management in Draft Article 8, the ILC almost certainly viewed cooperation as a duty wider than particular management or procedural rules and more similar to concepts of good neighbourliness in addition to principles embodied in art 2 of the UN Charter.[97] The composition of art 24 reflects the non-binding nature of RBO creation.[98] However, during the period of treaty negotiations, Germany, in collaboration with numerous co-sponsors, introduced a proposal designed to include reference towards RBO creation within art 8.[99] The sponsoring States stressed the non-obligatory nature of the proposed art 8(2) and expressed an understanding that the article was not intended to create norms, but merely encouraged riparian States to compare and evaluate existing institutional management regimes to help determine appropriate paths for cooperation within their respective international basins.[100] A number of states, such as Russia, did not see the need for what has become art 8(2), since the substantive content is also reflected in art 24(1) of the UN Watercourses Convention.[101] Nevertheless, the inclusion of art 8(2) does improve the overall structure: the effect of paragraph 2 creates a direct link between the creation of RBOs and the principle of cooperation and thus also with equitable and reasonable utilisation.[102] Despite the UNECE Water Convention's use of RBOs to guarantee and implement the customary duty of cooperation, the formation, negotiation and conclusion of the UN Watercourses Convention highlighted the non-customary nature of RBO establishment or membership within international watercourse law.

To ensure that the continued effectiveness of the UN Watercourses Convention provisions is achieved in circumstances of evolution in custom, by adopting guidance from art 31(3)(c) of the VCLT, the language of art 8(2) of the Watercourses Convention ought to be interpreted in light of

---

96 *Draft articles on the law of the non-navigational uses of international watercourses*, above n 69, art 24(1); and UN Watercourses Convention, above n 1, art 24(1).

97 *2003rd Meeting – The law of the non-navigational uses of international watercourses* [1987] vol 1 YILC 69 at 70.

98 UN Watercourses Convention, above n 1, art 24.

99 The inclusion of art 8(2) was sponsored by Argentina, Austria, Egypt, Germany, Greece, Hungary, Italy, Malaysia, Mali, Portugal, Romania, Switzerland, the Syrian Arab Republic, the United States of America, Venezuela and Viet Nam. See General Assembly Sixth Committee *Summary Records of the 52nd Meeting: Convention on the Law of the Non-Navigational Uses of International Watercourses* UN Doc A/C.6/51/SR.52 (20 August 1997) at [65].

100 At [66].

101 General Assembly Sixth Committee *Summary Record of the 57th Meeting: Convention on the Law of the Non-Navigational Uses of International Watercourses* UN Doc A/C.6/51/SR.57 (4 September 1997) at [3].

102 Benvenisti, above n 7, at 183.

new normative developments in international law.[103] Although art 8(2) of the Convention currently does not create binding obligations, but merely advises States to enter into joint management treaties, a new customary principle enforcing RBO creation may provide in future a contextual basis to incorporate a more obligatory normative meaning of the paragraph, and thereby create consistency with the UNECE Water Convention which does create binding obligations of RBO establishment.

Institutionalised cooperation through RBOs cannot be held to be customary law at the time of the ILC's work compiling the 1994 Draft Articles relating to international watercourses. However, subsequent to the signing of the UN Watercourses Convention in 1997, two decades have passed that have given rise to continuing questions as to how the principle of cooperation has developed within international law. An evaluation will be undertaken as to whether or not the development of customary law has assigned more precise procedures concerning how the principle of cooperation is implemented across international river basins, namely, whether international custom now requires riparian States to establish or join existing RBOs.

VI IS COOPERATION THROUGH RIVER BASIN ORGANISATIONS AN EMERGING PRINCIPLE OF CUSTOMARY INTERNATIONAL LAW?

Customary international law is discoverable by evidence of a general practice accepted as law by States.[104] Two elements are hence required to identify international custom: general state practice provides for the identification of the norm itself; while practice accepted as law or otherwise referred to as *opinio juris sive necessitatis* (an opinion of law or necessity) demonstrates the will of States to be considered subject or bound to the identified norm.[105] Complete uniformity of state practice over one particular norm is not required.[106] However, consistency and generality of practice, alongside substantial uniformity by States especially affected by any new norm, is needed to establish custom.[107] *Opinio juris* distinguishes instances of common and widespread state practice that are fundamentally of a political nature, from those that are reflective of a true legal norm. State practice that is identified as prevalent, but politically discretionary, cannot be construed as customary international law. Alongside general customary law, which is applicable to all States, regional custom can be identified that effectively limits customary law to only pertaining to a particular group of

---

103 Alberto Costi, Scott Davidson and Lisa Yarwood "The Creation of International Law" in Alberto Costi (ed) *Public International Law: A New Zealand Perspective* (LexisNexis, Wellington, 2020) 153 at 209.

104 Statute of the International Court of Justice, art 38(1)(b).

105 James Crawford *Brownlie's Principles of Public International Law* (9th ed, Oxford University Press, Oxford, 2019) at 23.

106 *Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v United States of America) (Merits)* [1986] ICJ Rep 14 at 98.

107 *North Sea Continental Shelf*, above n 64, at 43–44.

States.[108] To discover regional or local custom, the burden of proof for identification is necessarily higher than the determination of general custom. The higher burden of proof derives from the limitations relating to the smaller grouping of States, thus requiring higher consistency, generality and uniformity of practice notwithstanding clearly marked *opinio juris*.[109]

International watercourse treaties are subject to the customary principle of *uti possidetis juris*.[110] The principle ensures that treaties that attach to territory, including watercourse treaties, survive periods of State succession.[111] In the *Gabčíkovo-Nagymaros Project* case, the ICJ concluded that the joint investment treaty concluded between Hungary and Czechoslovakia concerning the utilisation of the River Danube survived the demise of Czechoslovakia, whose successor State Slovakia was responsible for continued treaty obligations.[112] Although Hungary was not a party to the Vienna Convention on State Succession, the Court identified art 12 of that Convention as custom in light of the preparatory works of the ILC.[113] Therefore, treaties which create other forms of joint watercourse management, such as RBOs, will be subject to the principle of *uti possidetis juris* as they too concern the regulation or administration of sovereign territory. The applicability of *uti possidetis juris* creates continued difficulties for State cooperation through institutionalisation, as the treaties generating the cooperative framework cannot be easily undone or discontinued; even State succession will not deprive treaty provisions of their intended effects. The Nile Waters Agreement of 1929, a bilateral treaty concluded between Egypt and the United Kingdom, demonstrates the difficulties in the relationship between water management and State succession. The Nile Waters Agreement prioritised Egypt's use and access to Nile water flows during a time when most riparian States were under British administration; the continued possible validity of the treaty regime for newly independent Nile States caused much vocal criticism.[114] However, the ability of watercourse treaties to survive State

---

108 *Asylum Case (Colombia v Peru) (Judgment)* [1950] ICJ Rep 266 at 276. See also Gleider Hernández *International Law* (Oxford University Press, Oxford, 2019) at 43; and *Draft conclusions on identification of customary international law with commentaries* UN Doc A/73/10 (2018) at 154.

109 Costi, Davidson, and Yarwood, above n 103, at 171.

110 *Gabčíkovo-Nagymaros Project*, above n 57, at 71–72.

111 *United Nations Conference on Succession of States in Respect of Treaties: Official Records, Volume 3* UN Doc A/Conf.80/16/Add,2 (1979) at 33.

112 *Gabčíkovo-Nagymaros Project*, above n 57, at 71–72.

113 At 71–72, referring to Vienna Convention on Succession of States in Respect of Treaties 1946 UNTS 3 (opened for signature 23 August 1978, entered into force 6 November 1996), art 12.

114 *United Nations Conference on Succession of States in Respect of Treaties: Official Records, Volume 3*, above n 111, at 33. See also Jeffrey Azarva "Conflict on the Nile: International Watercourse Law and the Elusive Effort to Create a Transboundary Water Regime in the Nile Basin" (2011) 25 Temp Intl & Comp LJ 457 at 472 and 473.

succession does contribute towards territorial stability.[115] Considering these circumstances, continued border disputes will almost certainly prevent the establishment of RBOs due to the permanence of such treaty effects on the disputed territory in question.

RBOs or joint management mechanisms range in size, scope and location. Therefore, the evaluation of state practice necessary to identify customary norms must be carefully undertaken. In some cases, one international watercourse will be covered by multiple RBO regimes; each organisation can be specialised in a particular area of resource management, such as the development of joint infrastructure or attainment of a common environmental protection plan for the river basin. This approach to watercourse management does pose risks towards a "fragmentation" of international law, or critically, an inability to comprehensively manage the whole ecosystem across various interdependent sectors.[116] In other situations, one RBO may be responsible for multiple watercourses, such as the International Joint Commission set up between the United States of America and Canada to manage 11 international river basins.[117] Europe, Africa and North America stand out for markedly higher RBO coverage than the Middle East and Asia.[118] Although not every international watercourse in Africa is covered through an institutionalised cooperation structure – one such example is the Chiloango River that traverses between Angola, the Democratic Republic of the Congo and the Republic of the Congo[119] – major international basins in Africa do have multilateral treaty regimes which have institutionalised cooperation through the establishment of RBOs.

The major African basins, in terms of geographic size and economic importance, include the Nile, Lake Chad, Congo Basin, Niger River Basin, Senegal Basin, Zambezi Basin, Okavango Basin, Limpopo Basin and the Orange River Basin.[120] Each of these international basins are overseen by international commissions with a general resource management mandate; however, the Nile River Basin Commission is not yet operational as the river basin treaty has not yet come into force.[121] Of

115 Shaw, above n 21, at 733.

116 Lee Jing *Preservation of Ecosystems of International Watercourses and the Integration of Relevant Rules* (Brill Nijhoff, Leiden, 2014) at 30.

117 Susanne Schmeier "Joint Institutional Arrangements for Governing Shared Water Resources: A comparative analysis of state practice" in Alistair Rieu-Clarke, Andrew Allan and Sarah Hendry (eds) *Routledge Handbook of Water Law and Policy* (Routledge, Abingdon (UK), 2017) 260 at 261.

118 Gerlak and Schmeier, above n 82, at 534.

119 Schmeier, above n 117, at 262.

120 Transboundary Freshwater Dispute Database, above n 17.

121 See Agreement on the Nile River Basin Cooperative Framework (opened for signature 14 May 2010, not yet in force) FAOLEX No LEX-FAOC203276 <www.fao.org/faolex>; Convention and Statutes relating to the Development of the Chad Basin (signed 22 May 1964) (1997) 61 FAO Legislative Studies 3; Convention Creating the Niger Basin Authority 1346 UNTS 207 (opened for signature 21 November 1980, entered into force 3 December 1982); Agreement on the Establishment of the Zambezi Watercourse Commission (opened for signature 13 July 2004, entered into force 7 January 2011); Agreement between the Governments of the

these nine major basins, all of the multilateral treaties that set up joint RBOs are inclusive in the sense that all, or at least a substantial majority of, riparian States are parties to the applicable treaty framework and hold membership within of the relevant RBO. The purpose of establishing RBOs or joint commissions within the major African basins is to promote cooperation among riparian States with a notable focus on economic development and environmental management.[122] Many of the RBOs in the major basins incorporate an independent secretariat, a technical committee, a council of ministers and a Heads of State summit within an overall decision-making framework.[123] Therefore, RBOs that incorporate independent secretariats will possess international legal personally in order to operate independently within the international system to perform functional duties.[124] Often, the formation of these various RBOs predates the UN Watercourses Convention, thus illustrative of the longevity of the principle of cooperation, and the early institutionalisation experienced within the sphere of international freshwater management.

Institutional cooperation is even more prevalent within Europe, a region known for its alluvial landscapes traversing across many small States. The role of institutions in the historical development of European watercourse cooperation, and the current legal necessity to cooperate within RBO structures for the European Union member States and parties to the UNECE Water Convention, determine that institutionalised cooperation is widely practised among European States.[125] To date, 40 European States are signatories to the UNECE Water Convention in addition to the European

---

Republic of Botswana, the Kingdom of Lesotho, the Republic of Namibia and the Republic of South Africa on the Establishment of the Orange-Senqu Commission (signed 3 November 2000) available at "Regional and International Agreements" ORASECOM <www.orasecom.org>; Agreement between the Governments of the Republic of Angola, the Republic of Botswana, and the Republic of Namibia on the establishment of a Permanent Okavango River Basin Water Commission (15 September 1994) FAOLEX No LEX-FAOC017435 <www.fao.org/faolex>; Agreement between the Republic of Botswana, the Republic of Mozambique, the Republic of South Africa and the Republic of Zimbabwe on the Establishment of the Limpopo Watercourse Commission (opened for signature 15 September 2004, entered into force 24 June 2005); Accord Instituant un Régime Fluvial Uniforme et Créant la Commission Internationale du Bassins Congo-Oubangui-Sangha (opened for signature 21 November 1999, entered into force 22 February 2007) FAOLEX No LEX-FAOC144670 <www.fao.org/faolex>; and Convention Portant Création de l'Organisation pour la Mise en Valeur du Fleuve Sénégal, above n 60.

122 See for example the mandate of the Niger Basin Authority: Convention Creating the Niger Basin Authority 1346 UNTS 207 (opened for signature 21 November 1980, entered into force 3 December 1982), art 3.

123 Article 5.

124 *Reparation for Injuries Suffered in the Service of the United Nations (Advisory Opinion)* [1949] ICJ Rep 174 at 180.

125 Gábor Baranyai "Transboundary water governance in the European Union: the (unresolved) allocation question" (2019) 21 Water Policy 496 at 504.

Union itself.[126] The only significant watercourse State in Europe to not sign the Convention is Turkey. However, as part of the process towards European Union membership, the European Commission has repeatedly advised Turkey to accede to the Convention.[127] The issue of Turkish accession to the UNECE Water Convention is particularly current as neighbouring riparian States such as Iraq have also expressed intention to accede.[128] As Turkey is a strong upstream State, in control of river sources from major international basins such as the Tigris and Euphrates rivers, there was historically little incentive to institutionalise cooperation, particularly when riparian relations were unstable.[129] Nevertheless, driven by social and economic change within Turkey, there appears to be some progress towards the development of institutional forms of environmental protection and water management.[130]

Comprehensive coverage of RBOs over international watercourses in the Middle East and Asia remains elusive. Major international basins remain without institutionalised structures, such as the Tigris and Euphrates.[131] In other basins, such as the Jordan River Valley, some institutional bilateral cooperation between Jordan and Israel, while positive, is infrequent.[132] Moreover, riparian States continue to act unilaterally or bilaterally, as in the case of Israel-Jordan, despite the Jordan River's position as an international watercourse shared also among Lebanon, Syria and the Palestinian Authority.[133] The creation of the Mekong River Commission between Southeast Asian States, designed to jointly cooperate and manage the Lower and Upper Mekong, was a noteworthy institutional development for Asian hydro-governance.[134] However, the Commission does not benefit

126 European States that are not signatories to the UNECE Water Convention include Andorra, Armenia, Cyprus, Georgia, Ireland, Iceland, Malta, Moldova, Monaco, San Marino, Turkey and Vatican City. See "Status of Treaties" United Nations Treaty Collection (30 January 2022) <www.treaties.un.org>.

127 Aysegül Kibaroglu *Turkey's Water Diplomacy: Analysis of its Foundations, Challenges and Prospects* (Anthem Press, London, 2021) at 65.

128 At 65.

129 Aysegül Kibaroglu "An analysis of Turkey's water diplomacy and its evolving position vis-à-vis international water law" (2015) 40 Water International 153 at 164.

130 Kibaroglu, above n 127, at 22.

131 Schmeier, above n 117, at 263.

132 Elizabeth Yaari, Marian Neal and Zaki Shubber *Governance Structures for Transboundary Water Management in the Jordan Basin* (EcoPeace Middle East and Stockholm International Water Institute, 2015) at 37.

133 At 7.

134 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin 2069 UNTS 3 (5 April 1995).

from the riparian membership of China and Myanmar, which are significant upstream States.[135] The existence of numerous border disputes across the Middle East and Asia, over which many incorporate watercourses, is an acute obstacle that hinders RBO creation and effective transboundary cooperation, not least due to the securitization of the watercourses themselves, but also due to the applicability of the principle of *uti possidetis juris* which enforces permanency to any treaty framework. The ongoing border conflict between Kyrgyzstan and Tajikistan exemplifies the significant challenges across the region as a whole. International watercourses such as the Isfara River, situated alongside the contested Kyrgyz-Tajik border, have become a point of conflict, rather than cooperation.[136]

The brief assessment of state practice illustrated above demonstrates that the use of RBOs as a means to achieve the principle of cooperation is mixed. In general, States do cooperate over international watercourses, best evidenced through the establishment of 119 RBOs to manage 116 international watercourses as of 2011.[137] Of this total, 55 RBOs include all riparian States to the respective watercourse while 64 RBOs include not all basin States.[138] In addition, 17 RBOs exclude complete basin-wide participation often due to the small section of the watercourse which may traverse across a non-member State.[139] In summary, about one third of watercourses are covered by an institutionalised cooperation framework. However, the identification of a new norm of customary international law, while not requiring complete uniformity of practice, does nevertheless require substantial uniformity.[140] Despite this high threshold not having generally been met globally, state practice is highly consistent pertaining to cooperation within institutions across Europe, North America and Africa, especially over economically and geographically significant international watercourses such as the Volta basin, Niger Basin, the Danube or the Great Lakes.[141] However, practice diversifies over the scope of cooperation and management structure of RBOs. Many European RBOs, while praised for their focus and ability to improve water quality, do not possess

---

135 Rémy Kinna and Alistair Rieu-Clarke *The Governance Regime of the Mekong River Basin: Can the Global Water Conventions Strengthen the 1995 Mekong Agreement?* (Brill, Leiden, 2017) at 22–23.

136 "Kyrgyz and Tajik security forces clash at border in water dispute" (29 April 2021) Reuters <www.reuters.com>.

137 Gerlak and Schmeier, above n 82, at 534.

138 Susanne Schmeier *The Institutional Design of River Basin Organizations: Introducing the RBO Institutional Design Database and its main Findings* (Oregon State University Program in Water Conflict Management and Transformation, 2013).

139 At 7.

140 *Anglo-Norwegian Fisheries (United Kingdom v Norway) (Judgment)* [1951] ICJ Rep 116 at 131; *Fisheries Jurisdiction (United Kingdom v Iceland) (Merits)* [1974] ICJ Rep 3 at 24–25; and *North Sea Continental Shelf*, above n 64, at 43–44.

141 Schmeier, above n 138.

instruments to negotiate or manage water allocation between riparian States.[142] The absence of water allocation mechanisms in European RBOs may present significant future challenges for watercourse management in Europe, particularly as glacial retreat, exacerbated by climate change, will decrease total river flows, increasing water scarcity.[143] Therefore, while there is some evidence of widespread and consistent state practice at regional levels, the consistency required to determine practice only extends to the use of RBOs as fora for cooperation, rather than extending to particular areas of management, such as water quality or quantity issues.

The Final Act of the 1815 Congress of Vienna noted a need for institutionalised cooperation as the collective shared interest of States in free navigation on the Rhine required common management. The identification of shared interests in watercourses has evolved since then to include goals of sustainable and equitable water use. Although interests have steadily changed, progressing from navigation to the inclusion of conservation, the means to manage and achieve collective State interests have always, at a fundamental level, been driven through institutionalism. Often, institutionalisation is not pursued when common interests over a watercourse are not identified.[144] The institutional approach is not limited to transboundary freshwater law: the UN Convention on the Law of the Sea, in some circumstances, mandates the creation of regional fisheries management organisations (RFMOs) to proceduralise and implement obligations of cooperation prevalent in the Law of the Sea.[145] Cooperation through institutions is evidently witnessed by the many treaties that establish international organisations to pursue and realise the common interests of riparian States.

In the *Nicaragua* case, the ICJ established *opinio juris* from the consent and willingness of States to be bound by treaty obligations that were an expression of state practice.[146] Treaty provisions that have generated RBOs and linked their establishment with the performance of a legal duty of cooperation, which is derivative from the principles of good faith and sovereign equality, may reflect relevant *opinio juris*. Treaties such as the Danube River Protection Convention and Permanent Okavango River Basin Water Commission Agreement form an international commission "with a view to implementing the objectives and provisions of this Convention."[147] The objectives of these

142 Baranyai, above n 125, at 510.

143 At 501.

144 Benvenisti, above n 7, at 42.

145 United Nations Convention on the Law of the Sea 1833 UNTS 3 (opened for signature 10 December 1982, entered into force 16 November 1994), arts 63 and 118.

146 *Military and Paramilitary Activities in and Against Nicaragua*, above n 106, at 100–101.

147 Convention on Cooperation for the Protection and Sustainable Use of the Danube River (opened for signature 29 June 1994, entered into force 22 October 1998) available at "Danube River Protection Convention" International Commission for the Protection of the Danube River <www.icpdr.org> [Danube River Protection Convention], art 18(1). See also Goemeone EJ Mogomotsi, Patricia K Mogomotsi and Ketlhatlogile Mosepele

Conventions reflect the goal of sustainable and equitable use while ensuring the conduct of specific forms of cooperation, for example, notification and negotiation over significant transboundary harm.[148] In a similar way, art 16 of the Agreement on the Nile River Basin Cooperative Framework defines that the objective of the established commission is to serve as an "institutional framework for cooperation among Nile Basin States."[149] The objectives of the commission also concern the implementation of the principles and obligations of the treaty, which reflect the UN Watercourses Convention and customary norms.[150] Treaty provisions that link the establishment of RBOs, such as river commissions, with the implementation of cooperation, may reflect positive *opinio juris* from the willingness of States to become legally subject to RBO procedures in order to meet their obligations concerning cooperation and equitable and reasonable utilisation. The ICJ in the *Continental Shelf (Libya v Malta)* case underscored the role of treaty action:[151]

> It is of course axiomatic that the material of customary international law is to be looked for primarily in the actual practice and *opinio juris* of States, even though multilateral conventions may have an important role to play in recording and defining rules deriving from custom, or indeed in developing them.

While the *Nicaragua* case represents the recording of *opinio juris* through custom, and indeed, the UN Watercourses Convention also embodies this form of codification, the many basin-wide multilateral treaties that have institutionalised cooperation to realise international watercourse principles may contribute towards the evolution of *opinio juris* among States that, over time, generate a process of customary norm creation rather than codification. Although ICJ practice permits the interpretation and discovery of *opinio juris* from treaties that also represent state practice, the existence of outside or material sources reflecting State belief to be bound by an emerging customary norm, such as comments, speeches or legal reasoning by States, would provide greater clarity as to the nature or form of *opinio juris* connecting to institutionalised cooperation.[152]

Greater clarity in the evolution of *opinio juris* concerning the establishment of joint institutions can perhaps be inferred from the change in the language of the 2004 International Law Association (ILA) Berlin Rules. While these rules and the work of the ILA are not a formal source of law, as it is best practice with the aim of systematisation and progressive development, the language of the rules

---

"Legal aspects of transboundary water management: An analysis of the intergovernmental institutional arrangements in the Okavango River Basin" (2020) 33 LJIL 391 at 403.

148 Danube River Protection Convention, above n 147, arts 5, 12 and 24.

149 Agreement on the Nile River Basin Cooperative Framework, above n 121, art 16(b).

150 Articles 6(1) and 3. See also Philine Wehling *Nile Water Rights: An International Law Perspective* (Springer, Berlin, 2020) at 268.

151 *Continental Shelf (Libyan Arab Jamahiriya v Malta) (Judgment)* [1985] ICJ Rep 13 at 29–30.

152 Crawford, above n 105, at 21.

can nevertheless be of assistance.[153] Article 64 states that "when necessary", basin States "shall" establish a basin-wide joint agency or commission with authority to undertake the integrated management of waters of an international basin.[154] While the term "when necessary" does give States a level of flexibility in the determination of circumstances and context, the change to "shall" from "may" as used in the UN Watercourses Convention demonstrates an increasing shift away from discretionary notions of institutional management of international basins within the legal community. In the 2008 Draft Articles on the Law of Transboundary Aquifers, while the ILC does reiterate the non-binding nature of RBO creation for basin States generally by stating that States "should" establish joint mechanisms for cooperation, in its commentary, the ILC notes that in some regions such as Europe, cooperation through RBO structures enjoys a strong and long tradition.[155] Furthermore, it is noticeable that the UN Sustainable Development Goals (SDGs) points to an integrated method of watercourse management where, as appropriate, transboundary cooperation is required.[156] However, the UN Economic and Social Council, in its progress update on the implantation of SDG 6.5, worrisomely identified that 129 countries and territories were not on target to achieve an integrated system of freshwater resource management, including basin management and monitoring.[157] In fact, according to the SDG progress update:[158]

> … only 24 of the 153 countries and territories that share transboundary rivers, lakes and aquifers have 100 per cent of their transboundary basin area covered by operational arrangements, and only another 22 countries and territories have more than 70 per cent covered.

Therefore, particularly in light of the poor progress made on SDG 6.5, a sober assessment would suggest that there is not enough evidence as yet to identify any general customary change.

The steady growth of treaties utilising institutional structures to implement watercourse management principles lends some support to the notion that State cooperation through RBOs is an emerging principle of customary international law. However, state practice remains inconsistent at a global level, and therefore, it would be impulsive to suggest institutional cooperation can be described

---

153 Salman MA Salman "The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspective on International Water Law" (2007) 23 Water Resources Development 625 at 628.

154 "Water Resources Law: Fourth Report" in International Law Association *Report of the Seventy-First Conference, held in Berlin 16–21 April 2004* (International Law Association, London, 2004) 334 at 404.

155 *Draft Articles on the Law of Transboundary Aquifers* [2008] vol 2, pt 2 YILC 23 at 30 and 31.

156 *Transforming Our World: the 2030 Agenda for Sustainable Development* GA Res 70/1 (2015), goal 6.5.

157 *Progress towards the Sustainable Development Goals: Report of the Secretary-General* UN Doc E/2021/58 (30 April 2021) at [79].

158 At [80].

as a current principle of customary international law.[159] Nevertheless, the high number of treaties incorporating watercourse commissions in Europe and Africa demonstrates significant evidence for, perhaps in future, the crystallisation of regional customary law concerning institutionalised cooperation over significant international watercourses.[160] The treaties reveal widespread and remarkably consistent state practice alongside a recognition that riparian States express a willingness to be bound and subject to institutionalised forms of cooperation to attain optimal and sustainable use of shared watercourses.

VII THE SIGNIFICANCE OF A CUSTOMARY PRINCIPLE OF INSTITUTIONAL COOPERATION

Since some evidence does indicate that continued change in state behaviour may in the future lead to the creation of a new norm of institutionalised cooperation, this part will focus on the possible implications relating to the existence of any such regional custom. The immediate consequence of the crystallisation of regional custom confirming institutional cooperation is that riparian States, situated in the region covered by the new norm, would be compelled to create or join RBOs to effect cooperation within the international river basin. This change in of itself would significantly disrupt the status quo. Riparian States such as Egypt, which has not currently signed nor ratified the Agreement on the Nile River Basin Cooperative Framework, the instrument that establishes a river commission to facilitate basin-wide cooperation and management, would be required, rather than currently expected, to join the RBO. The emergence of a regional customary principle of institutional cooperation has not been validated or recognised by international courts nor UN bodies such as the ILC. The 2008 ILC Draft Articles on the Law of Transboundary Aquifers propose that aquifer States "should establish joint mechanisms of cooperation."[161] While art 8(2)'s terminology is certainly stronger towards the inclusion of RBOs than seen in the 1994 Draft Articles, the language nevertheless does not enforce the creation of joint institutions. Indeed, the possible regional custom would be unique in international law, as treaty participation is commonly discretionary pursuant to the principles of state sovereignty and consent.[162] Consequently, the emergence of a norm of institutionalised cooperation as *lex specialis* (within the ambit of international watercourse law) would limit the discretionary nature of the customary principle of treaty consent as codified in art 11 of the

159 Julie Gjørtz Howden *The Community of Interest Approach in International Water Law: A Legal Framework for the Common Management of International Watercourses* (Brill Nijhoff, Leiden, 2020) at 154.

160 Leb, above n 49, at 177.

161 *Report of the International Law Commission: Sixtieth Session (5 May–6 June and 7 July–8 August 2008)* UN Doc A/63/10 (2008) at 23. See also Wehling, above n 150, at 268, stating that no obligation exists under international law to create joint river commissions.

162 Costi, Davidson and Yarwood, above n 103, at 190.

VCLT; however, this limitation is foreseen by way of art 38 of the VCLT.[163] The development of regional custom securing cooperation through regimes would also, over time, realise the establishment of new RBOs over international watercourses, institutionalising cooperation in environments previously unacquainted with RBO structures.

A The Omo-Turkana Basin

An example of an environment unfamiliar with RBOs, and an appropriate case study to illustrate the significance of the effects of any regional norm change, is the Omo-Turkana Basin situated on the border between Kenya and Ethiopia. Lake Turkana, which is located in Kenya, is characterised by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as possessing outstanding universal value due to the lake's unique ecological diversity and rich geography situated in the Great Rift Valley.[164] However, in 2018, Lake Turkana was identified by the World Heritage Committee as "in danger" in accordance with art 11(4) of the World Heritage Convention.[165] The World Heritage Committee expressed utmost concern over the construction of Ethiopia's Gibe III dam on the Omo River. Although the dam is situated in Ethiopia, the development has the capacity to adversely impact river flows into Lake Turkana, threatening hydrological health and posing a significant risk of transboundary harm for Kenya.[166] Furthermore, Ethiopia's Kuraz Sugar Development Project extracts significant amounts of water from the Omo River, and it was also identified as a threat to the preservation of the lake.[167]

Local Daasanach and other indigenous groups dependent on Lake Turkana for economic and religious sustenance have become more vulnerable from the ecological and hydrological deterioration of the lake and thus are significantly impacted by unmitigated transboundary impacts resulting from regional developments.[168] It is important to recognise that due to the irrigation and hydropower

---

163 Vienna Convention on the Law of Treaties, above n 63, arts 11 and 38. On the customary nature of the Convention, see Costi, Davidson, and Yarwood, above n 103, at 189.

164 UNESCO *Convention Concerning the Protection of the World Cultural and Natural Heritage: World Heritage Committee, Twenty-first session* UN Doc WHC-97/CONF.208/17 (27 February 1998) at 38, referring to art 11(4) of the Convention for the protection of the world cultural and natural heritage 1037 UNTS 151 (opened for signature 16 November 1972, entered into force 17 December 1975) [World Heritage Convention].

165 UNESCO *Decisions adopted during the 42nd session of the World Heritage Committee (Manama, 2018)* UN Doc WHC/18/42.COM/18 (4 July 2018) [*Decisions adopted during the 42nd session of the World Heritage Committee*] at 170–171.

166 Julie Gibson and Zeray Yihdego "Pathways to enhanced cooperation" in Jonathan Lautze, Matthew McCartney and Julie Gibson (eds) *The Omo-Turkana Basin: Cooperation for Sustainable Water Management* (Routledge, Abingdon (UK), 2022) 123 at 129.

167 *Decisions adopted during the 42nd session of the World Heritage Committee*, above n 165, at 170.

168 Neil Shea "Last Rites for the Jade Sea?" *National Geographic* (Washington DC, August 2015) at 68.

projects conducted in and around the Omo-Turkana basin, Ethiopia may have breached customary international law.[169] However, the downstream impacts of the dam are not sufficiently clear as yet to determine whether or not the nature of any transboundary harm may be deemed "significant" pursuant to the definition under the duty to prevent significant transboundary harm. While it is important to consider that by incorporating a level of significance into the no-harm rule is to ensure a *de minimis* threshold in order to exclude minor environmental impacts, the due diligence component to the obligation to prevent significant transboundary harm has been poorly implemented.[170] Formal environmental and social impacts assessments were prepared subsequent to the commencement of construction of the dam in 2006; this approach ignores the customary status of transboundary environmental impact assessments that must be completed prior to any construction of works where there may exist a risk of significant transboundary harm.[171] In order to ascertain whether the risk of transboundary harm may be significant and, therefore, of a nature to trigger the obligation to complete a transboundary environmental impact assessment, the ICJ has noted the need for the completion of preliminary assessments before embarking on any activity.[172] Due to the undertaking of impact assessments after the initiation of works, this due diligence obligation was not undertaken. In addition, such assessments did not consider any social impacts from water extraction for irrigation on local populations surrounding the Lower Omo River and Lake Turkana nor ecological impacts on the biodiversity of the lake.[173] Gibson and Yihdego note that detailed impact assessments, such as information gathering on Lake Turkana fish stock trends or wider analysis to develop an understanding on the changes to the basin as a whole, have not been undertaken by the riparian States even after the construction of works.[174] Most strikingly, a transboundary impact assessment is not yet available in relation to the Kuraz Sugar Development Project.[175] Evidence suggests that the overall biomass of Lake Turkana may halve, leading to a collapse in fish stocks due to the hydrological changes caused by the Gibe III dam development.[176] While customary international law does not

169 Ethiopia and Kenya are not parties to the UN Watercourses Convention or the UNECE Water Convention. As such, the case study limits itself to the examination of applicable customary law.

170 Gibson and Yihdego, above n 166, at 139.

171 On the customary nature and scope of the rule, see *Pulp Mills on the River Uruguay*, above n 62, at 82–83. See also Jennifer Hodbod and others "Social-ecological change in the Omo-Turkana basin: A synthesis of current developments" (2019) 48 Ambio 1099 at 1105.

172 *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica) (Judgment)* [2015] ICJ Rep 665 at 706.

173 Hodbod and others, above n 171, at 1104.

174 Gibson and Yihdego, above n 166, at 139.

175 UNESCO *Decisions adopted during the extended 44th session of the World Heritage Committee (Fuzhou (China) / Online meeting, 2021)* UN Doc WHC/21/44.COM/18 (31 July 2021) at 72.

176 Hodbod and others, above n 171, at 1104.

determine the exact content of transboundary environmental impact assessments, the underwhelming scale and breadth of the prepared assessments can hardly be reconciled with the duty to prevent significant transboundary harm in addition to the general obligations to protect and preserve the environment and world heritage.[177] Obligations imposed on the State require at least some knowledge gathering in order to make a reasonable assessment of possible transboundary impacts.[178]

The application of the customary principle of equitable and reasonable use is circumstance-dependent.[179] Guidance from the UN Watercourses Convention and the 2008 ILC Draft Articles on the Law of Transboundary Aquifers highlight relevant criteria to consider such as geographic, ecological, social or economic circumstances.[180] Circumstances in favour of Ethiopia's development projects include most notably the social and economic benefits attached to significant hydropower production and increasing total arable land for cultivation. The Gibe III dam has a capacity to generate 1870 MW, amounting to an 80 per cent increase in Ethiopia's generation capacity.[181] While half of the electricity generated is expected to remain in Ethiopia, 500 MW is to be exported to Kenya, 200 MW to Sudan and 200 MW to Djibouti.[182] The regulation of river flow has further allowed for intensified irrigation in the lower Omo catchment. The Kuraz Sugar Development Project is to cover over 100 kilo hectares while large private estates focusing on cotton and palm oil also rival in size.[183] The opportunity for the addition of a large body of renewable energy into the Kenyan electricity grid is naturally an important factor when considering the overall Kenyan response to the developments within the basin.

Despite the positive effects of the developments within the Omo-Turkana basin, the worrying scale and totality of social and ecological risks seem to outweigh the benefits in particular in relation to the intensive agricultural projects that extract significant amounts of freshwater from the river basin. The principle of equitable and reasonable use requires a careful balancing act between development, on the one hand, and social-environmental effects, on the other. In this way, equitable and reasonable

177 *Construction of a Road in Costa Rica along the San Juan River*, above n 172, at 706. On the customary status of environmental protection, see *Legality of the Threat or Use of Nuclear Weapons*, above n 48, at 241; and *Gabčíkovo-Nagymaros Project*, above n 57, at 41. On the duty of Ethiopia to preserve and protect world heritage outside of its territory, see World Heritage Convention, above n 164, art 6(3).

178 Leb, above n 49, at 111.

179 *Gabčíkovo-Nagymaros* Project, above n 57, at 56.

180 UN Watercourses Convention, above n 1, art 6. See also *Draft Articles on the Law of Transboundary Aquifers*, above n 155, art 5.

181 Hodbod and others, above n 171, at 1103.

182 At 1103.

183 At 1103.

use ties into the principle of sustainable development.[184] Ultimately, determining what may be considered equitable and reasonable involves subjective value judgments from States.[185] Equity represents a normative claim of justice in a given circumstance; thus, the theory of justice embedded into the principle of equitable and reasonable use implies political choice in order to weigh the relevant factors and reach a conclusion.[186] Due to the responsibility of both States to ensure adequate protection of the natural environment and heritage in domestic and international law, the current approach taken by both basin States ought to be revised.[187] The normative commitments inherent in the principle of equitable and reasonable utilisation can be delineated to an extent from the legal orders of the riparian States themselves. Recognition of the concept of vital human water needs within the sphere of human rights, in addition to environmental and heritage protection regimes, should compel both States to emphasise precaution when utilising the Omo-Turkana Basin.[188] In the case of *Friends of Lake Turkana Trust v Attorney General*, the Kenyan Environment and Land Court affirmed the applicability of the precautionary principle.[189] As such, when undertaking purchase arrangements for hydroelectric power from Ethiopia, Kenya has a responsibility to ensure that no environmental harm arises from such agreements. While the Environment and Land Court could not address human rights breaches due to lack of information, it concluded that the Kenyan Government breached its constitutional duty of environmental stewardship:[190]

> It is thus the finding of this court that the Respondents and Interested Party as trustees of the environment and natural resources owe a duty and obligation to the Petitioner to ensure that the resources of Lake Turkana are sustainably managed utilized and conserved, and to exercise the necessary precautions in preventing environmental harm that may arise from the agreements and projects entered into with the Government of Ethiopia in this regard.

McCaffrey notes that the obligation of equitable and reasonable utilisation is best understood as a process.[191] Indeed, without transboundary cooperation exemplified through information gathering, sharing and collective assessment, evaluating what may be equitable and reasonable becomes

---

184 *Gabčíkovo-Nagymaros Project*, above n 57, at 77–78.

185 Leb, above n 49, at 87.

186 Martti Koskenniemi "The Politics of International Law" (1990) 1 EJIL 4 at 30–31.

187 Constitution of the Republic of Kenya 2010, preamble, arts 42 and 69; and Constitution of the Federal Democratic Republic of Ethiopia 1995, arts 44 and 92.

188 Leb, above n 49, at 200–205.

189 *Friends of Lake Turkana Trust v Attorney General* [2014] eKLR ELC Suit No 825 of 2012 (Kenya Environment and Land Court) at 18.

190 At 26.

191 McCaffrey, above n 35, at 403.

arbitrary and irrational.[192] Therefore, in light of the normative commitments of the Constitutions of Kenya and Ethiopia to protect and preserve the environment, current approaches have yet to realise the equitable and reasonable utilisation of the Omo-Turkana Basin. While it is arguable that tacit acquiescence from Kenya may absolve Ethiopia from international responsibility, in this case, the responsibility of each State over lack of meaningful transboundary cooperation merely shifts to the domestic level.

The inquiry undertaken thus far has demonstrated that without a process of effective cooperation, the structure of international watercourse law is without any solid foundation. In order to achieve equitable and reasonable use of the basin, while also adhering to the duty to prevent significant transboundary harm, there must first be in place a platform for dialogue, information sharing, scientific assessment and evaluation of the impact of proposed uses on the Omo-Turkana Basin as a whole. Only with a sufficient level of information can the riparian States engage in their due diligence obligations to implement their substantive legal duties.[193] The circumstances within the Basin are such that local indigenous groups have become marginalised due to rapid environmental and social changes.[194] Requests by the World Heritage Committee to establish a joint Ethiopia-Kenya Technical Experts Panel to oversee environmental impact assessments have been ignored.[195] Presently, there is no RBO to facilitate cooperation between Kenya and Ethiopia within the international basin. The following section will address possible effects that may arise from the establishment of a regional custom to cooperate through joint institutions.

B The Creation of a Legal Mandate to Cooperate through a River Basin Organisation

A regional customary obligation of institutional cooperation would require the establishment of an RBO to oversee effective cooperation and management of Lake Turkana and the Omo River. If such a regime were not established, and no reasonable efforts were undertaken to perform the customary obligation of institutionalising cooperation, both Kenya and Ethiopia may be

192 At 402.

193 On the customary nature of these principles, see *Pulp Mills on the River Uruguay*, above n 62, at 55–56, 74–75 and 82–83. See also *Gabčíkovo-Nagymaros Project*, above n 57, at 56. On the lack of an agreed legal understanding for the basin, see Jared Agano "Persisting Transboundary Resource Conflicts in Africa: A Case Study of River Omo Delta" (MA Thesis, University of Nairobi, 2020) at 53–54. See also Julie Gibson and Zeray Yihdego *Risks versus Rewards: Utilising International Water Law in the Omo Turkana Basin* (University of Aberdeen Centre for Constitutional and Public International Law, Working Paper Series No 008/20, 2020) at 5.

194 Shea, above n 168, at 77; and Hodbod and others, above n 171, at 1109.

195 *Decisions adopted during the 42nd session of the World Heritage Committee*, above n 165, at 170.

internationally responsible,[196] whereas under the current legal framework, only Ethiopia may have acted inconsistently with international law. Nevertheless, this responsibility for enforcement is attached to the basin States themselves in the absence of *erga omnes* obligations, and therefore, in circumstances of basin-wide non-compliance, legal enforcement is more difficult to grasp.[197] However, the transformation of a current soft law principle into a binding legal norm may assist its enforcement as a result of the norm transformation itself. Efforts by the World Heritage Committee calling for strengthened cooperative frameworks, in addition to pressure from other key international actors such as the World Bank, may propel forward action on RBO creation.[198] In the past, both States have contemplated the joint management of the Omo-Turkana Basin through a common institution. However, due to costs among other considerations, the generally positive working relationship between Kenya and Ethiopia has yet to develop institutionally.[199] If legal norms are dependent on social understandings, the transformation of the norm itself may, therefore, be enough to alter the value assessment of the riparian States for the need to enter into negotiations to effect cooperation through a joint management organisation.[200]

If an RBO were created, depending on its institutional structure, the organisation could provide valuable relief to the ecology of the international basin and safeguard the needs of local communities. A joint river commission, institutionalising watercourse principles, could assess the nature and extent of transboundary harm arising from Ethiopian territory through ongoing environmental impact assessments and evaluation mechanisms. Although the dam is constructed, the ICJ has reflected that where necessary, throughout the life of a project, continuous monitoring of effects ought to be undertaken.[201] Furthermore, processes of notification, consultation and negotiation to mitigate and avoid future transboundary harm could be initiated through the organisation, providing a mandate and cooperation plan between Kenya and Ethiopia. In effect, the institution will allow the parties to

196 *Draft articles on Responsibility of States for Internationally Wrongful Acts* [2001] vol 2, pt 2 YILC 26, arts 1, 2 and 3.

197 It ought to be noted that obligations assumed under common heritage regimes could be deemed *erga omnes* or *erga omnes partes* and, therefore, grant third States the opportunity to seek enforcement: Yoshifumi Tanaka "The Legal Consequences of Obligations *Erga Omnes* in International Law" (2021) 68 NILR 1 at 10.

198 *Decisions adopted during the extended 44th session of the World Heritage Committee*, above n 175, at 73. On the role of the World Bank as an actor in the development of cooperative agreements between riparian States, see Salman MA Salman *Notification concerning Planned Measures on Shared Watercourses: Synergies between the Watercourses Convention and the World Bank Policy and Practice* (Brill, Leiden, 2019) at 54.

199 Gibson and Yihdego, above n 166, at 141.

200 Jutta Brunée and Stephen J Toope "Interactional international law: an introduction" (2011) 3 International Theory 307 at 310.

201 *Pulp Mills on the River Uruguay*, above n 62, at 83–84.

formally adopt a process that shares costs and provides certainty.[202] Independent scientific evidence, necessary to evaluate significant harm, could be assessed and compiled apolitically through the river commission, depoliticising the reporting process and promoting scientific integrity.[203] Lastly, local communities affected by any transboundary harm could be granted a meaningful role within the process that would be consistent with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), such as evaluating the proposed mitigation measures to protect their needs.[204]

Perhaps most importantly, the obligation to create a joint institution will place the substantive principles of watercourse law, such as equitable and reasonable use alongside the duty to prevent significant transboundary harm, within an institutionalised cooperative framework. The overarching objective of cooperation through an institution is to improve the implementation of these fundamental principles, and evidence suggests, due to the sheer number of RBOs throughout Africa, that cooperation is effective within joint management structures.[205] Improvements in the implementation of international watercourse law can be achieved through the creation of compliance mandates within the RBO. For example, under the framework of the UNECE Water Convention, a compliance committee was established to review cases of possible non-compliance of treaty provisions by the parties.[206] Where cases of non-compliance are found, the facilitative and cooperative nature of the process is designed to ensure that in the event technical assistance is needed to conform to treaty commitments, such assistance is readily available.[207] The UNECE non-compliance mechanism bears similarities with global human rights frameworks, such as those non-compliance procedures adopted by the UN Human Rights Council.[208]

In the Omo-Turkana Basin, the need for an RBO is apparent. The poor execution of environmental impact assessments, lack of meaningful cooperation between the parties within the sphere of information gathering and exchange, and misapplication of the principles of equitable and reasonable

---

202 Thomas Bolognesi and Christian Bréthaut "An institutionalist perspective on the use of international water law: crafting institutions in a multi-level setting" in Mara Tignino and Christian Bréthaut (eds) *Research Handbook on Freshwater Law and International Relations* (Edward Elgar, Cheltenham (UK), 2018) 413 at 428–429.

203 Howden, above n 159, at 181–182. See also Leb, above n 49, at 123.

204 *United Nations Declaration on the Rights of Indigenous Peoples* GA Res 61/295 (2007) annex, art 8(2)(a) and (b). For example, the Espoo Convention, above n 44, art 2 ensures public participation within the assessment of transboundary impacts.

205 McCaffrey, above n 35, at 403.

206 Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes 2331 UNTS 202 (opened for signature 17 June 1999, entered into force 4 August 2005), arts 7 and 15.

207 Leb, above n 49, at 190.

208 Wouters and others, above n 92, at 709.

use or due diligence obligations demonstrate the need for such an institution. A customary principle of cooperation through an RBO perhaps would bring the basin one step closer towards this reality. Therefore, the situation in the Omo-Turkana Basin illustrates the benefits of the development of such a customary norm, in particular when a newly established RBO is equipped with the tools, funding and independence to perform its tasks.

VIII EVALUATING THE ROLE OF RIVER BASIN ORGANISATIONS

Institutional watercourse governance should not be romanticised or perceived as an inherently effective solution to the implementation of international watercourse law. Like other international organisations, RBOs have the potential to generate exclusion, reinforce the status quo and become fora of inter-State rivalries leading to significant breakdowns in transboundary cooperation and governance.[209] However, despite real challenges, institutions are best situated to achieve cooperation and preferable to ad hoc methods of cooperation and legal implementation.[210] Effective organisations can deliver inclusive stakeholder engagement, enabling the rights of local and indigenous communities dependent on international watercourses. The inclusion of actors beyond States within the decision-making process, such as indigenous communities, can also have the capacity to generate more inclusive and sustainable resource management outcomes. Local communities at risk of economic or cultural hardship as a result of adverse environmental impact can often become, out of collective self-interest, invested in the preservation of the natural and spiritual environment. Furthermore, indigenous communities can bring sophisticated traditional approaches to resource management, thus providing a valuable contribution towards ideas and outcomes.[211] Consequently, stakeholder inclusion grants an opportunity to strengthen principles of environmental protection and implementation of international legal principles, such as equitable and reasonable use, within any joint watercourse framework. Moreover, wider engagement between States and communities enabled by RBOs will likely improve the prioritisation of the population dependent on the watercourse in accordance with art 6 of the UN Watercourses Convention. This pluralist approach promotes a greater

209 Frédéric Mérand and Vincent Pouliot "International Institutions and Peaceful Change" in TV Paul and others (eds) *The Oxford Handbook of Peaceful Change in International Relations* (Oxford University Press, Oxford, 2021) 129 at 136. See also Schmeier, above n 117, at 269. Schmeier identifies that actions from the Lesotho Highlands Water Commission, achieving a goal of joint development of hydropower, have created significant negative environmental and social impacts.

210 Benvenisti, above n 7, at 87; and Schmeier, above n 117, at 269.

211 Aaron Wolf "Indigenous Approaches to Water Conflict Negotiations and Implications for International Waters" (2000) 5 International Negotiation 357 at 370.

human focus on freshwater ecosystem management which can improve alignment with the Rio Declaration's principles and UN SDGs.[212]

Cooperation through institutions carries an inherent risk of cementing rights and privileges, creating a future inflexible regime where member States, with current access to privileges through institutional membership, seek to safeguard those gains and thus prevent reform and flexibility.[213] Further, there is a threat that member State power imbalances can regenerate competition or even unilateralism.[214] A strong riparian State may seek to stall RBO procedures to unilaterally change the hydro-political geography, for example, through the construction of a dam. In order to mitigate or prevent these risks, RBO treaties must be carefully and appropriately designed. RBOs should be inclusive, providing membership to all riparian States.[215] In this way, all States can enjoy equal membership benefits, such as access to technical, scientific and legal information. Treaty flexibility must be also guaranteed in order to manage future environmental, economic and social challenges. For example, the distribution of precise benefits, such as water allocation quotas between riparian States, if included within any RBO treaty, must be drafted in a future-orientated way to adapt to new environmental realities. Lastly, while RBOs cannot, nor are designed to change balances of power between riparian States, member State unilateralism that undermines the work of an RBO is contrary to the principles of cooperation and good faith.[216] All RBOs should incorporate mechanisms to achieve the peaceful settlement of disputes, in particular through meaningful negotiation in the light of the principle to cooperate.[217]

Article 8 of UNDRIP recognises the role of States in the provision of effective mechanisms for the prevention of any action that may deprive cultural values, ethnic identities or the dispossession of lands or resources.[218] The unique role of water and watercourses within the cultural identity and economic life of indigenous peoples, therefore, requires effective fora of cooperation between States and indigenous peoples. The need for effective cooperation is also expressed in principles 10 and 22 of the Rio Declaration.[219] To meet this goal, RBOs can provide the institutional forum necessary to

212 Rio Declaration, above n 42, art 1; and *Transforming Our World: the 2030 Agenda for Sustainable Development*, above n 156, goal 6.b.

213 Mérand and Pouliot, above n 209, at 136.

214 J Peter Burgess, Taylor Owen and Uttam Kumar Sinha "Human securitization of water? A case study of the Indus Waters Basin" (2016) 29 Camb Rev Intl Aff 382 at 386.

215 UN Watercourses Convention, above n 1, art 4.

216 *Gabčíkovo-Nagymaros Project*, above n 57, at 67–68 and 78–79.

217 Dispute settlement mechanisms could reflect art 33 of the UN Watercourses Convention. See also Howden, above n 159, at 214.

218 *United Nations Declaration on the Rights of Indigenous Peoples*, above n 204, art 8(2)(a) and (b).

219 *Rio Declaration on Environment and Development*, above n 42, principles 10 and 22.

facilitate engagement between indigenous groups and riparian States.[220] At the national level, indigenous peoples can be underrepresented or even excluded from the policy process; therefore, it is important that on the transnational level, inclusive representation is pursued either through meaningful consultations undertaken during proposed developments or policy changes, or through the incorporation of indigenous groups into the RBO structure.[221] The European Union's principle of subsidiarity, which is used to ensure that European policy decisions are taken at the appropriate level, could be incorporated into RBO structures.[222] Indigenous and civil authorities within the river basin could contribute to the RBO policy programme. For example, the composition of policy reports to identify community interests, participation in scientific monitoring or working for the ecological conservation of the watercourse are all steps that could be taken at a local level, in coordination with the RBO. Organisational inclusion can encourage mutual understanding, relationship building and trust, whereas an otherwise formal consultation process between the RBO and outside communities would limit informal people-to-people relationships that often produces effective cooperation.

Although community and indigenous participation at the international level is an objective in itself since people are at the centre of environmental policy-making, the practical effect in broadening institutional cooperation to include indigenous peoples and other non-state actors may create indirect effects on the interpretation and implementation of watercourse law.[223] Principles of cooperation, equitable and reasonable use, and the duty to prevent significant transboundary harm, may evolve, through the practice of stakeholder-inclusive RBOs, to generate obligations not only among States, but also between citizens and States.[224] By way of example, current customary law does not require riparian States to consult local or indigenous communities during an environmental impact assessment to assess significant transboundary harm.[225] However, the inclusion of indigenous peoples within an RBO regime, with a mandate to carry out environmental impact assessments, may gradually generate new norms depending on the intention and practice of RBO structures. In this way, the evolving practice, legal interpretation and implementation through RBO structures should not be readily overlooked. Indeed, contextual interpretations of treaty principles, such as those expressed in the UN Watercourses Convention, provide a method for the continued evolution of international watercourse principles. The VCLT unambiguously articulates that subsequent practice in the application of any

220 See Paul Berman "A Pluralist Approach to International Law" (2007) 32 Yale J Intl L 301 at 312.

221 Benvenisti, above n 7, at 193.

222 See Damian Chalmers, Gareth Davies and Giorgio Monti *European Union Law: Cases and Materials* (2nd ed, Cambridge University Press, Cambridge, 2010) at 363.

223 Nico Krisch "Pluralism" in Jean d'Aspremont and Sahib Singh (eds) *Concepts for International Law: Contributions to Disciplinary Thought* (Edward Elgar, Cheltenham (UK), 2019) 691 at 705–706.

224 On the ability of treaties to generate obligations between individuals and States, see *Jurisdiction of the Courts of Danzig (Advisory Opinion)* (1928) PCIJ (series B) No 15 at 17–18.

225 *Pulp Mills on the River Uruguay*, above n 62, at 87.

treaty can be considered as part of general rules of interpretation.[226] Furthermore, the evolution of customary law can continue through the emergence of state practice within RBOs. International organisations may also contribute to the development of customary international law "as such" in light of legal personality independent from member States that have transferred competences to the RBO.[227] To an extent, like international custom, treaties remain open to continuity and change.[228] A customary principle of institutionalised cooperation, which also provides a meaningful role to local communities could, over time, generate a process of widening general watercourse principles to include relations between riparian States and local communities.

IX CONCLUSION

From the expression of cooperation through notions of good faith and sovereign equality, this article has navigated through the principles of watercourse law to ascertain the nature and purpose of cooperation. Cooperation is best articulated as an implementing principle, which gives effects and linkages between other various principles, such as the duty to prevent transboundary harm, through procedural obligations. Due to increasing evidence of State cooperation through institutions, this article examined the possibility of an emerging customary norm of institutionalised cooperation, and the legal implications such a norm may bring into the overall legal framework. It is premature to conclude that a general customary obligation of RBO membership or establishment has materialised. However, state practice indicates that the emergence of regional custom – particularly within Africa and Europe – should not be readily disregarded. Such evidence of increasing state practice ought to be welcomed and encouraged. Over time, water quality has steadily improved in the Danube River Basin on the basis of a comprehensive action plan by the International Commission for the Protection of the Danube River.[229] Indeed, through the monitoring and control functions of RBOs, standards for the prevention of freshwater pollution can be implemented at the international level, such as through the reporting process adopted by the Lake Tanganyika Authority or prior information procedures in the case of the Lake Chad Basin Commission.[230]

Institutional regimes can provide a useful framework through which to implement watercourse law and environmental management: treaties are drafted appropriately, reflecting local geographic

---

226 Vienna Convention on the Law of Treaties, above n 63, art 31(3)(b).

227 International Law Commission *Third Report on Identification of Customary International Law by Michael Wood, Special Rapporteur* UN Doc A/CN.4/682 (27 March 2015) at [76]–[77].

228 *Gabčíkovo-Nagymaros Project*, above n 57, at 67–68.

229 Danube River Basin Water Quality Database <www.icpdr.org/wq-db>.

230 Komlan Sangbana *African Basin Management Organizations: contribution to pollution prevention of transboundary water resources* (Brill, Leiden, 2020) at 69. Riparian State reports on activities impacting Lake Tanganyika can be found on the Lake Tanganyika website: see "Publications" Lake Tanganyika Authority <www.lta-alt.org>. See also Michel Dimbele-Kombe and others *Report on the State of Lake Chad Basin Ecosystem* (Lake Chad Basin Commission, 7 July 2021).

realities alongside ensuring the comprehensive implementation of watercourse law; and RBOs have the potential to deliver for States and local communities. RBOs offer the advantage of broadening transboundary cooperation beyond States to indigenous communities and other non-State actors while facilitating constructive legal environments within international basins that may generate new norms of international law.