

School of Law

Master of Law (LL.M.) in Food Law

The Legal Personality of Rivers and the Right to Food: using the Whanganui, Atrato and Turag rivers as case studies

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Abstract

The present paper addresses an emerging novel mechanism in law to protect water systems: granting legal personality to rivers. It assesses how this innovative legal approach to critical freshwater ecosystems can enhance the implementation of the right to food by analyzing the key aspects of the right to water, its link to the right to food, and its role in food security and nutrition. Drawing on three case studies of legal rights conferred to rivers in New Zealand, Colombia and Bangladesh, the paper provides an overview of the different models of legal personhood. It discusses the related shortfalls, possible solutions, and general recommendations for the model's success. Finally, it analyses the United Nations and civil society initiatives promoting the rights of Nature as a solution to the critical need for innovative ways to provide joint protection of the environment and human rights, along with the outcomes of COP 15. It concludes that the sustainable management of critical freshwater resources, and the joint protection of rivers and fundamental human rights that the conferral of legal personality to rivers enables, renders such model a fruitful pathway to ensure the realization of the right to food for present and future generations.

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Abbreviations

CBD	Convention on Biological Diversity
CESCR	Committee on Economic, Social and Cultural Rights
CFS	Committee on World Food Security
FAO	Food and Agriculture Organization
FSN	Food Security and Nutrition
GC 15	General Comment No. 15: The Right to Water
GC 12	General Comment No. 12: The Right to Adequate Food
HLPE	High-Level Panel of Experts on Food Security and Nutrition
HLPW	High Level Panel of Experts on Water
HRC	Human Rights Council
HwN	Harmony with Nature Programme
ICESCR	International Covenant on Economic, Social and Cultural Rights
IPBES	Intergovernmental Platform on Biodiversity and Ecosystems Services
RoN	Rights of Nature
NRPC	National River Protection Commission
OHCHR	Office Of the High Commissioner on Human Rights
UDHR	Universal Declaration on Human Rights
UNGA	United Nations General Assembly
WHO	World Health Organization
WWF	World Wildlife Fund

Introduction

All life on our planet depends on water. Freshwater ecosystems, which include aquifers, wetlands, lakes and rivers, provide fresh water, flood control, water purification, carbon dioxide sequestration and habitats for many fish, reptiles, amphibians, birds, mammals and plants. They are among the world's most biologically diverse environments and provide multiple benefits and services to society and are essential for achieving many of the 2030 Agenda's¹ SDGs. Indeed, they supply natural fresh water, sustain food production, tackle climate change and biodiversity loss playing a critical role in providing water of appropriate quality and quantity on which the human right to life, and its key components, the rights to water and food, depend. Unsurprisingly, among the targets associated with SDG 6 ("ensure availability and sustainable management of water and sanitation for all") and SDG 2 ("ending hunger, achieving food security and improved nutrition and promote sustainable agriculture"), the 2030 Agenda calls for the protection and restoration of water-related ecosystems (target 6.6) and sustainable food production systems that preserve ecosystems (target 2.4). Notwithstanding their vital role, freshwater ecosystems are dramatically declining. Poor water management is creating a global water and sanitation crisis. SDG 6 is alarmingly off track. Promoting resilient water cycles is therefore paramount to ensure human well-being and environmental integrity and for securing a sustainable and equitable future for all. In this context, the United Nations General Assembly (hereinafter "UNGA") declared the period from 2018 to 2028 the International Decade for Action, "Water for Sustainable Development"², aiming to improve capacity development, cooperation, partnership and actions in response to the 2030 Agenda. To ensure the successful implementation of the Action Decade goals, the UNGA has convened³, in March 2023, a Conference on the Midterm Comprehensive Review of the Implementation of the Decade for Action (hereinafter "UN 2023 Water Conference"). The aim of the UN 2023 Water Conference is to formulate a Water Action Agenda through voluntary commitments to water to accelerate progress in the second half of the Water Action Decade and of the 2030 Agenda. It is a much-needed opportunity to advance urgent water action.

Freshwater ecosystems and rivers, in particular, are indeed suffering from an alarming over-exploitation which is jeopardizing their critical function in addressing climate change,

¹ UN General Assembly, *Resolution adopted by the General Assembly at its 70th session*, 25 September 2015, A/RES/70/1.

² UNGA, Resolution adopted by the General Assembly at its 71th session., 21 December 2016, A/RES/71/222.

³ UNGA, Resolution adopted by the General Assembly at its 73rd session., 20 December 2018, A/RES/73/226.

biodiversity loss and ensuring fundamental human rights. This dramatic global situation has cast a light on the failures of environmental laws worldwide to adequately protect Nature and its ecosystems, giving rise to the Rights of Nature (hereinafter "RoN") movement.

The RoN movement stems from ancestral Indigenous creation stories and customary laws that sanctify the deep relationship and interdependence of humans and the natural world. In western legal systems, the idea that Nature has an inherent value and, therefore, an intrinsic right to exist with which we are symbiotically intertwined was first proposed by Christopher Stone in 1972 in his groundbreaking article "Should Trees Have Standing?" ⁴. Thirty-six years after, this revolutionary idea started a legal revolution, determining a paradigm shift of Nature in law from object to subject. In 2008, the Constitution of the Republic of Ecuador recognized the right of Nature to "exist, persist, and maintain and regenerate its vital cycles, structure, functions and its evolutionary processes" ⁵. In 2010, Bolivia enacted a law recognizing the rights of Mother Earth to life, diversity of life, water, clean air, equilibrium, restoration, and pollution-free living⁶. In 2017 a novel legal mechanism to protect rivers and their ontological relationship with humans was established in New Zealand through the conferral of legal personality to the Whanganui River. In the following years, due to the extreme pressure on river systems worldwide and the need for innovative solutions to enhance the protection of freshwater ecosystem and their critical contribution to ensuring water and food, rivers have become increasingly central in the RoN movement. Environmental concerns and their adverse impacts on fundamental human rights have led to the judicial recognition of legal personality to the Atrato River in Colombia and to the Turag River in Bangladesh. This international legal revolution has further evolved worldwide, encompassing lakes, forests, mountains, animals, plants, seas, and other rivers. It has been described by the UN Secretary-General "as the fastest growing legal movement of the twenty-first century"⁷, which has further underlined how "to achieve the greatest number of Sustainable Development Goals and comply with the 2030 Agenda for Sustainable Development, it is important to focus efforts to promote, respect, protect and guarantee the Rights of Nature"⁸.

The Kunming-Montreal Global Biodiversity Framework has even more recently promoted the RoN movement (hereinafter "Framework")⁹. The Framework is a landmark

⁴ Christopher D. Stone (1972) Southern Carolina Law Review, 450-501.

⁵ Constitution of the Republic of Ecuador, 2008, art. 275.

⁶Law of the Rights of Mother Earth, Law 071, 2010, art.5.

⁷ UNGA (2019) Harmony with Nature, report of the U.N.Secretary-General, A/74/236, 16.

⁸ UNGA (2017) Harmony with Nature, report of the U.N.Secretary-General, A/72/175, 5.

⁹ Kunming-Montreal Global Biodiversity Framework CBD/COP/15/L.25.

global biodiversity agreement adopted at COP 15¹⁰, setting 23 conservation targets to halt and reverse biodiversity loss. The Framework expressly promotes RoN, which are both a target and a means for the Frameworks' successful implementation. Among the most relevant targets, the Frameworks requires the mobilization of at least \$200 billion each year to implement national biodiversity strategies and action plans, including "Mother Earth centric actions", defined as "eco-centric and rights-based approaches enabling the implementation of actions towards harmonic and complementary relationships between peoples and Nature" (target 19). The Framework moreover recognizes that Nature's contributions "are vital for human existence and good quality of life, including human well-being, living in harmony with Nature" and considers "Rights of Nature and rights of Mother Earth, as being an integral part of its successful implementation" (Section C(9).

Indeed, the interdependence of humans and Nature and the adverse impacts of environmental degradation on the rights to water and food has been a frequent driver of the conferral of legal personality to rivers. Notwithstanding this centrality, most of the literature on rivers' legal personhood has not focused on the implications of such recognition on the rights to water and food, although there is still limited evidence of the practical outcomes of rivers' legal personality. The current interpretation of the actions needed to further the realization of the rights to water and food in light of the dramatic ecological crises and the encouraging outcomes of COP 15 offer, nevertheless, meaningful insights to address the possible impacts of rivers' legal personhood on the rights to water and food. Drawing on such interpretations, the present paper assesses how this innovative governance of freshwater resources could enhance the implementation of the right to food through an analysis of the legal personality model limited to non-transboundary rivers. Chapter 1 analyses the key aspects of the right to water, the related states' obligations and its link to the right to food. Chapter 2 assesses the critical role of water in ensuring food security and nutrition, the challenges for effective water governance and the emergence of a novel governance approach to water resources: the conferral of legal personality to rivers. Chapter 3 analyses the earliest successful cases of legal personhood conferred to rivers in New Zealand, Colombia and Bangladesh. It discusses the social, cultural and environmental concerns leading to such recognition without addressing the related political aspects, which are out of the scope of the present paper. Finally, chapter 4 analyses the shortfalls of the three case studies to identify possible solutions.

¹⁰ The United Nations Fifteenth Conference of the Parties to the Convention on Biological Diversity held in Montreal, Canada from 7 to 20 December 2022.

It further assesses three unsuccessful RoN cases to build on the lessons learnt and identify general recommendations for the legal personhood model's success. While these additional case studies concern transboundary waterbodies, the related causes of unsuccess have not primarily interested their transboundary dimension, which, being out of the scope of the present paper, will not be addressed. Chapter 4 further analyses the United Nations and civil society's initiatives promoting the Rights of Nature as a solution to the critical need for innovative ways to provide joint protection of the environment and human rights, along with the outcomes of COP 15. It concludes that the improved joint protection of freshwater ecosystems and fundamental human rights and the democratic and sustainable governance of freshwater resources that rivers' legal personhood enables renders such a model a fruitful pathway to ensure the realization of the right to food for present and future generations.

Chapter 1 The Right to Water

1.1. Key aspects of the Right to Water

The right to water has progressively emerged from the interpretation of the right to an adequate standard of living¹¹. Such right was first envisioned in the Universal Declaration of Human Rights¹² (hereinafter "UDHR") and later reaffirmed by art. 11.1 of the International Covenant on Economic, Social and Cultural Rights¹³ (hereinafter "ICESC"), according to which: "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions".

In 2003, the Committee on Economic, Social and Cultural Rights (hereinafter "CESCR")¹⁴ adopted General Comment No. 15: The Right to Water (hereinafter "GC 15"), codifying water as a specific human right¹⁵. It has done so by shifting from an interpretation of water as an economic good to a "limited natural resource and a public good fundamental for life and health" (par. 1) ¹⁶. GC 15, therefore, identifies the legal basis of the right to water, which entitles "everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses" (par. 2) in art. 11.1 of the ICESC on the right to an adequate standard of living. It does so by arguing that the word "including" in art. 11.1 of the ICESC demonstrates that the list of mentioned rights was not meant to be exhaustive and

¹¹ Elisa Morgera, Elaine Webster, Graham Hamley, Francesco Sindico, Jill Robbie, Stephanie Switzer, Thierry Berger, Pedro Pablo Silva Sànchez, Mitchell Lennan, Renee Martin-Nagle, Elsa Tsioumani, Ruby Moynihan and Antonia Zydek (2020) *The right to water for food and agriculture*, FAO Legislative Study No. 113. Rome, 7.

¹² UNGA (1948) *Resolution 217 (III) A*, 10 December 1948, Universal Declaration of Human Rights, A/RES/217 (III), art. 25.1, according to which: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services" (art. 25.1).

¹³ The Universal Declaration of Human Rights does not have treaty status and it has subsequently been implemented by two binding covenants: one for civil and political rights and the other for economic, social and cultural rights (ICESCR). The ICESCR has been ratified by the three case study countries of the present paper: New Zealand in 1978, Colombia in 1969, and Bangladesh in 1998. The ratification status of the ICESCR is available at:https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?Treaty=CESCR&Lang=en ¹⁴ The CESCR is the body of independent experts that monitors the implementation of the ICESCR by its States parties. The Committee was established under the Economic and Social Council (hereinafter "ECOSOC") Resolution 1985/17 of 28 May 1985 to carry out the monitoring functions assigned to the United Nations ECOSOC in Part IV of the Covenant.

¹⁵ UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, 20 January 2003, E/C.12/2002/11, available at: <u>https://www.refworld.org/docid/4538838d11.html</u>. GC 15 is considered the "most detailed, authoritative elaboration of the normative content of the right to water": Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 21.

¹⁶Elisa Morgera, et. al. (2020) The right to water for food and agriculture, 9.

includes the right to water, which is "essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival" (par. 3)¹⁷.

As for the normative content of the right to water, GC 15 specifies that the realization of such right for personal and domestic use, which includes "drinking, personal sanitation¹⁸, washing of clothes, food preparation, personal and household hygiene" (par. 12 (a) requires that water must be: available in sufficient quantities, accessible and safe¹⁹. Three factors, therefore, are necessary to ensure the right to water: availability, quality, and accessibility (par. 12).

Availability refers to the supply of water for each person for personal and domestic uses, which must be sufficient and continuous²⁰.

Quality refers to the characteristics of water for personal and domestic use, which must be safe and therefore free from hazardous contaminants such as micro-organisms, chemical substances and radiological hazards²¹ and of "acceptable colour, odour, and taste".

¹⁷ OHCHR (2014) *Realising the human rights to water and sanitation: A Handbook by the UN Special Rapporteur, Catarina de Albuquerque*, 23, further underlines how the lack of explicit mention of water in the right to an adequate standard of living can be explained by the assumption that "water, like air, was already freely available to all".

¹⁸ On 28 July 2010, the UNGA recognized the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and of all human rights: UNGA, Resolution adopted by the General Assembly at its 64th session., 28 July 2010, A/RES/64/292. In the following years the UNGA acknowledged that while the rights to water and sanitation are interconnected, being both components of an adequate standard of living, they are separate rights: UNGA, Resolution adopted by the General Assembly at its 70th session., 17 December 2015, A/RES/70/169. The separation of the said rights has also been promoted by the first Special Rapporteur on the human rights to water and sanitation, Catarina de Albuquerque. The Special Rapporteurs are independent experts appointed by the UN Human Rights Council (hereinafter "HRC" and formerly the UN Commission on Human Rights) with the mandate to publicly report, advise and monitor human rights in specific countries (country mandates) and on human rights violations worldwide (thematic mandates). The mandate of the Special Rapporteur on the rights to water and sanitation has been defined by the HRC (2008), 28 March 2008, Human rights and access to safe drinking water and sanitation, A/HRC/RES/7/2. As mentioned, the Special Rapporteur on the human rights to water and sanitation promoted the separation of the human rights to water and sanitation underlining how "Defining the human rights to water and sanitation as separate and distinct allows governments, civil society and other stakeholders to create standards specifically for the human right to sanitation and for its realisation. Distinguishing between these two rights also makes it easier for States and other stakeholders to understand the distinct responsibilities, obligations and roles implicit in the realisation of each of them" further specifying that "The situation of people who lack sanitation is very different from that of people who lack water": OHCHR (2014) Realising the human rights to water and sanitation 19. Available at: https://www.ohchr.org/en/special-procedures/sr-water-and-sanitation/handbook-realizing-human-rights-waterand-sanitation.

¹⁹ Ibid., 13

²⁰ The quantity of water which must be available for each person is determined by the World Health Organization's (hereinafter "WHO") guidelines (par. 12). It has been observed that the reference to the WHO guidelines rather than to a determined volume enables modifications to the threshold over time: Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 12. The term "continuous" requires the regularity of sufficient water supplies for personal and domestic uses: GC 15, foot note 12.

²¹ GC 15 calls State parties to refer to the WHO (1996) Guidelines for drinking-water quality. Vol. 1-3, 2nd edition, Geneva, as the basis for the development of national standards aiming at the elimination or reduction to a minimum concentration of contaminants known to be hazardous to health.

Accessibility ensures access to water, water facilities and services for the whole population and encompasses:

(i) physical accessibility: requiring that access is within safe, physical reach;

(ii) economic accessibility: to ensure that the costs of water is affordable without compromising the realization of other rights of the ICESCR²²;

(iii) non-discrimination: requiring access, *de facto* and *de jure*, to all "including the most vulnerable or marginalized sections of the population";

(iv) information accessibility: to ensure the possibility to ask, receive and give information on water. Such aspect of the accessibility dimension aims to ensure peoples' and groups' participation in the formulation and implementation of national water plans that may affect their right to water (par. 48)²³.

Aside from the domestic and personal use dimension of the right to water, GC 15 expressly acknowledges the need to ensure sustainable access to water resources for agricultural production for the realization of the right to adequate food²⁴, underscoring the inextricable link between the right to water and food that we will see in greater detail in par. 1.3.

1.2. The implementation of the Right to Water: States' obligations

States have general and specific obligations concerning the right to water. The general obligations are implied by the ICESCR and comprise the guarantee that the right will be exercised without any discrimination of any kind (art. 2, par. 2) and the obligation to take steps towards the full realization of the right to an adequate standard of living (art. 2, par 1).

The obligation to not discriminate in relation to the right to water requires States under GC 15 to give special attention to individuals and groups who "have traditionally faced difficulties in exercising this right, including women, children, minority groups, Indigenous peoples (...)" (par. 16). GC 15, therefore, calls States to ensure that: "there is adequate access to water for subsistence

²²OHCHR (2014) *Realising the human rights to water and sanitation*, 35 further specifies that "States have an obligation to provide free services or put adequate subsidy mechanisms in place to ensure that services always remain affordable for the poor".

²³ Paragraph 48 is expressly recalled by GC 15 footnote n. 17. Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 17, underline how the right to information ensures effective public participation in decision making concerning water issues.

²⁴ Indeed GC 15 does not expressly link the accessibility dimension of water to personal and domestic use and it has therefore been underscored that the accessibility dimension of the right to water is relevant for water for food production and agriculture: Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 13; OHCHR (2014) *Realising the human rights to water and sanitation*, 38.

farming and for securing the livelihoods of indigenous peoples" (par. 7) further prescribing that "Access to traditional water sources in rural areas should be protected from unlawful encroachment and pollution.(...) indigenous peoples' access to water resources on their ancestral lands is protected from encroachment and unlawful pollution" and specifying moreover that "States should provide resources for indigenous peoples to design, deliver and control their access to water" (GC 15, par. 16 (c) and (d)²⁵.

The said disposition corresponds to the *ratio* of the Indigenous and Tribal Peoples Convention, of the International Labour Organization (hereinafter "ILO Convention")²⁶ provision against the discrimination of Indigenous peoples, according to which: "Indigenous and tribal peoples shall enjoy the full measure of human rights and fundamental freedoms without hindrance or discrimination" (art. 3.1). While the ILO Convention does not expressly mention access to water recognizing at art. 15 the rights of Indigenous and tribal peoples "to the natural resources pertaining to their lands", the UN Declaration on the Rights of Indigenous Peoples (hereinafter "UNDRIP")²⁷ expressly considers water among the natural resources with which Indigenous peoples "have a right to maintain and strengthen their distinctive spiritual relationship and to uphold their responsibilities towards future generations". The special consideration for Indigenous peoples required by GC 15 has been further underscored by the 2022 report on the human rights to safe drinking water and sanitation of the Special Rapporteur Pedro Arrojo Agudo (hereinafter "Special Rapporteur")²⁸. Acknowledged that "Water sources are often far from where indigenous peoples live and water is generally taken directly from rivers, ponds, streams, wells or springs"29, the Special Rapporteur underlines how "It is paramount that States legally recognize the status of indigenous peoples and their rights to land, territory and resources, including aquatic ecosystems, as a precondition to ensuring the realization of their human rights to safe drinking water and sanitation"³⁰. In doing so the Special Rapporteur highlights "the importance of recognizing legal personhood to rivers for the

²⁵ Further groups requiring special attention are women, children, nomadic travelers and communities, refugees, asylum seekers, internally displaced persons, prisoners and detainees (GC 15, par. 16, lett. a), b), e), f), g).

²⁶ The Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, of the International Labour Organization.

²⁷ UN Declaration on the Rights of Indigenous Peoples: A/RES/61/295. Although formally non-binding, the UNDRIP is considered as "interpreting preexisting international obligations in the specific context of indigenous peoples and therefore some of its provision form part of customary international law": Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 33.

²⁸ A/HRC/51/24: Human rights to safe drinking water and sanitation of indigenous peoples: state of affairs and lessons from ancestral cultures - Report of the Special Rapporteur on the human rights to safe drinking water and sanitation, 2022.

²⁹ Ibid. 7.

³⁰ Ibid. 17.

preservation of aquatic ecosystems in indigenous peoples' territories and ensuring their access to safe drinking water"³¹.

The obligation to take steps towards the full realization of the right to an adequate standard of living (ICESCR art. 2, par 1) requires State parties to act, individually and through international assistance and cooperation, to progressively achieve the full realization of the rights recognized in the ICESCR using the maximum available resources and all appropriate means including legislative measures. With specific reference to the right to water, the said obligation requires States to increase the number of people with access to water, with a view to achieving universal access and improve the general levels of service for present and future generations³².

As for the specific obligations, the right to water, like all other human rights, imposes three types of obligations on States parties: to respect, protect and fulfil (par. 20). States, therefore, must: (i) not interfere or curtail the existing enjoyment of the right to water; (ii) prevent third parties from interfering with the enjoyment of the said right and adopt effective measures to prevent such interference³³; and (iii) take action to ensure the enjoyment of the right to water³⁴. The obligation to fulfil³⁵, in particular, requires States to adopt "comprehensive and integrated strategies and programmes to ensure that there is sufficient and safe water for present and future generations". It is, therefore, a positive obligation which codifies sustainability as a core principle requiring the provision of water and sanitation "in a way that

³¹ Ibid, 11.

³²OHCHR (2014) *Realising the human rights to water and sanitation,* 25. The said obligation is founded on the assumption that States have the necessary powers to enhance access to water: Elisa Morgera, et. al. (2020) *The right to water for food and agriculture,* 15. GC 15 specifies moreover that such obligation also implies the prohibition of retrogressive measures, prohibition which is particularly important in periods of economic crises and budget cuts: Elisa Morgera, et. al. (2020) *The right to water for food and agriculture,* 15: (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to water for food and agriculture,* 15; (2020) *The right to safe drinking water and sanitation,* Catarina de Albuquerque 2013, 5-6. GC 15 further specifies that upon the adoption of retrogressive measures, "State parties have the burden of proving that they have been introduced after the most careful consideration of all alternatives and that they are duly justified by reference to the totality of the rights provided for in the Covenant in the context of the full use of the State's parties maximum available resources" (par. 19).

³³ GC 15 specifies that "third parties" includes "individuals, groups, corporations and other entities as well as agents acting under their authority" and that the obligation includes the adoption of "effective legislative and other measures to restrain, for example third parties from denying equal access to adequate water; polluting and inequitably extracting from water resources, including natural resources, wells and water distribution systems" (par. 23).

³⁴ Further obligations concern international cooperation: "Article 2, paragraph 1, and articles 11, paragraph 1, and 23 of the Covenant require that States parties to recognize the essential role of international cooperation and assistance and take joint and separate action to achieve the full realization of the right to water" (par. 30).

³⁵ The obligation to fulfil comprises the obligations: (i) to facilitate, which requires States to assist individuals and communities in enjoying the right; (ii) to promote, requiring States to provide for education on hygienic use of water, protection of water resources and measure to reduce water waste; (iii) to provide, which requires State's intervention when individuals or groups are unable to realize the right to water for reasons beyond their control (par. 25).

respects the environment and ensures a balance of the different dimensions of economic, social and environmental sustainability"³⁶. Among the programmes and strategies to ensure sufficient and safe water for present and future generations, GC 15 expressly considers ones aiming at: "(a) reducing depletion of water resources through unsustainable extraction, diversion and damming; (b) reducing and eliminating contamination of watersheds and water-related ecosystems by substances such as radiation, harmful chemicals and human excreta; (c) monitoring water reserves; (d) ensuring that proposed developments do not interfere with access to adequate water; (e) assessing the impacts of actions that may impinge upon water availability and natural-ecosystems watersheds, such as climate changes, desertification and increased soil salinity, deforestation and loss of biodiversity (...) (i) and establishing competent institutions and appropriate institutional arrangements to carry out the strategies and programmes"(par. 28)³⁷.

The critical contribution of healthy freshwater ecosystems to the right to water has been recently underscored by the Special Rapporteur. In the Plan and vision for the mandate from 2020 to 2023, the Special Rapporteur has stressed the need for a "socio-environmental approach to the human rights to safe drinking water and sanitation", identifying, accordingly, the restoration of aquatic ecosystems and democratic water governance as the two key elements to ensure the effective realization of such rights³⁸. The Special Rapporteur, in particular, acknowledging the interdependence of the enjoyment of the rights to water and sanitation and healthy freshwater ecosystems, calls States to sustainably manage ecosystems to ensure the

The importance of healthy aquatic ecosystems for the fulfilment of the human rights to safe drinking water and sanitation has been further underscored by the Special Rapporteur and Stuart Orr, WWF Global Freshwater Lead: Pedro Arrojo-Agudo and Stuart Orr, (15 October 2021) "Healthy freshwater ecosystems are fundamental to rights safe drinking and sanitation", WWF Freshwater human to water <https://medium.com/wwftogetherpossible/healthy-freshwater-ecosystems-are-fundamental-to-human-rights-tosafe-drinking-water-and-sanitation-bdf52c5700f2 > (accessed 16 November 2022). In the 2022 report the Special Rapporteur has highlighted moreover the value of traditional indigenous practices in sustainably managing freshwater ecosystems: A/HRC/51/24: Human rights to safe drinking water and sanitation of indigenous peoples. The critical role of healthy, functioning freshwater systems for the effective realization of the right to water has also been underscored by Erin O'Donnel, (2020) Legal Rights for Rivers, Competition, Collaboration and Water Governance, Routledge, London, 18 and Elisa Morgera, et. al. (2020) The right to water for food and agriculture, 101 underlining, in relation to the prioritization of water uses, that "Any prioritization needs to consider environmental sustainability as a precondition for the realization of the universal right to water". The importance of preserving ecosystems to ensure the rights to water and to food, which are deeply interrelated, has been further highlighted by the FAO (2005) "The Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security" 18, as we will see in greater detail in the following paragraph.

³⁶ OHCHR (2014) Realising the human rights to water and sanitation, 32.

³⁷ Further strategies concern: (f) increasing the efficient use of water by end-users; (g) reducing water wastage in its distribution; (h) response mechanisms for emergency situations;"

³⁸ A/HRC/48/50: Planning and vision for the mandate from 2020 to 2023 - Report of the Special Rapporteur on the human rights to safe drinking water and sanitation, Pedro Arrojo Agudo, 2021, 4. The analysis of the key aspects of effective and democratic water governance will be conducted in par. 2.2.

services on which such rights depend (par. 8). Recognizing that "the degradation of rivers, wetlands and aquifers also endangers other human rights by affecting fishing and the livelihoods of riverine communities" (par. 42), the Special Rapporteur also explicitly acknowledges that human rights, and the right to water and food in particular, are interrelated and all depend on healthy freshwater ecosystems³⁹.

1.3. The link between the Right to Water and the Right to Food

As mentioned in paragraph 1.1, the right to food was first stated in the UDHR in the context of the right to an adequate standard of living and then reaffirmed in the binding ICESCR, which further recognizes "the fundamental right of everyone to be free from hunger"⁴⁰ (art. 11.2). The right to food, therefore, derives like the right to water, from the right to an adequate standard of living. The common foundation of such rights and the similar development of their normative content demonstrates how deeply they are connected and expected to mutually support the realization of one another in contributing to an adequate standard of living⁴¹.

The content of the right to food was further specified in the CESCR General Comment No. 12: The Right to Adequate Food (hereinafter "GC 12")⁴². GC 12 describes the normative content of the right to adequate food, which implies: "The availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture; The accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights" (par. 8). The availability dimension of the right to food concerns individuals feeding possibilities which must be ensured either directly, through the use of productive land and other natural resources, or through effective distribution, processing and market systems (par. 12). The accessibility dimension requires sustainable economic and physical access to sufficient amounts of food (without

³⁹ A/HRC/48/50: Planning and vision for the mandate from 2020 to 2023, 10.

⁴⁰ FAO (2014) "Right to Food Handbook", Rome, 4 specifies that while the right to be free from hunger is an "absolute standard, i.e the minimum level to be guaranteed to all people, regardless of the degree of development of the state", the right to adequate food is a broader concept entailing "the need to establish the economic, political and social conditions" necessary to ensure physical and economic access to adequate food.

⁴¹ Elisa Morgera, et. al. (2020) *The right to water for food and agriculture,* 25; FAO (2014) "Right to Food Handbook", 7 which recognizing that "human rights are universal, indivisible and interdependent", underlines the close link between the right to food and the right to water "as is part of the food intake and is necessary to produce and cook food". HLPE (2015) "Water for food security and nutrition". A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome, 18. For the role of the High Level Panel of Experts on Food Security and Nutrition and its relationship with the Committee on World Food Security see footnotes 69 and 70.

⁴² UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12: The Right to Adequate Food (Art. 11 of the Covenant)*, 12 May 1999.

interfering with the enjoyment of other rights)⁴³. Sustainability is, therefore, a core principle also in GC 12. It requires the sustainable management of natural resources to ensure the availability and accessibility of sufficient amounts of food for both present and future generations (par. 25)⁴⁴ and further implies that "activities and processes undertaken towards the realization of the right to food must respect environmental limits pertaining to water such as minimum flow requirements and the carrying capacity of resources and must not be at the cost of other human rights such as the right to water"⁴⁵. As for States' obligations, as mentioned in the previous paragraph, all human rights impose three types of obligations on States: to respect, protect and fulfil. In relation to the right to food, GC 12 requires States to: (i) refrain from adopting measures that could prevent, restrict or deprive people of the ability to feed themselves; (ii) prevent third parties from interfering with the enjoyment of such right; (iii) take positive action to ensure the right to food by "proactively engage in activities intended to strengthen people's access to and utilization of resources and means to ensure their livelihood, including food security". (par. 15).

The interconnectedness of the right to water and the right to food was first recognized by the Commission on Human Rights resolution 2001/25 of 20 April 2001. Acknowledging that drinking water is an essential element of the right to food, the said resolution extended the mandate of the Special Rapporteur on the right to food to include drinking water in order to take into account their interdependence⁴⁶. In his preliminary report, the Special Rapporteur on the right to food, Jean Ziegler, recognizing that "Like food, water is vital for life", underlined the importance of access to water for the realization of the right to food⁴⁷. In highlighting the agricultural aspects of access to irrigation water, "clearly linked to the viability of food production and the capacity of people to feed themselves", the Special Rapporteur on the right to food underscored how: "everyone must have access to drinking water on equal terms and that irrigation water should also be accessible for poor peasants who depend on their land to feed themselves. As a component of the right to food, access to safe, clean drinking water and

⁴³ FAO (2014) "Right to Food Handbook", 5.

⁴⁴ Ibid.

⁴⁵ HLPE (2015) "Water for food security and nutrition" 104.

⁴⁶ Drinking water has been later considered a food by the Codex Alimentarius, a collection of internationally recognized standards, codes of practice and guidelines, relating to food, food production, labelling and safety. According to the definition of the Codex Alimentarius "food means any substance, whether processed, semi processed or raw which is intended for human consumption and includes drink, chewing gum and any substance which has been used in the manufacture, preparation or treatment of food but does not include cosmetics or tobacco or substances used only as drugs". FAO and WHO (2011) *Codex Alimentarius Commission*, Procedural Manual Twelfth Edition. Rome.

⁴⁷A/56/210: Preliminary report of the Special Rapporteur of the Commission on Human Rights on the right to food, Jean Ziegler, 2001, 15.

basic irrigation water must be protected under the obligations to respect, protect and fulfil the right to food and through international cooperation"⁴⁸.

With the institutionalization of the right to water as a separate human right, the interrelation of the right to water and the right to food has been expressly recognized by GC 15. The introduction of GC 15 declares "the right to water is a prerequisite for the realization of other human rights", further specifying that it is "inextricably related to the right to the highest attainable standard of health (art. 12, para. 1) and the rights to adequate housing and adequate food (art. 11, par. 1)". (par. 3). The interdependence between the right to water and food is highlighted in several other paragraphs of GC 15. First of all, the personal and domestic dimension of the right to water expressly encompasses water for food preparation (par. 2). In considering the different purposes of water, GC 15 declares the necessary prioritization of water for personal and domestic use and to prevent starvation, thus ensuring priority for water use in agriculture and pastoralism when necessary to prevent starvation (para. 6)⁴⁹. Finally, it recognizes the importance of ensuring sustainable access to water resources for agriculture to realize the right to adequate food, giving particular attention "to ensuring that disadvantaged and marginalized farmers, including women farmers, have equitable access to water and water management systems" and further specifying that "States parties should ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples". (par. 7). The said provision, as mentioned, corresponds to the ratio of the ILO Convention's provision against discriminations of Indigenous peoples and is considered particularly important to ensure Indigenous peoples access to water also for agriculture to realize their right to adequate food. Indeed, as acknowledged by the Special Rapporteur⁵⁰ "When indigenous peoples claim sovereignty over their waters, they include the use of their rivers, wetlands, lakes and springs not only for safe drinking and domestic uses but also as sources of food, including for fishing, irrigation purposes or watering livestock".

The interdependence of the right to water and the right to food has been further highlighted in the Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food (hereinafter "Voluntary Guidelines") of the Food and Agriculture Organization (hereinafter "FAO")⁵¹. Acknowledged that "access to natural resources such as water

⁴⁸ Ibid.

⁴⁹Ibid., 21.

⁵⁰ A/HRC/51/24: Human rights to safe drinking water and sanitation of indigenous peoples, 7.

⁵¹ FAO (2005) "The Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security". The Voluntary guidelines have been adopted to clarify the content of the right to food and guide its implementation through a number of non-binding guidelines.

represents a precondition for the full realization of the right to adequate food"⁵², the Voluntary Guidelines recognize the importance of ensuring sustainable, non-discriminatory and secure access to resources and calls for States to "respect and protect the rights of individuals with respect to resources such as land, water, forests, fisheries and livestock without any discrimination" further specifying that "Special attention may be given to groups such as pastoralists and indigenous peoples and their relation to natural resources"⁵³. In highlighting that "access to water in sufficient quantity and quality for all is fundamental for life and health", the Voluntary Guidelines underline moreover how "States should strive to improve access to, and promote sustainable use of, water resources and their allocation among users giving due regard to efficiency and the satisfaction of basic human needs in an equitable manner that balances the requirement of preserving or restoring the functioning of ecosystems with domestic, industrial and agricultural needs, including safeguarding drinking-water quality".

Indeed, the profound interconnectedness of the right to water and the right to food further emerges from their shared dependence on ecosystem's services⁵⁴ and thus on biodiversity⁵⁵. Due to the increasing recognition of the links between human rights and the environment, the HRC established a mandate on human rights and the environment in 2012 to promote "best practices relating to the use of human rights in environmental policymaking"⁵⁶. The Special Rapporteur on Human Rights and the Environment, John Knox, underscored how most human rights depend on Nature's contributions: "The full enjoyment of human rights, including the rights to life, health, food and water, depends on the services provided by ecosystems. The provision of ecosystem services depends on the health and sustainability of ecosystems, which in turn depend on biodiversity. The full enjoyment of human rights thus

⁵² Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 27.

⁵³ Ibid. 16.

⁵⁴ Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth: Millennium Ecosystem Assessment (2005) Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC, 10.

⁵⁵ The definition of biodiversity is provided by the Convention on Biodiversity, see footnote n. 58.

⁵⁶ A/HRC/RES/19/10. John Knox was appointed in 2012 as Independent Expert (2012 – 2015) and then as Special Rapporteur on human rights and the environment (2015 – 2018). The human right to a clean, healthy and sustainable environment was first recognized by the HRC in 2021, acknowledging that "while the human rights implications of environmental damage are felt by individuals and communities around the world, the consequences are felt most acutely by those segments of the population that are already in vulnerable situations, including indigenous peoples, older persons, persons with disabilities, and women and girls": A/HRC/RES/48/13. The said right has been even more recently recognized in 2022 by the UNGA, acknowledging that "sustainable development, in its three dimensions (social, economic and environmental), and the protection of the environment, including ecosystems, contribute to and promote human well-being and the full enjoyment of all human rights, for present and future generations". UNGA, *Resolution adopted by the General Assembly at its 76th session.*, 26 July 2022 A/76/L.75.

depends on biodiversity, and the degradation and loss of biodiversity undermine the ability of human beings to enjoy their human rights" ⁵⁷. It has therefore been observed that international obligations to conserve and sustainably use ecosystems and biodiversity as the Convention on Biological Diversity (hereinafter "CBD")⁵⁸, "also matter from a human rights perspective as biodiversity degradation and loss can have negative impacts on the right to water for food and agriculture"⁵⁹.

Finally, the deep interrelation between the right to water and food further emerges in the critical role of water for food security and nutrition, as we will see in the following chapter.

⁵⁷ A/HRC/34/49 Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2017.

⁵⁸ The Convention on Biological Diversity, 5 June 1992 (1760 U.N.T.S. 69). The CDB defines biodiversity at art. 2 as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems". The objectives of the CBD enshrined in art. 1 are the "conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources", which are a responsibility of the States which have sovereign rights over their biological resources as specified in the preamble. The CBD, moreover, recognizing the value of Indigenous knowledge and practices in conserving and sustainably using biodiversity, further requires States to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices" (art. 8, lett. j).

The CBD has been ratified by the three case study countries of the present paper: New Zealand in 1993, Colombia in 1994, and Bangladesh in 1994. The ratification status of the CBD is available at: https://www.cbd.int/information/parties.shtml.

⁵⁹ Elisa Morgera, et. al. (2020) *The right to water for food and agriculture*, 53.

Chapter 2 Water for food security and nutrition

2.1. Global and local challenges

According to the definition of food security provided at the 1996 World Food Summit, "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life"⁶⁰. Food security is, therefore, a precondition for the enjoyment of the right to food. However, since it is not a legal concept *per se*, it does not impose obligations nor provide entitlements⁶¹ being instead a policy goal with a multidimensional nature encompassing availability, access, utilization and stability of food (i.e. the four dimensions of food security)⁶². Nutrition is an outcome of food security strictly linked to its utilization dimension. While food availability and accessibility are necessary conditions to ensure nutrition, adequate food preparation, distribution practices, and safe drinking water ensure the necessary quantity, quality, safety and diversity of food essential for good nutrition.

Water has a critical role in ensuring food security and nutrition (hereinafter "FSN") through direct and indirect contributions to all the dimensions of food security⁶³. It is necessary for food production (such as crops, livestock and fisheries) and processing and, therefore, for food availability. It enables food accessibility since it is both "a key factor for the livelihoods of smallholders farmers and for the poorest and most vulnerable" and essential to several industries which contribute to general economic growth through increased incomes⁶⁴. It contributes to the utilization-nutrition dimension by providing sanitation services and drinking water, whose quality affects the nutrient's absorption by the human body and is crucial in

⁶⁰ FAO (1996) Rome Declaration on World Food Security and World Food Summit Plan of Action, Rome.

⁶¹ FAO (2014) "Right to Food Handbook", 9, specifies how food security "is a goal to be achieved through policies and programmes" while the right to food "is a legal concept involving right-holders (people) and duty bearers (states)". Office of the High Commissioner for Human Rights (2010), "Fact Sheet No. 34, The Right to Adequate Food, April 2010, No. 34", Geneva, 4.

 ⁶² Jan Dithmer, Awudu Abdulai (2017), *Does trade openness contribute to food security? A dynamic panel analysis*, Food Policy, Elsevier, vol. 69(C) 218-230; FAO (2003a) "Trade reforms and food security" chapter 2.
⁶³HLPE (2015) "Water for food security and nutrition" 27-28; UN (2021) "World Water Development Report 2021: Valuing Water", UNESCO, Paris, 68.

⁶⁴ HLPE (2015) "Water for food security and nutrition" 45-46.

ensuring health and good nutrition⁶⁵. Finally, it contributes to the stability dimension being water bodies critical for food, feed and inputs transport⁶⁶.

Freshwater ecosystems play a vital role in ensuring quantity and quality of water for FSN⁶⁷. They replenish groundwater, supply natural freshwater, provide flood control, carbon dioxide sequestration, water purification and habitats for nearly 10% of the world's known species, although they account for only 0.01% of the world's water⁶⁸. Unsurprisingly the conservation and sustainable management of ecosystems is considered the first action by the High-Level Panel of Experts on Food Security and Nutrition (hereinafter "HLPE")⁶⁹ and the first recommendation by the Committee on World Food Security (hereinafter "CFS")⁷⁰ to ensure the continued availability, quality and reliability of water for FSN⁷¹.

Among the freshwater ecosystems, rivers are the ones that majorly contribute to FSN. According to a recent study by the World Wildlife Fund (hereinafter "WWF"), rivers support the production of one-third of the food globally produced, contributing to four key components of world food production: irrigation, freshwater fisheries, deltas and flood recession agriculture⁷². The study shows that 25% of the world's food supply is produced through river water irrigation and over 40% of global fish production relies on rivers. Furthermore, the study underscores how rivers enhance agricultural production by creating and sustaining deltas

⁶⁵CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", Endorsed At Cfs 42 in 2015, 1; HLPE (2020) "Food security and nutrition: building a global narrative towards 2030". A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome, 10 which further specifies the necessity of: "adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met"; HLPW Outcome Report (2018) "Making every drop count" A report by the High Level Panel of Experts on Water, New York, 15. The High-Level Panel of Experts on Water (hereinafter "HLPW") has been convened by the UN and the World Bank Group to "provide leadership in tackling one of the world's most pressing challenges: an approaching global water crisis", Ibid, 5. ⁶⁶ HLPE (2015) "Water for food security and nutrition", 28.

⁶⁷ UNESCO, UN-Water, (2020) "United Nations World Water Development Report 2020: Water and Climate Change", Paris, 24-25, FAO (2020) "The State of Food and Agriculture 2020. Overcoming water challenges in agriculture" Rome, 2-3, United Nations (2018) "Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation", New York, 18.

⁶⁸ UNESCO, UN-Water (2020) "United Nations World Water Development Report 2020", 24.

⁶⁹ The HLPE was established in 2010 to provide the CFS with "evidence based and policy-oriented analysis to underpin policy debates and policy formulation on topics identified by the CFS": HLPE (2015) "Water for food security and nutrition", 9.

⁷⁰ The CFS is the UN's "most inclusive and international intergovernmental platform for relevant stakeholders to work together to ensure food security and nutrition for all. Using a multi-stakeholder, inclusive approach, CFS develops and endorses policy recommendations and guidance on a wide range of food security and nutrition topics. These are developed starting from scientific and evidence-based reports produced by the High-Level Panel of Experts on Food Security and Nutrition" (hereinafter "HLPE") see: https://www.fao.org/cfs/en/

⁷¹ HLPE (2015) "Water for food security and nutrition", 108; CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", 2.

⁷² In September 2021, WWF launched the Rivers of Food study, a microsite analyzing the crucial role of rivers in sustaining food production showing how far more food depends on rivers than previously thought and further underscoring how growing threats to rivers are posing at risk global food security: https://rivers-offood.panda.org/#intro.

through sediment transportation, which produce 4% of the world's food and allow floodrecession agriculture, which produces approximately 1% of the global food supply. Despite their vital role, rivers are suffering from an alarming over-exploitation which is jeopardizing their critical function in sustaining biodiversity, combating climate change, supporting agricultural systems, fisheries and ensuring food security⁷³. Paradoxically, unsustainable agricultural practices are among the greatest threats to rivers and, in turn, to one third of global food production that depends on rivers⁷⁴. Agriculture is responsible for over 70% of total freshwater withdrawals⁷⁵ and is the dominant cause of pollution of rivers and freshwater ecosystems, posing severe threats to ecosystems' health, food safety and food security ⁷⁶.

Excessive extraction, increasing pollution and damming, alteration of natural flows and river habitats are causing a severe loss of physical availability and quality of water⁷⁷ and

⁷³ Stuart Orr, WWF's Global Freshwater Lead, has underlined how "Rivers are central to feeding the world now and in the future, yet protecting and restoring their health and resilience are not even on the periphery of debates about global food systems,"; Jeff Opperman, WWF Global Freshwater Lead Scientist, has further underscored that river systems are under increasing stress and "if we don't take urgent steps to manage them better, we will not be able to sustainably feed everyone on Earth,": "Global Food Security at Risk from Growing Threats to Rivers, which Support One-Third of World's Food Production" (21 September 2021) < https://www.worldwildlife.org/press-releases/global-food-security-at-risk-from-growing-threats-to-rivers-

which-support-one-third-of-world-s-food-production > (accessed 22 November 2022); International River, Rivers without Boundaries (2020) "Rivers for recovery", 14, available at <u>https://www.rivers4recovery.org/#publications</u>; ⁷⁴ Joao Campari, WWF Global Food Leader, "Global Food Security at Risk from Growing Threats to Rivers"; Rivers of Food: https://rivers-of-food.panda.org/#rivers-at-risk.

 ⁷⁵ HLPE (2020) "Food security and nutrition", 2; "Global Food Security at Risk from Growing Threats to Rivers";
FAO (2021) "The state of the world's land and water resources for food and agriculture – Systems at breaking point. Synthesis report" 23.
⁷⁶ "Global Food Security at Risk from Growing Threats to Rivers"; FAO (2021) "The state of the world's land

and water resources for food and agriculture" 45 underlines that the main agricultural contributors to water pollution "are nutrients, pesticides, salts, sediments, organic carbon, pathogens, heavy metals and drug residues"; UN (2018) "Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation", New York, 18 which recognizing that agriculture is a leading cause and a major victim of water pollution, underscores that among the options to avoid water quality deterioration are: "pollution prevention, treatment of polluted water, safe use of wastewater, and restoration and protection of ecosystems"; HLPE (2015) "Water for food security and nutrition", 13 further underscores that "Pollution renders water unfit for use and undermines ecosystems' health in many areas. Unsustainable water use and management reduce the ecosystems' functions of land fisheries, forest and water bodies including their ability to provide food and nutrition"; CFS (2015) "Policy Recommendations On Water For Food Security And Nutrition", 2 recommends to "significantly reduce pollution, restore, depollute and protect water bodies from contamination and ensure water quality is preserved for domestic, agricultural and foodrelated uses, including through targeted incentives and disincentives"; UN (2021) "World Water Development Report 2021: Valuing Water", UNESCO, Paris, 68 further underlines how "water for food production is used inefficiently. This is a major driver of environmental degradation, including depletion of aquifers, reduction of river flows, degradation of wildlife habitats, and pollution"; FAO (2008) "Coping with water scarcity. An action framework for agriculture and food security"; FAO Water Reports 38, Rome, 55, further underlines how pollution reduces water availability, increases the costs of water treatment and underscores that "the costs of not addressing pollution, are very high and some impacts, as contamination of drinking water and ecosystem losses may be irreversible".

⁷⁷ HLPE (2015) "Water for food security and nutrition", 27, which underscores how the physical availability of water in a particular region is determined by "rainfall, rivers and aquifers"; HLPW (2018) "Making every Drop Count", 28 recognizing that "Many current water crises have roots in environmental degradation" recommends to "Raise awareness of the contribution of healthy rivers, lakes, wetlands and aquifers to human life and wellbeing, and ensure the value of environmental services is accounted for in managing and allocating water" and to "Prevent

the dramatic decline of freshwater species and ecosystems worldwide⁷⁸. The 2019 Global Assessment Report on Biodiversity and Ecosystem Services issued by the Intergovernmental Platform on Biodiversity and Ecosystems Services (hereinafter "IPBES")⁷⁹ underscored that biodiversity is deteriorating at unprecedented rates worldwide and that "freshwater ecosystems show among the highest rates of decline"⁸⁰. The report underlines the dangers of this alarming situation, underscoring how many of Nature's contributions are irreplaceable while most are not entirely replaceable, further highlighting how the substitutes created for some of Nature's contributions are imperfect or financially prohibitive⁸¹. With specific reference to the realization of high-quality drinking water through human-engineered water treatment facilities rather than through ecosystems services (water purification), the report underscores that it "can be extremely expensive, incur high future costs and fail to provide synergistic benefits such as nursery habitats for edible fish or recreational opportunities" underlining moreover how "human-made replacements often do not provide the full range of benefits provided by Nature"⁸².

A recent report by the WWF⁸³ has quantified the costs of Nature's loss. It shows that in a business-as-usual scenario, the continued reduction in the supply of ecosystem services would lower by 2050 the annual global GDP by 0.67% ⁸⁴ and would cause a reduction in the global supply of many commodities determining price hikes, especially in the food and agricultural sectors⁸⁵. By contrast, a global conservation scenario in which the management of natural

degradation and pollution of rivers, lakes and aquifers, and where necessary, restore and maintain acceptable environmental conditions and water quality".

⁷⁸ Rivers of Food: https://rivers-of-food.panda.org/#rivers-at-risk; WWF (2020) "Living Planet Report 2020 -Bending the curve of biodiversity loss", Almond, R.E.A., Grooten M. and Petersen, T. (Eds). WWF, Gland, Switzerland, 24 highlights how in the last 50 years there has been a 83% decline in freshwater species and the loss of 30% of freshwater ecosystems; International River, Rivers without Boundaries (2020) "Rivers for recovery", 14 further underlines how "Dams and other developments have already fragmented more than 70% of the world's large rivers (>1000km), resulting in critically degraded freshwater ecosystems"; UN (2018) Sustainable Development Goal 6, New York, 18.

⁷⁹ The IPBES is an "independent intergovernmental body established by States to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development". It is not a United Nations body, although the United Nations Environment Programme (UNEP) provides secretariat services to it: see: https://ipbes.net/about.

⁸⁰IPBES (2019), Global assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Brondízio, E. S., Settele, J., Díaz, S., Ngo, H. T. (eds). IPBES secretariat, Bonn, 18. The mentioned Framework adopted at COP 15 seeks to respond to the dramatic evidence of the report. ⁸¹ IPBES (2019), "Global assessment report" 28.

⁸² Ibid.

⁸³ Toby Roxburgh, Karen Ellis, Justin Andrew Johnson, Uris Lantz Baldos, Thomas Hertel, Chris Nootenboom, Stephen Polasky (2020) Global Futures: Assessing the global economic impacts of environmental change to support policy-making. Summary report, January 2020.

⁸⁴ The report underscores how "Assuming the same size and structure of the 2011 economy (base year for the analysis), this would be equivalent to a reduction of US\$ 479 billion in annual global GDP", Ibid. 14.

⁸⁵ In particular: "timber (+8%), cotton (+6%), oil seeds (+4%) and fruit and vegetables (+3%)", Ibid.

resources aims at avoiding further loss of important areas for biodiversity and ecosystem services would enable important economic gains, including a 0.02% increase in annual global GDP in 2050⁸⁶ and lower prices for many commodities "particularly fish, timber, cotton, oil seeds, and fruit and vegetables"⁸⁷.

The importance of safeguarding natural resources to ensure food security has been further underscored by the FAO's 2021 state of the world's land and water resources for food and agriculture⁸⁸. Acknowledged that many land and water ecosystems are currently stressed to a critical point, the report highlights the importance of safeguarding land and water resources to ensure future food security and further underscores the need to adopt innovative institutional and technical solutions to effectively manage land and water ecosystems along with more effective land and water governance⁸⁹.

2.2. Water Governance

Water governance is "the set of rules, practices, and processes through which decisions for the management of water resources and services are taken and implemented, and decision-makers are held accountable" ⁹⁰. It addresses the efficiency and equity of allocation and distribution of water resources and services comprising, moreover, the "rules, access rights, economic tools, and accountability mechanisms for all actors involved in the management and use of water" ⁹¹. It follows that water crises are frequently governance crises⁹².

Water governance concerns both water resources and water services management, whose governance can be linked or separated⁹³. Water resources governance, in particular, is often organized "around the shared uses of a particular resource, such as a river, with multiple uses from provision to water to fishing and waterways, or the protection of an ecosystem key

⁸⁶ The report underscores how "In 2011 base year terms this would be equivalent to an increase in annual global GDP of US\$ 11 billion", Ibid.

⁸⁷ Ibid.

⁸⁸ FAO (2021) "The state of the world's land and water resources for food and agriculture – Systems at breaking point. Synthesis report", 9.

⁸⁹ Ibid.; HLPE (2015) "Water for food security and nutrition", 96; CFS (2015) "Policy Recommendations on Water For Food Security And Nutrition", 5.

⁹⁰ Water Governance Initiative, hosted by OECD, <u>http://www.oecd.org/cfe/regional-policy/water-governance-initiative.htm</u>; HLPW (2018) "Making every Drop Count: An Agenda for Water Action". Outcome document of the High Level Panel on Water Experts, New York, 19; HLPE (2015) "Water for food security and nutrition", 96. ⁹¹ Ibid.

⁹² HLPW (2018) "Making every Drop Count", 12; Ngai Weng Chan, Ranjan Roy and Brian C Chaffin (2016) *Water*, 8, 1.

⁹³ HLPE (2015) "Water for food security and nutrition", 75 specifies that "the modernization of water provision, when it happened, often led to differentiated governance schemes for water services".

to water resources protection"⁹⁴. As mentioned in the previous paragraph, freshwater ecosystems provide vital contributions to FSN, although they are currently stressed to a critical point. It is therefore paramount that water resource governance models focus on protecting and conserving freshwater ecosystems as "Poor ecosystem governance leading to their degradation can negatively impact on food security"⁹⁵.

The provision of participatory mechanisms and governance decentralization is also crucial to the sustainable management of ecosystems and for ensuring continued availability, quality and reliability of water for FSN⁹⁶. Co-management measures are strongly recommended and should be designed, implemented and monitored with a range of different stakeholders closest to the resource⁹⁷. Inclusive governance models are indeed considered critical for ensuring the participation of individuals and groups often excluded in decision-making process and for embedding multi-value approaches to water governance. They improve the legitimacy of water resources management decisions and bring "greater emphasis on ecological and environmental processes and refocus efforts on sharing water resource benefits for present and future generations"⁹⁸. Inclusive resource governance models are therefore critical to safeguard Nature and its contributions to people, enabling the adoption of Indigenous and local communities' traditional knowledge and their effective involvement in water resource management, securing the quality and legitimacy of decisions⁹⁹.

The centrality of inclusive and democratic governance has been further highlighted by the Special Rapporteur, who has also underlined how such a model enables the adoption of Indigenous and local communities' knowledge and ensures their active engagement. As

⁹⁴ Ibid. 77.

 ⁹⁵ HLPE (2015) "Water for food security and nutrition", 96. In the same sense: CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", 2. HLPW (2018) "Making every Drop Count", 28;
⁹⁶ CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", 2; HLPE (2015) "Water for food security and nutrition", 19.

⁹⁷ HLPE (2015) "Water for food security and nutrition", 19; CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", 5.

⁹⁸ UN (2021) "World Water Development Report 2021", 122 which further cites the Whanganui case as example of recognition of relation values of Indigenous peoples 101; HLPW (2018) "Making every Drop Count", 17 which underscores the need to "identify and take into account the multiple and diverse values of water to different groups and interests in all decisions affecting water". Recognizing that "There are deep interconnections between human needs, social and economic well-being, spiritual beliefs, and the viability of ecosystems that need to be considered" HLPW further requires to "Value, manage, and protect all sources of water, including watersheds, rivers, aquifers, associated ecosystems".

⁹⁹ IPBES (2019) "Global assessment report", 894 specifies that "Governance, including customary institutions and management systems, and co-management regimes involving Indigenous Peoples and Local Communities, can be an effective way to safeguard Nature and its contributions to people, incorporating locally attuned management systems and Indigenous and local knowledge". The report further acknowledges how RoN and the Whanganui Case, in particular, imply a co-management regime with Indigenous peoples; UN (2021) "World Water Development Report 2021", 100; HLPW (2018) "Making every Drop Count", 17.

mentioned in paragraph 1.2, the Plan and vision for the mandate from 2020 to 2023 identifies the restoration of aquatic ecosystems and democratic water governance as the two key elements to furthering the realization of the rights to water and sanitation¹⁰⁰. Underscored that water must continue to be a public good due to its critical functions for social and ecosystems wellbeing, the Special Rapporteur requires States "to ensure that water continues to fulfil those functions under democratic and participatory management", further specifying in relation to Indigenous peoples and rural communities, that States "should empower them in its management, including by providing them with the necessary support for the protection of water and associated ecosystems" ¹⁰¹. The Special Rapporteur has further underlined the importance of democratic water governance in the 2022 report on human rights to safe drinking water and sanitation of Indigenous peoples. Recognizing that Indigenous people's worldviews provide "valuable lessons on sustainable management of aquatic ecosystems "102, the Special Rapporteur calls for "effective participation of indigenous peoples in the management of water in large territorial spaces, such as river basins or aquifers" requiring "their representation in corresponding decision-making bodies, on an equal footing with the non-Indigenous populations involved" ¹⁰³.

Finally, a human rights-based approach is also considered paramount in the governance of water. The Special Rapporteur has underlined how water governance "must ensure environmental sustainability and adopt existing international standards on the human rights to water and sanitation, including the normative content of such rights identified by the CESCR in GC 15"¹⁰⁴. On the other hand, the HLPE and CFS have underscored the need for a human rights-based approach to water governance for FSN to acknowledge the linkages between the right to water and the right to food¹⁰⁵.

2.4. The emerging approach of conferring legal personality to rivers

The dramatic decline of freshwater species and ecosystems and the increasing pressure on water resources have highlighted the failures of environmental laws worldwide to ensure

¹⁰⁰ A/HRC/48/50: Planning and vision for the mandate from 2020 to 2023, 2021, 4.

¹⁰¹ Ibid., 4.

¹⁰² A/HRC/51/24: Human rights to safe drinking water and sanitation of indigenous peoples, 2022, 18.

¹⁰³ Ibid., 5.

¹⁰⁴ Ibid., 6.

¹⁰⁵ HLPE (2015) "Water for food security and nutrition", 100; CFS (2015) "Policy Recommendations on Water for Food Security and Nutrition", 6.

adequate protection of Nature and its ecosystems¹⁰⁶. As mentioned in the previous paragraphs, innovative institutional solutions and effective and democratic water governance are crucial to ensure the sustainable management of freshwater ecosystems¹⁰⁷. Against this background, a new governance approach is emerging to protect water resources: granting legal personality to rivers¹⁰⁸. The conferral of legal personhood to rivers implies the appointment by governments and local communities of guardians in charge of representing the river and exercising its rights. It establishes, moreover, in most cases, a complex collaborative co-management regime of the river involving all interested stakeholders. Such innovative institutional arrangement for rivers' management is considered to have the potential to overcome environmental laws' constraints, enable effective and democratic governance of water resources and foster the realization of fundamental human rights.

The greatest failure of environmental laws in providing adequate protection of Nature is considered Nature's qualification as a legal object. Such construction renders Nature "legally weak", deprived of proper enforceable rights, and is considered to have "contributed to an increasing trend towards ownership of natural resources and environmental degradation" ¹⁰⁹.

¹⁰⁶ David R. Boyd, (2017) *The Rights of Nature a legal revolution that could save the world*, ECW Press, Toronto, 220 underlines how "the growing calls to recognize Nature's rights are a direct and revolutionary response to the ecological crisis of the twenty-first centutry"; Paola Villavicencio Calzadilla (2019) Law, Environment and Development Journal, 9; Denielle Perry, Ian Harrison, Stephannie Fernandes, Sarah Burnham, Alana Nichols, (2021) Sustainability, 13, 2347, 8; Cyrus R. Vance Center for International Justice, Earth Law Center, International Rivers (2020), "Rights of Rivers", 6; Michele Carducci, Silvia Bagni, Massimiliano Montini, Ito Mumta, Vincenzo Lorubbio, Alessandra Barreca, Costanza Di Francesco Maesa, Elisabetta Musarò, Lindsay Spinks, Paul Powlesland (2020) "Towards an EU Charter of the Fundamental Rights of Nature". Brussels: European Economic and Social Committee, 5; 19-27; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature strategies for building a more sustainable future*, MIT press, 1; David Takacs (2021) *University of Illinois Law Review*, 2, 559; IPBES (2019), "Global assessment report" 895, according to which: "Legal, economic and socio-cultural instruments currently regulating the use of Nature (...) fail to address the plural and multiple values of Nature" and therefore calls for the "strengthening of environmental laws and policies and their implementation, and the rule of law more generally".

¹⁰⁷ A/HRC/48/50: Planning and vision for the mandate from 2020 to 2023, 2021, 4; IPBES (2019), "Global assessment report", 881 which recognizing that the "goals for conserving and sustainably using Nature and achieving sustainability cannot be met by current trajectories, and goals for 2030 may only be achieved through transformative changes" emphasizes how transformative change needs innovative approaches to governance such as integrative and inclusive governance.

¹⁰⁸ Erin O'Donnel, Julia Talbot-Jones (2017) *Australian Environment Review*, 160; Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 7 underline how legal rights for rivers are "a flexible water governance tool with its own set of opportunities and limitations" due to the river's lack of rights to their water as we will see in greater detail in chapter 4; Gabriel Eckstein, Ariella D'Andrea, Virginia Marshall, Erin O'Donnell, Julia Talbot-Jones, Deborah Curran & Katie O'Bryan, (2019) *Water International*, 12; Erin O'Donnel, (2020) *Legal Rights for Rivers*, 195, highlights that where legal rights for rivers "have been embedded in strong cultural frameworks they appear more likely to create a collaborative approach to river management and water governance"; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 190.

¹⁰⁹ Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 11; Alexander Lillo (2018) *Vermont Journal of Environmental Law*, 168; Cyrus R. Vance Center for International Justice, Earth Law Center, International Rivers (2020), "Rights of Rivers", 6; Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 2; Anna Arstein-Kerslake, Erin O'Donnell, Rosemary Kayess, Joanne Watson (2021), *Griffith Law Review*, 30:3, 531-532; IPBES (2019), "Global assessment report" 895.

The conferral of legal personality, which is the "highest moral-juridical recognition of an entity within the frame of Western modernity" ¹¹⁰, determines a paradigm shift of Nature in law: from object to subject. Such a shift typically infers at least three rights: "the right to enter into and enforce contracts, to own property, and legal standing, or the right to sue or be sued in court" ¹¹¹. Through the conferral of legal personality, therefore, rivers gain the status of legal subjects and become entitled to the rights typically inferred by such status, along with additional ones which can be specifically conferred, such as the right to exist, thrive and to restoration¹¹². It follows that legal personhood allows enhanced protection of rivers, levelling, in particular, the asymmetry in their relationship with humans¹¹³. By doing so, such legal mechanism does not prioritize the river allowing instead to protect rivers' intrinsic value with which we are symbiotically intertwined. While some scholars have underlined that "finding the right balance between legal rights that increase the power of the river to protect itself and maintain community support for the management of a public resource is difficult"¹¹⁴, it has also been observed that such balance that the legal personhood model enables is the "beauty of the new arrangement" in which river's novel legal form "comes from the community and devolves power to the community"¹¹⁵.

¹¹⁰ Stefan Knauß (2018), Journal of Agricultural and Environmental Ethics, 31:703–704.

¹¹¹ Erin O'Donnel, (2020) Legal Rights for Rivers, 24; Alexander Lillo (2018) Vermont Journal of Environmental Law, 19, 182, which underlines how the notion of legal personality infers the concept of legal capacity: "lawful capacity for an entity in its own name to enter into binding contracts, to sue and be sued"; Erin O'Donnel, Julia Talbot-Jones (2017) Australian Environment Review, 161-162; Craig M. Kauffman, Pamela L. Martin (2021) The politics of rights of Nature, 16; Gabriel Eckstein et. al. (2019) Water International, 7; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers", 6; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) Journal of Water Law 25, 12.

¹¹² UNGA (2019) Harmony with Nature, report of the U.N.Secretary-General, A/74/236, 16; Erin O'Donnell, Julia Talbot-Jones, Deborah Curran & Katie O'Bryan, (2019) *Water International*, 7; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers", 6 according to which the right to exist, thrive and to restoration are generally granted in addition to the three rights typically inferred by legal personality.

¹¹³Anna Arstein-Kerslake, et. al. (2021), *Griffith Law Review*, 30:3, 531-532 which underscores that: "Without legal personhood, Nature is legally weak, and cannot protect itself against the actions of humans, or other legal persons such as corporations. As we enter the Anthropocene, and human impacts on the environment take on a global scale, the lack of legal personhood and a level playing field between the interests and rights of humans and Nature is growing ever more alarming". Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 6 see RoN as a "prerequisite for a different and improved relationship between human beings and the rest of Nature"; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 7 further specifies that RoN have "an important normative value and reframe exploitative or destructive relationships between people and Nature"; Alexander Lillo (2018) *Vermont Journal of Environmental Law*, 19, 165; UNGA (2019) Harmony with Nature, report of the U.N.Secretary-General, A/74/236, 16 which further underscores, with reference to the RoN movement in general, that "the most significant consequence of acknowledging human interconnectedness and inextricability from the rest of the world has been casting the non-human world as a legal subject"; Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 13.

¹¹⁴ Erin O'Donnel, Elizabeth Macpherson (2018) Australasian Journal of Water Resources, 4.

¹¹⁵ David Takacs (2021) University of Illinois Law Review, 2, 568.

The conferral of legal personhood to rivers allows overcoming further criticalities of environmental laws which hinder the effectiveness of environmental litigation¹¹⁶: financial barriers in accessing courts¹¹⁷, the difficulties in meeting standing requirements¹¹⁸, the conflation of the harm to the natural entity with the harm to human interests, and the proof of the causal link between environmental degradation and human harm¹¹⁹. The appointment of guardians as stewards of the river's rights and provided with adequate funding to enforce such rights solves both the financial and standing issues¹²⁰. The conferral of fundamental rights and, in particular, the right to restoration¹²¹, allows to overcome the criticalities concerning the compensable damage and the related burden of proof, being both connected to the damage to the river, which, moreover, is entitled to the related compensation¹²².

The personhood model creates, furthermore, duties of care for both the appointed guardians and society at large, all of which must uphold such rights¹²³. The institution of a

¹¹⁶ Paola Villavicencio Calzadilla (2019) *Law, Environment and Development Journal*, 15, 9; David Takacs (2021) *University of Illinois Law Review*, 2, 8; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 377; Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 27; Kaitlin Sheber (2020) *Hastings Environmental Law Journal*, 21, 165; Anna Arstein-Kerslake, et. al. (2021), *Griffith Law Review*, 30:3,531-532; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 1.

¹¹⁷ UNEP (2019) "Environmental Rule of Law: First Global Report" 195: underscores that "Financial barriers are among the most substantial barriers to access to the courts to protect environment-related rights and address environmental violations"; Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature", 26.

¹¹⁸ Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature", 26 recognizing that standing is available only for directly and individually affected persons, underscores that "legal standing is one of the biggest unresolved issues in EU Environmental Law"; Jan Darpo, (2021) "Can Nature Get It Right? A Study on Rights of Nature in the European Context", Brussels: European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs, 31; Denielle Perry, et. al., (2021) *Sustainability*, 13, 2347, 8. Standing is considered an issue, for similar reasons, also outside the European context. In US in particular the evolution of the injury-in-fact standard, requiring "an invasion of a legally protected interest which is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical" renders standing "a significant hurdle for lawyers bringing legal action to protect the environment"; Nicholas Bilof (2018) *Golden Gate University Environmental Law Journal*, 10, 1, 10; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 375; UNEP (2019) "Environmental Rule of Law" 193, although it recognizes that many countries have established broad standing to facilitate access to courts for environmental cases.

¹¹⁹ Due to the fact that the environmental damage is framed in light of the damage suffered by the affected individuals rather than of the damage to the natural entity: Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 2; Kaitlin Sheber (2020) *Hastings Environmental Law Journal*, 21, 148; Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 126; Erin O'Donnell, et. al., (2019) *Water International*, 7; Livio Perra (2020) *Diritto & Questioni Pubbliche* 20, 54.

¹²⁰ Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature", 26; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 369.

¹²¹ See footnote 112.

¹²² Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature", 126 which specifies that through legal personhood the restoration of the natural entity is an additional obligation "apart from the obligation of the State and natural persons or legal entities to compensate individuals and communities that depend on affected natural systems"; Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 2; Kaitlin Sheber (2020) *Hastings Environmental Law Journal*, 21, 149.

¹²³ Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 51; Chandan Reddy (2018) *Pen Acclaims*, 7; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers"

specific authority bearing the right and the duty to protect the river and provided with the necessary funds to do so should also play a strong deterrent effect on potential polluters, and encroachers, ¹²⁴ and further allow, in case of the guardians' inaction, the promotion of judicial proceedings against them¹²⁵.

Aside from the enhanced legal protection, such model provides further positive outcomes. It enables the river's participation in decision-making processes affecting it¹²⁶. It allows the codification of Indigenous cosmologies and worldviews into law¹²⁷. It further ensures effective and democratic river management through the active involvement of Indigenous populations and local communities, appointed as river guardians¹²⁸ and of all interested stakeholders, as we will see in greater detail in the following chapter.

Finally, the conferral of legal personality to rivers is considered an effective mechanism to ensure fundamental human rights. Built on the dependence of the human rights to life, health, food and water on ecosystem's health¹²⁹, the personhood model is indeed construed to provide protection in situations of "co-violation" ¹³⁰ being designed to provide joint protection of the environment and of human rights¹³¹. Indeed, in most cases, the legal personality of rivers has

^{6;} Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 2; Aikaterini Argyrou, Harry Hummels (2019) *Water International*, 44: 6-7, 756.

¹²⁴ Although it has not been considered by the cited literature. Such additional outcome that the legal personhood model enables is considered extremely important due the non-complete replaceability of most of Nature's contributions, the costs of Natures' loss and the related adverse consequences on the prices of agricultural commodities as seen in par. 2.1.

¹²⁵ Erin O'Donnel (2020) Legal Rights for Rivers, 178; Chandan Reddy (2018) Pen Acclaims, 7.

¹²⁶ Craig Kauffman, Pamela L. Martin (2019) *Vermont Law Review*, 273; Erin O'Donnell, Julia Talbot-Jones, Deborah Curran & Katie O'Bryan, (2019) *Water International*, 8; Erin O'Donnell (2021) Griffith Law Review, 10 which underscores how "participation is very different from having a decision-making power in water management". The said limitation will be analyzed in greater detail in par. 4.1.

¹²⁷ Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 106 according to which "environmental personhood sets forth the best framework for protecting traditional lands. Unlike a treaty rights approach or international human rights approach, environmental personhood allows tribal communities to insert ancestral knowledge and spiritual beliefs into plans aimed at preserving land"; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 328-329; Gabriel Eckstein, et. al., (2019) *Water International*, 8; Kaitlin Sheber (2020) *Hastings Environmental Law Journal*, 166; Denielle Perry, et. al. (2021) *Sustainability*, 13, 2347, 16.

¹²⁸ IPBES (2019) "Global assessment report", 881 emphasizes how inclusive governance, engaging Indigenous peoples and local communities ensures quality and legitimacy of decisions and can be "an effective way to safeguard Nature and its contribution to people incorporating locally attuned management systems and indigenous local knowledge"; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 99 further underscores how "environmental personhood model gives indigenous tribes the mechanism needed to exercise actual decision-making power over their land".

¹²⁹ As seen extensively at pp. 18-19. The dependance of human rights to life, health, food and water on ecosystems' services and biodiversity has been underscored also by: John Knox, Elisa Morgera, (2022) *Human rights and the environment – The interdependence of human rights and a healthy environment in the context of national legislation on natural resources*, FAO Legal Papers No. 109, Rome, FAO, 23.

¹³⁰ Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 15; <u>https://www.earthlawcenter.org/co-violations-of-rights;</u> UNEP (2019) "Environmental Rule of Law" 151.

¹³¹El Wang (2021) *Human Rights and the Environment: Legality, Indivisibility, Dignity and Geography*, edited by James R. May & Erin Daly Edward Elgar, 2019, 554; Cyrus R. Vance Center for International Justice, et. al.

been conferred to tackle environmental degradation and its adverse impacts on fundamental human rights, especially to water and food and therefore to ensure the realization of fundamental human rights¹³². It is a legal model which allows to recognize, value and protect the symbiotic relationship between humans and Nature through an equitable balance which allows both to thrive. River's legal personhood is indeed increasingly being considered an effective mechanism for States to implement the right to water. The UN Secretary-General expressly recognized that the conferral of rights to rivers "supports the commitments made by Member States in the 2030 Agenda regarding the human right to safe drinking water and sanitation and the implementation of target 6.6 of the Sustainable Development Goals on clean water and sanitation, which aims to protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes" ¹³³. The 2022 report of the Special Rapporteur¹³⁴ has further highlighted "the importance of recognizing legal personhood to rivers for the preservation of aquatic ecosystems in indigenous peoples' territories and ensuring their access to safe drinking water" citing as "emblematic cases", among others, the Whanganui River in New Zealand, the Atrato River in Colombia, and the Turag River in Bangladesh: the three case studies of the following chapter. Interestingly in neither of the three cases there was an explicit initial intention of creating rights for rivers. Indeed, in the Whanganui Case, the legal personality was conferred to overcome the criticalities concerning the ownership of the riverbed. In the Atrato and the Turag case, judges have conferred the legal personality to the rivers not only in the absence of national laws recognizing substantive rights for Nature but also of a specific request by the plaintiff communities, although the Constitutions of both countries recognize the human right to a healthy environment. Both the Atrato and Turag cases, moreover, despite the different legal systems, cite the Whanganui case and use it effectively as a precedent, as we will see in greater detail in the following chapter.

^{(2020), &}quot;Rights of Rivers" 8; Anima Mundi Law Initiative (2021) "Rights of Nature in practice, Lessons from an emerging global movement", 4; Dana Zartner (2021) *Vermont Journal of Environmental Law*, 22, 10.

¹³² Erin O'Donnel (2020) *Legal Rights for Rivers*, 174 which referring to the Whanganui and Atrato cases underlines how "legal rights for rivers have emerged from the need to give effect to legal rights of people, particularly indigenous communities and the new legal rights for the river reflect the values of the river to their local communities".

¹³³ UNGA (2022) Harmony with Nature, report of the U.N.Secretary-General, A/77/244, 12.

¹³⁴A/HRC/51/24: Human rights to safe drinking water and sanitation of indigenous peoples, 11.

Chapter 3 Rivers with legal personhood

3.1. Whanganui River, Aotearoa New Zealand

The Whanganui is the third longest river in Aotearoa New Zealand¹³⁵, that flows from Mount Tongariro to the Tasman Sea. It has been for centuries at the center of the livelihoods of the local Māori tribe, the Whanganui Iwi (hereinafter "Iwi"), as a source of water and food¹³⁶ and at the heart of their cosmology as an ancestor¹³⁷. As a navigable river, however, the Crown has formally owned its riverbed since late 1840 in force of the Treaty of Waitangi. The British government's actions negatively impacted the Whanganui adversely affecting the Iwi's fisheries, disrupting their major food supply¹³⁸ and pushing them, for over a century, to challenge the Crown's ownership of the riverbed¹³⁹. Indeed, according to the Iwi world views, environmental features are spiritual living forces with which they are genealogically intertwined. Ownership of rivers or land is therefore not only inconceivable but violates their customary laws (tikanga) under which their relationship with ancestral natural features is one of guardianship¹⁴⁰. The proposal of granting legal personality to the Whanganui River "while an imperfect approximation of the Iwis' view of the river as a living spiritual being"¹⁴¹ enabled to finally reach an agreement over the riverbed, through the conferral of the related ownership to the Whanganui River. In 2014 the parties signed the Whanganui River Deed of Settlement (hereinafter "Deed of Settlement"), centered on the conferral of legal personality to the river, and the recognition of the Iwi's ancestral relationship with the Whanganui through cultural and financial redresses.

International Law Journal, 87; Aikaterini Argyrou, Harry Hummels (2019) *Water International*, 44: 6-7, 756. ¹³⁹ As mentioned, the political reasons leading to the recognition of the legal personality to rivers are out of the

scope of the present paper. For an extensive analysis of disputes leading to the Whanganui River Claim Settlement Act see: Tia Rowe (2019) *Michigan State International Law Review*, 27:3,604-608; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 86-88; David Takacs (2021) *University of Illinois Law Review*, 2, 561-567. ¹⁴⁰ Erin O'Donnel, Julia Talbot-Jones (2017) *Australian Environment Review*, 160; David Takacs (2021) *University of Illinois Law Review*, 2, 567; David R. Boyd, (2017) *The Rights of Nature*, 133 who further explains that "Māori believe that all things in the universe, living and dead, animate and inanimate, are related, going back to Papatuānuku (the Earth) and Raginui (the Sky). Thus, all the elements of Nature are kin".

¹³⁵ Aotearoa is the Māori name for New Zealand meaning "land of the long white cloud": Erin O'Donnel (2020) *Legal Rights for Rivers*, 1; David R. Boyd, (2017) *The Rights of Nature*, 131.

¹³⁶ David Takacs (2021) University of Illinois Law Review, 2, 567.

 ¹³⁷ Erin O'Donnel (2020) Legal Rights for Rivers, 164; Craig Kauffman, Pamela L. Martin (2019) Vermont Journal Of Environmental Law, 20, 271; David Takacs (2021) University of Illinois Law Review, 2, 568.
¹³⁸ Tia Rowe (2019) Michigan State International Law Review, 27:3, 604; Sequoia L. Butler (2020) Wisconsin

¹⁴¹ Craig Kauffman, Pamela L. Martin (2019) Vermont Journal of Environmental Law, 20, 271.

In 2017 the Whanganui Claims Settlement Act¹⁴² (hereinafter "Whanganui Act") enacted in to law the Deed of Settlement (part. 1.3 (b), granting the Whanganui River (Te Awa Tupua) legal personality¹⁴³ and creating a new complex and collaborative governance framework for the river¹⁴⁴.

The Whanganui Act starts with a formal apology of the Crown to the Iwi¹⁴⁵ (part. 1.3 (a) and recognizes the Te Awa Tupua "as an indivisible and living whole, comprising the Whanganui River from the mountains to the sea incorporating all its physical and metaphysical elements" (part. 2.12) adopting the Iwi perspective of the river¹⁴⁶. The Whanganui Act acknowledges, moreover, the intrinsic values representing the essence of the Te Awa Tupua specifying that it is a: "spiritual and physical entity that supports and sustains both the life and natural resources within the Whanganui River and the health and well-being of the iwi, hapū, and other communities of the River". Acknowledging the interdependence of the river's and people's health and wellbeing¹⁴⁷ the Whanganui Act recognizes, moreover, the Te Awa Tupua's importance for the Iwi as a "source of physical and spiritual sustenance", "home" and "food basket and fisheries" (part. 3.69 (4). Recognizing, moreover, that "the iwi and hapū of the Whanganui River have an inalienable connection with, and responsibility to Te Awa Tupua and its health and well-being" the Whanganui Act codifies the ancestral relationship of mutual care of the Iwi and the river: "Ko au te Awa ko te Awa ko au (I am the River and the River is me)" (part.2.13).

The Whanganui Act further declares that the Te Awa Tupua is a legal person "with all the rights, powers duties and liabilities of a legal person" (part. 2.14). It establishes, moreover, the Te Pou Tupua, "the human face of the Te Awa Tupua" which represents it in the physical world. The functions of Te Pou Tupua are "to act and speak for and on behalf", "promote and protect the health and well-being of the Te Awa Tupua", and "develop appropriate mechanisms for engaging with and reporting to the iwi and hapu with interest in the Whanganui River". The

¹⁴² Te Awa Tupua (Whanganui Claims Settlement Act) 2017.

¹⁴³ The conferral therefore "happened as a part of a process that did not explicitly intend to create legal rights for Nature": Erin O'Donnel (2020) *Legal Rights for Rivers*, 164.

¹⁴⁴ Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 11; Tia Rowe (2019) *Michigan State International Law Review*, 27:3, 604; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 87; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) *Journal of Water Law* 28; Erin O'Donnel (2020) *Legal Rights for Rivers*, 164 underlines how the new legal arrangement is "an adaptation of the co- management that characterize river governance in New Zealand".

¹⁴⁵ Act, part. 1.3 (b).

¹⁴⁶ Craig Kauffman, Pamela L. Martin (2019) Vermont Journal of Environmental Law, 20, 270; Erin O'Donnel, Elizabeth Macpherson (2018) Australasian Journal of Water Resources, 6; Dana Zartner (2021) Vermont Journal of Environmental Law, 22, 16; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) Journal of Water Law. 25 12.

¹⁴⁷ Erin O'Donnel, Elizabeth Macpherson (2018) Australasian Journal of Water Resources, 6.

Whanganui Act further specifies that such body "may participate in any statutory process affecting Te Awa Tupua in which the Te Pou Tupua would be entitled to participate under any legislation" (part. 2.19). The Te Pou Tupua comprises two representatives, one appointed by the Crown and the other by the Iwi, which are the guardians of the Te Awa Tupua¹⁴⁸ (hereinafter "Guardians"). They are entitled to ensure the enforcement of the Act and are granted "full capacity and all powers reasonably necessary to achieve its purpose" (part. 2.18) and can, therefore, bring claims on behalf of the Te Awa Tupua¹⁴⁹. The Guardians are also "responsible for the liabilities of the Te Awa Tupua"; the said responsibility, however, is limited: they are not personally liable for the actions and omissions related to their powers and functions if they have acted in good faith (part. 2.21 (1). Further functions of the Guardians consist in the performance "for and on behalf of Te Awa Tupua landowner functions" due to the transfer of the ownership of the riverbed to Te Awa Tupua (part. 2.41) and in the administration of the Te Korotete, a 30 million \$ fund established "to support the health and well-being of the Te Awa Tupua" (part. 2.57)¹⁵⁰. The Whanganui Act requires collaborative processes between Iwi, the local and the central government, which must consult the Guardians on the activities on the surface of the river, (part.2.64) setting moreover specific provisions for the coordination of fisheries and customary food gathering. The Whanganui Act requires the establishment of an Iwi, local and central government coordination group for the protection and sustainable utilization of fisheries¹⁵¹ (part. 2.66) and a collaborative process between Iwi and the Ministry for Primary Industries for the regulation and management of Iwis customary food gathering (part. 2. 67).

The Whanganui Act, moreover, expressly states that it does not "limit any existing property rights" or "create, limit, transfer, extinguish or otherwise affect any rights to or interest in water, wildlife, fish, etc." (part. 2.16)¹⁵². It follows that the river does not have rights to its

¹⁴⁸ Although the Act refers to them as Trustees. Indeed Gerrard Albert, lead negotiator for the Iwi, underlining the importance of the river for the Iwi has highlighted how defining the Te Pou Tupua as the river's guardian "would turn reality on its head (...) if anything the reverse would be true": interviewed by David Takacs (2021) *University of Illinois Law Review*, 2, 570.

¹⁴⁹ Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 4; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 89; Aikaterini Argyrou, Harry Hummels (2019) *Water International*, 44: 6-7, 764 which further argue that "in case of dissenting views of the Guardians, Iwi views should prevail".

¹⁵⁰ Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 4; Cristy Clark, Nia Emmanouil, John Page, Alessandro Pelizzon, (2018) *Ecology Law Quarterly*, 45, 803; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 89 underscores that it comprises an additional 80 million \$ payment as financial redress and settlement of claims with the Crown.

¹⁵¹ Without prejudice to Iwi's previous fishing rights.

¹⁵² The Act therefore has "no impact on public rights of use, fishing or navigation" Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 13.

water¹⁵³, and the consent of the Guardians is not required for water uses (part.2.46 (3) a)¹⁵⁴. By contrast, due to the Te Awa Tupua's ownership of the riverbed, the consent of the Guardians is required for the related uses (part.2.46 (3) b).

The Whanganui Act further establishes an advisory group, the Te Karewao, "to provide advice and support" to the Guardians (part.2.27) comprising three representatives, appointed respectively by the Guardians, by the Iwi and by the local authorities (part. 2.28) and a strategy group, the Te Kopuka na Te Awa Tupua. The strategy group comprises up to 17 representatives of stakeholders with interest in the Whanganui River: "including Iwi, relevant local authorities, departments of State, commercial and recreational users and environmental groups" and provides "a forum for discussion of issues relating to the health and well-being of the Te Awa Tupua" (part.2.29)¹⁵⁵. It is in charge of developing and approving a strategy document, the Te Heke Ngahuru¹⁵⁶, that will guide the management of the Te Awa Tupua and is considered "a collaborative integrated watershed management body"¹⁵⁷.

The personhood model established by the Whanganui Act is an extremely advanced collaborative co-management model which has strengthened Iwi's role in the management of the river "in the form of an equal seat at the governance table"¹⁵⁸ and is believed to be the reason for its limited invocation and, to date, uncontroversial implementation¹⁵⁹. Indeed, both parties have demonstrated a profound commitment to the novel legal framework based on mutual trust, cooperation, good faith and respect as expressly foreseen (part. 3.70). While the

¹⁵³ Erin O'Donnel, Elizabeth Macpherson (2018) Australasian Journal of Water Resources, 7; Erin O'Donnel, Julia Talbot-Jones (2018) Ecology and Society, 23 (1), 6; Erin O'Donnel (2020) Legal Rights for Rivers, 165; David Takacs (2021) University of Illinois Law Review, 2, 569; Erin O'Donnell (2021) Griffith Law Review, 10 Dana Zartner (2021) Vermont Journal of Environmental Law, 22, 20 which recognizes that such limitation may "reduce the immediate effectiveness of the legislation" but also that it has been a "key factor in fostering acceptance by the community" as we will see in greater detail in par. 4.2.

¹⁵⁴ Although the Act specifies that "a consent authority may determine under the Resource Management Act 1991 that Te Pou Tupua is an affected person for the purpose of applications for resource consents relating to water" (part 2.63) and the Te Awa Tupua may apply for a water conservation order to protect the river flows as we will see in greater detail in par. 4.2. Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 12.

¹⁵⁵ Erin O'Donnel (2020) *Legal Rights for Rivers*, 165 specifies that the strategy group comprises the following representatives: "6 from Iwis with interest in the Whanganui river and the remaining 11 from local and central government, tourism, conservation recreation, wild game interest and Genesis Energy, the operator of the Tongariro Power Scheme" which diverts 75% of the Whanganui's water as we will see further on.

¹⁵⁶ According to the Te Kopuka website the plan still has to be adopted: https://www.ngatangatatiaki.co.nz/our-story/ruruku-whakatupua/te-kopuka-na-te-awa-tupua/.

¹⁵⁷ Craig Kauffman, Pamela L. Martin (2019) Vermont Journal of Environmental Law, 20, 272.

¹⁵⁸ Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 7; in the same sense: Elizabeth Macpherson, Felipe Clavijo Ospina (2018) *Journal of Water Law*. 25 13.

¹⁵⁹ Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 339; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 18.

exclusion of the river's right to its waters was expressly allowed by the Iwi¹⁶⁰, both initial Guardians are Māori, having the Crown appointed an Iwi representative¹⁶¹. The collaborative approach characterizing the Whanganui Act has been further underscored by Gerrard Albert, lead negotiator for the Iwi, which has underlined how "They wish to confront any problems through negotiation, keeping Te Awa Tupua out of the courts both as a preferred means of conflict resolution but also until judges can be properly socialized on what it means, legally for the Te Awa Tupa to speak for the river" ¹⁶². The collaborative approach created by the Whanganui Act is believed to be the key to finding consensus-based solutions to challenges affecting the Te Awa Tupua¹⁶³. Indeed, it has been observed that the judicial enforcement of the river's rights should be a last resort "as it can be fatal to collaboration between stakeholders" ¹⁶⁴. With specific reference to food production, it has been underlined that while the absence of rights to water renders future water restrictions unlikely¹⁶⁵, the cooperation between the different stakeholders fostered by the Whanganui model could "incentivize more sustainable approaches to food production"¹⁶⁶.

As for the Whanganui Act's implementation and enforcement, the outcomes are limited due to the recent establishment of the new legal framework¹⁶⁷. Indeed, there have been a few cases triggering the Guardians' consultation procedure concerning the removal of powerlines and the construction of a cycling bridge over the Whanganui¹⁶⁸. Both cases required the Guardians' consent ¹⁶⁹ which was not sought initially, determining the delay of the projects until lawful consultations finally took place and the projects were able to start. According to Gerrard Albert¹⁷⁰, these interventions are "muscles stretching to show seriousness and

¹⁶⁰ Although they have reserved the possibility of further treaty negotiations relating to water: Erin O'Donnell (2021) *Griffith Law Review*, 10.

¹⁶¹ David Takacs (2021) University of Illinois Law Review, 2, 570.

¹⁶² Interviewed by David Takacs (2021) University of Illinois Law Review, 2, 571.

¹⁶³ Erin O'Donnel, Elizabeth Macpherson (2018) Australasian Journal of Water Resources, 12.

¹⁶⁴Ibid.

¹⁶⁵ Although new water permits may be prohibited as mentioned in foot note 154 and there is some margin to affect also existing water permits, as we will see in greater detail in par. 4.2.

¹⁶⁶ M. Hansche, Simon Meisch, (2021) "Rights for rivers", in Justice and food security in a changing climate, edited by Hannah Schubel and Ivo Wallimann-Helmer, 359.

¹⁶⁷ Dana Zartner (2021) *Vermont Journal of Environmental Law*, 22, 21; David Takacs (2021) *University of Illinois Law Review*, 2, 570; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 18 according to which "given the complexity of the issues associated with river management, any impact will likely take several years".

¹⁶⁸ Dana Zartner (2021) Vermont Journal of Environmental Law, 22, 21; David Takacs (2021) University of Illinois Law Review, 2, 571.

¹⁶⁹ It is believed that the Guardians' consent was necessary since both projects concerned the Whanganui's riverbed although such aspect is not specified in the cited articles. According to the Whanganui Act, the riverbed means "the space of land that the waters of the Whanganui cover (...) and includes the space occupied by the water and the air space above the water" (part. 1.7).

¹⁷⁰ Interviewed by David Takacs (2021) University of Illinois Law Review, 2, 563.
strength" of the new legal framework. Indeed, the effectiveness of the Whanganui Act will be tested upon the end of the license of Genesis Energy, the company operating the Tongariro Power Scheme, which diverts 75% of the Whanganui's water, leaving 25% to flow back into the river¹⁷¹. While the renewal of the license would trigger the Guardians' consultation¹⁷² and is "likely that the concessions will not be continued"¹⁷³, according to Gerrard Albert the "intervening years will be about building the capacity of the community, of the government, of the ecosystem to meet that challenge"¹⁷⁴. In the meantime, it is important to note that the license requires the company to respect the river's minimum flows, which have been set "to a level to maximize whio food production and food access" and ensure the river's ecosystem health¹⁷⁵. Such requirement should ensure that water extraction does not hinder the river's wellbeing and importance for the Iwi and recognized in terms of "food basket and fisheries" (part. 3.69 (4) by the Whanganui Act.

3.2. Atrato River, Colombia

The Atrato is Colombia's largest river that flows from the Cerro de Caramanta to the Caribbean Sea. It is a navigable river located in the department of Chocò, one of the most biodiverse regions on the planet¹⁷⁶, rich in minerals and home to several ethnic communities, mostly Indigenous and Afro-descendants. The region, however, is one of the poorest and geographically isolated areas in which traditional forms of sustenance are based on artisanal mining, agriculture, hunting and fishing, which, for centuries, have guaranteed the local communities' total food supply¹⁷⁷. The increase of large scale, mostly illegal, mining and logging activities have dramatically affected the Atrato River. The diversion of the river's flow

¹⁷¹ Due to the fact that the Whanganui Act does not limit existing rights (part. 2.16). The license was conferred in 2004 for 35 years. Jeremy Lurgio, (29 November 2019) "Saving the Whanganui", The Guardian, (accessed in 8 november 2022) .https://www.theguardian.com/world/2019/nov/30/saving-the-whanganui-can-personhood-rescue-a-river.

¹⁷² See footnote 154.

¹⁷³ Dana Zartner (2021) *Vermont Journal of Environmental Law*, 22, 23; Erin O'Donnel (2020) *Legal Rights for Rivers*, 178 according to which such situation "opens the possibility for future legal action" and that if the Guardians are reluctant to take action, they can "be sued by environmental groups for failing to fulfill its responsibilities".

¹⁷⁴ Interviewed by David Takacs (2021) University of Illinois Law Review, 2, 571.

¹⁷⁵ Jeremy Lurgio, (29 November 2019), "Saving the Whanganui", The Guardian (8 november 2022) .https://www.theguardian.com/world/2019/nov/30/saving-the-whanganui-can-personhood-rescue-a-river.

 ¹⁷⁶ Juan Carlos Bello (2000) "Atlas de la Biodiversità de Colombia", Bogotá, Instituto Alexander von Humboldt.
 ¹⁷⁷ Centros de Estudios para la Justicia Social, "Terra Digna" and Others v. Presidency of the Republic and Others (Constitutional Court of Colombia, T-622/16, 10 November 2016) (hereinafter "Atrato Case"), 7.

and mercury contamination have caused alarming adverse impacts on the river's ecosystems and local communities' fundamental rights determining, displacement and armed conflicts.

This situation led the Terra Digna NGO, on behalf of several community councils and Indigenous and Afro-descendants organizations to file an *action de tutela* before the Constitutional Court of Colombia (hereinafter "Court")¹⁷⁸. The action brought against several local and national institutions, who had failed to protect their fundamental rights to life, health, water, food security, culture and territory sought the issue of measures to stop the illegal mining and logging activities. The Court, overturning the previous judgements,¹⁷⁹ recognized the violation of the plaintiffs' fundamental rights due to the dramatic degradation of the Atrato¹⁸⁰. In doing so, it used a novel legal approach centered on the relationship of profound interdependence and unity between Nature and humans, i.e. biocultural rights, highlighting the need to provide joint protection of humans and Nature, with consequent recognition of the Atrato as a subject of rights.

The Court first recognized the constitutional relevance of the "protection of rivers, forests, food sources, the environment and biodiversity" enshrined in Colombia's "Ecological Constitution" in which the conservation and preservation of the environment "are part of the constitutional guarantees for the general welfare" and the right to a healthy environment has the "highest interest"¹⁸¹. The Court then underscored the importance of the conservation of biodiversity for both "the protection of species and ecosystems because of their intrinsic value" and the survival of human communities being "undoubtedly linked to the integrity of their environment"¹⁸². It further argued that the conservation of biodiversity "necessarily leads to the preservation and protection of the ways of life and cultures that interact with it", codifying the biocultural rights of the affected ethnic communities. The Court further specified that biocultural rights are collective rights of communities resulting from "the deep and intrinsic connection that exists between Nature, its resources and the culture of the ethnic and indigenous communities that inhabit them which are interdependent with each other and cannot be understood in isolation"¹⁸³. It further recognized that the protection of the environment is inextricably connected to the rights "that ethnic communities have to administer and exercise

¹⁷⁸ For an overview of the organizations involved see: Tierra Digna, http://tierradigna.org/nosotros/. The *action de tutela* is guaranteed by section 86 of the Colombian Constitution for the protection of constitutional rights. ¹⁷⁹ The action had been previously declared inadmissible by both the Administrative Tribunal and the State

Council being meant to protect collective rights and not fundamental ones, Atrato Case, 13-14.

¹⁸⁰ Atrato Case, 9.

¹⁸¹ Ibid. 30-31. ¹⁸² Ibid. 32

¹⁰² Ibid. 32

¹⁸³ Ibid. 35.

autonomous guardianship over their territories, according to their own laws and customs, and the natural resources that make up their habitat".

Acknowledged the profound unity of the human species with Nature, the Court further underlined the importance of water both as a fundamental right and "sine qua non requirement for the exercise of other rights" such as the right to food and health, and as a public service. It recognized, moreover, that the effectiveness of such right requires the compliance of State's obligation to ensure the availability, accessibility and quality of water and, more in particular, the provision of special protection of water ecosystems¹⁸⁴. Drawing on the evidence of the presence of high mercury concentrations in the Atrato, the Court acknowledged the responsibility of the defendant entities for violating the plaintiff communities' fundamental rights to water, food security¹⁸⁵, healthy environment, culture and territory¹⁸⁶. It specified, as to the violation of the right to water, that mercury pollution: "not only violates the right to water and other components of the right to a healthy environment, but also violates the essential standards of availability, accessibility and water quality established in General Comment No. 15, since this type of mining harms the production of food (trees, crops and fish), the health conditions, the traditional ways of life and the cultural practices of the plaintiff ethnic communities"¹⁸⁷. With reference to the violation of the right to food security the Court underlined moreover how: "illegal mining activities, as they pollute and seriously threaten water sources and forests, directly violate the availability, access and sustainability of food and the traditional forms of food production of ethnic communities of the basin of the Atrato which implies an affectation of all the components of the right to food and the different stages of the food process".

Finally, recognizing that "justice for Nature must be applied beyond the human scenario and must allow Nature to be subject of rights"¹⁸⁸, the Court recognized the Atrato "its basin and tributaries as an entity subject to rights of protection, conservation, maintenance and restoration by the State and ethnic communities" and ordered the national government and the ethnic communities that inhabit its basin to "exercise legal guardianship and representation of

¹⁸⁴ Ibid. 44-49. Despite the absence of the recognition of the right to water in Colombia's Constitution: Elizabeth Macpherson, Julia Torres, (2021) *Transnational Environmental Law*, 13, although Colombia ratified the ICESCR, see foot note 13. The Court moreover underlined how the 2030 Agenda "regarding access to water (number 6) mandates that States must unify efforts and adopt the necessary measure to guarantee universal access to safe and affordable drinking water" Atrato Case, 47.

¹⁸⁵ Ibid., 101.

¹⁸⁶ Ibid., 101-104.

¹⁸⁷ Ibid., 97-98.

¹⁸⁸ Ibid., 99.

the rights of the river" ¹⁸⁹. The Court required, moreover, the said legal representatives to form a commission of guardians, including the two appointed guardians and an advisory team comprising the Humbolt Insitute and WWF Colombia¹⁹⁰, specifying moreover that the advisory team may be "formed and receive support from all public and private entities, universities (regional and national), academic and research centers in natural resources and environmental organizations (national and international), community and civil societies wishing to link to the protection project of the Atrato River and its basin".

The court further prescribed to the defendant Ministries to design and implement, in conjunction with the plaintiff communities: (i) a plan to decontaminate the Atrato and recover its ecosystem, further requiring "the reestablishment of the riverbed, the elimination of the banks produced by illegal mining, and reforestation of the affected areas" (Ministry of the Environment); (ii) a plan to neutralize illegal mining activities (Ministry of Defense and the National Police); (iii) a plan to recover traditional forms of substance and food¹⁹¹ (Ministry of Agriculture)¹⁹². The Court further prescribed to the Ministry of Environment, the Ministry of Health and the National Health Institute¹⁹³ to carry out toxicological and epidemiological studies of the Atrato River and its tributaries and to the National Attorney General's Office and to the Office of the Ombudsman to implement monitoring and following-up processes on compliance and execution of the issued orders. For such purpose, the Court required the Attorney General's Office to convene a panel of experts to verify the compliance with the orders, supervise and advise the work of the guardians and the follow-up and execution process. Finally, the Court required the Presidency of the republic and the Ministry of Finance to ensure resources for the implementation of the orders and granted the decision inter communis effect, extending it to all the ethnic communities of Chocò "in the same factual and juridical situation of the actors"¹⁹⁴.

¹⁸⁹ Ibid., 114, both of which are required to appoint the respective representative. Similarly to the Whanganui Case, the guardianship body envisioned by the Atrato Case comprises two guardians, one representative of the plaintiff communities and a delegate of the Colombian government.

¹⁹⁰ Since they had developed the "Bita River protection project" and therefore had "the necessary expertise on the actions to take", Ibid., 110.

¹⁹¹ Specifying moreover that "This plan should also be aimed at restoring the rights of the ethnic communities that inhabit the Atrato River Basin, especially in relation to the recovery of their culture, participation, territory, identity, way of life and productive activities, including fishing, hunting, agriculture, fruit harvesting and artisanal mining", Atrato Case, 115.

¹⁹² Atrato Case, 114-115.

¹⁹³ With the support and supervision of the Humboldt Institute, Universities of Antioquia and Cartagena, the Institute of Environmental Research of the Pacific, and WWF Colombia, Atrato Case, 116. ¹⁹⁴ Ibid.

The personhood model established by the Court is a complex collaborative governance approach¹⁹⁵ which has strengthened the Indigenous and Afro-descendants' role in the management of the river in a very similar way to the Whanganui Case, explicitly cited by the Court¹⁹⁶. Despite the judgement's provisions on the appointment of two guardians, the government and ethnic communities agreed to render the community guardian a collegial body comprising 7 females and 7 males representing the communities of the Atrato basin region. The interviews with the members of the community guardian collegial body have underlined how through such role they gained a "much stronger voice in policymaking"¹⁹⁷ and that the Court's ruling had adequately responded to their needs "concerning health, food security, and humanitarian protection"¹⁹⁸. In relation to the plan to restore the environment developed with the Ministry of the Environment, they underscored how they had "participated in that, at the same level as the Ministry. Everything was decided with us, everything was coordinated with us"¹⁹⁹.

As for the judgement's implementation and enforcement, the outcomes are to date limited due to the relatively recent establishment of the new governance framework and the many challenges of the region²⁰⁰. The limited implementation has interested, in particular: the appointment of the Ministry of the Environment as the government's guardian designee, the establishment of the Commission of Guardians, comprising, as mentioned, 15 guardians due to the government and ethnic communities' agreement on a collegial community guardian, and

¹⁹⁵ Philip Wesche (2021) *Journal of Environmental Law*, 33, 534; Erin O'Donnel (2020) *Legal Rights for Rivers*, 173.

¹⁹⁶ Atrato Case 34, foot note 87. David R. Boyd, (2017) *The Rights of Nature*, 226; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 195; Erin O'Donnel (2020) *Legal Rights for Rivers*, 173; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) *Journal of Water Law*. 25 20; Craig Kauffman, Pamela L. Martin (2019) *Vermont Journal of Environmental Law*, 20, 272 which further notes "how the court embedded the above legal provisions within an integrated watershed management governance body".

¹⁹⁷ Interviewed by Philip Wesche (2021) *Journal of Environmental Law*, 33, 548; and by Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 70.

¹⁹⁸ Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 70.

¹⁹⁹ Philip Wesche (2021) *Journal of Environmental Law*, 33, 548. By contrast the community guardian's participation in the formulation of the plan to eradicate illegal mining has been less egalitarian allegedly, to avoid the "leak of sensitive information", Ibid., 545. The good cooperation within the guardianship body has been highlighted also by Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 73.

²⁰⁰ Among which are: tensions with armed groups responsible of illegal mining and drug cultivation: Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 199; corruption problems: Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 71-74; the population's economic dependence on illegal mining: Philip Wesche (2021) *Journal of Environmental Law*, 551-554.

the formulation²⁰¹ of the action plans prescribed by the Court²⁰². As for the implementation of the action plans, there have been advancements in the eradication of illegal mining and on the environmental recovery. The operations to eradicate illegal mining, for which the Ministry of Defense regularly reports on the number of destroyed mining machinery and equipment, have reduced the mining sites on the Atrato, although according to others, they have only been relocated²⁰³. As for the environmental recovery, a project restoring a 300 hectares area has entered the implementation stage²⁰⁴. Other important material effects of the Court's ruling have interested the workshops and educational activities carried out by the guardians with the Chocò communities to enhance awareness of the Court's ruling and on environmental issues²⁰⁵. The greatest constraint to the effective implementation of the Court's decision, and in particular of the plan for the environmental restoration, is considered the lack of resources²⁰⁶. In addition, neither the Ministry of the Environment nor the community guardians have to date manifested the intention of bringing legal actions to collect damages on behalf of the Atrato. While the Ministry declared that it would "institute such proceedings against an entity or a mining enterprise that is not complying with environmental law"²⁰⁷ most community guardians lack legal expertise and have primarily focused on representing the communities in the formulation of public policies. It has been observed that the major focus of the guardianship body on collaborative policymaking instead of litigation is also due to the Court's focus on public policy and the lack of precise indications both on the guardianship body's powers in civil and criminal

 ²⁰¹ Although with significant delays. For a detailed analysis of the timeline of the action plans see: Philip Wesche (2021) *Journal of Environmental Law*, 33, 544-545.
 ²⁰² Philip Wesche (2021) *Journal of Environmental Law*, 33, 544; Craig M. Kauffman, Pamela L. Martin (2021)

²⁰² Philip Wesche (2021) *Journal of Environmental Law*, 33, 544; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 199; Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 24.

²⁰³ Interviewed by Philip Wesche (2021) *Journal of Environmental Law*, 33, 545.

²⁰⁴According to the Ministry of Environment interviewed by Philip Wesche (2021) *Journal of Environmental Law*, 33, 545,

²⁰⁵ Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 199; Philip Wesche (2021) *Journal of Environmental Law*, 33, 548; Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 70-71.

²⁰⁶ Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 24; Anima Mundi Law Initiative (2021) <u>https://www.animamundilaw.org/rights-of-Nature-case-studies</u>". Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 71. The resource issue is underscored also by Justice Palacio, chief justice of the Court, interviewed by David Takacs (2021) *University of Illinois Law Review*, 2, 586. According to the Ministry of the Environment, interviewed by Philip Wesche (2021) *Journal of Environmental Law*, 33, 551 the resources should be provided through property taxes by departmental and municipal authorities which however receive very few taxes due to cadastral gaps. Against this background the Ministry of the Environment has tried to secure further funds but despite its efforts the lack of resources remains one of the greatest challenges to the plan's effectiveness.

²⁰⁷ Philip Wesche (2021) *Journal of Environmental Law*, 33, 549.

litigation and on the administration of the compensation obtained through litigation²⁰⁸, as we will see in greater detail in par. 4.1.

3.3. Turag River, Bangladesh

The Turag is one of the major rivers of Bangladesh. It originates in the Bangshi River and flows across the country's capital city, Dhaka, becoming, in turn, the upper tributary of the Buriganag River. Despite the river's importance as a source of water, food and transport, pollution, encroachment and river grabbing²⁰⁹, have caused serious negative environmental impacts on the river and adversely affected the livelihoods of the people of Bangladesh. Against this background, in 2009, the High Court Division of the Supreme Court of Bangladesh (hereinafter "Court")²¹⁰ adopted measures aiming at the rivers' recovery and further required the government to form the National River Protection Commission (hereinafter "NRPC"). The NRPC was established in 2013 with the National River Protection Commission Act (hereinafter "NRPC Act"), providing "new governance arrangements (...) to improve the rivers' protection and management"²¹¹. The Act, however, limits the NRPC's powers to the formulation of recommendations only, rendering the NRPC unable to give force and effect to the national river protection laws²¹². In addition, neither the NRPC Act nor the Bangladesh Water Act²¹³ provide indications to address the most pressing issues: pollution, grabbing and encroachment. Due to the limits of the abovementioned measures, pollution and river grabbing increased in the following years to such an extent that the national Bangladesh newspaper issued an article in 2016 declaring that the Turag was dead ²¹⁴.

The Human Rights and Peace for Bangladesh NGO (hereinafter "HRPB"), therefore, filed a writ of petition²¹⁵ before the Court against several local and national institutions,

²⁰⁸ Philip Wesche (2021) Journal of Environmental Law, 33, 555; Regine Roncucci, (2019), Rights of Nature and the pursuit of environmental justice in the Atrato case, Wageningen University, 72; Lidia Cano Pecharroman (2018), Resources, 7, 13, 8.

²⁰⁹ Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 161, specify that "river grabbing" occurs "when developments encroach on the floodplain and river channel reducing the total area available to the river, compromising the ecosystem functions"; Erin O'Donnel (2021) *Griffith Law Review*, 4.

²¹⁰ Human Rights and Peace for Bangladesh v Bangladesh and others (2009) W.P. 3503/2009.

²¹¹ Mohammad Sohidul Islam, Erin O' Donnel (2020), Asia Pacific Journal of Environmental Law, 2, 170.

²¹² Ibid.; Ngai Weng Chan, et. al. (2016) *Water*, 8, 1.

²¹³ Adopted in 2013, is the principal law of Bangladesh regulating management, extraction, distribution, use, protection and conservation of water resources.

²¹⁴ Tawfique Ali, (2016) "Time to declare the Turag dead" The Daily Star <www.thedailystar.net/frontpage/time-declare-turag-dead-1310182> (accessed 4 November 2022) underlining that fish and other forms of life were disappearing from the river.

²¹⁵ Under art. 102 of the Bangladesh Constitution which allows citizens to enforce their fundamental rights.

challenging the legality of encroachment and of several structures on the banks of the Turag. The Court requested a judicial investigation to identify the illegal establishments along the river following which the appointed body submitted a report with the names of the river grabbers and the related illegal structures²¹⁶. Recognizing the alarming levels of pollution and encroachment of the Turag, and the importance of all the country's rivers for the people of Bangladesh, the Court declared, in 2019, the Turag to be a legal person and a living entity extending such status to all the rivers of Bangladesh appointing, moreover, the NRPC as the legal guardian of the rivers²¹⁷.

The Court first emphasized the presence in the Bangladesh Constitution of the public trust doctrine and the right to a healthy environment (art. 21 and 18 A), and the consequent duty for the government to protect natural resources for the enjoyment of the general public ²¹⁸. It then connected the public trust doctrine, the right to a healthy environment and the right to life (art. 32)²¹⁹, recognizing that "if any damage is caused to any public property (such as natural resources) any individual (...) can take resort to law for the violation of fundamental rights guaranteed by the constitution". The Court consequently acknowledged that the government's continued failure to protect Bangladesh's rivers had breached the people of Bangladesh fundamental rights, underlining that "river encroachment and pollution violate the right to life"²²⁰.

The Court further recognized the importance of the country's rivers for the citizens of Bangladesh in providing vital water supplies, supporting the fish population supplying "the lion's share of protein" consumed in Bangladesh and navigation routes which provide "employment for hundreds of thousands of people"²²¹. Acknowledging that human existence depends on the environment's wellbeing, the Court declared that "saving rivers is saving Bangladesh"²²² and identified a specific obligation on humans to act as custodians of Nature requiring "humans to protect, preserve and develop Nature as a guardian of a child strives for its utmost betterment"²²³.

²¹⁶ Mohammad Sohidul Islam, Erin O' Donnel (2020), Asia Pacific Journal of Environmental Law, 2, 170.

²¹⁷ Human Rights and Peace for Bangladesh v Bangladesh and others (2019) W.P. 13989/2016, (hereinafter "Turag Case") Although the decision is in Bengali all the cited English language documents are in English.

²¹⁸ Turag Case, 77.

²¹⁹ Due to the fact that the public trust doctrine and the right to a healthy environment are not judicially enforceable pursuant to art 8 of the Bangladesh Constitution under which part II of the text comprises guiding constitutional principles for the interpretations of the laws. ²²⁰ Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 165-166.

²²¹ Ibid. 167, Turag Case, 15, translation from Bangla by Mohammad Sohidul Islam.

²²² Ibid., 283.

²²³ Ibid., 272. The mentioned reasoning is similar to the one adopted by the Indian High Court in the Gange and Yamuna Case in which the river guardians were appointed in loco parentis, creating a parental bond between the

Drawing on such duty of care and the dramatic conditions of the Turag, the Court argued that such situation required an innovative legal approach to overcome the government's inaction²²⁴. Acknowledging that rivers in Aotearoa New Zealand and Colombia had been granted legal personality to improve the protection of the river and of the communities depending on them²²⁵, the Court declared that the Turag is a living entity and legal person, extending such status to all the rivers of Bangladesh²²⁶.

The Court moreover: (i) appointed the NRPC as "person in loco parentis" (legal guardian) in charge of the rivers' protection, conservation and beautification with the duty to free them from pollution and encroachment²²⁷, further prescribing cooperation and assistance of all the river related authorities to the NRPC; (ii) required all the concerned national authorities to obtain a No Objection Certificate by the NRPC before starting any new project concerning rivers and water bodies; (iii) ordered the removal of the illegal structures of the "grabbers" identified by the judicial investigation prescribing their eviction in case of noncompliance; (iv) directed the government to amend the NRPC Act to make encroachment and pollution a criminal offense with stricter punishments; (v) required the government to make publicly available maps of the rivers and lists of the responsible of river encroachment and pollution; (vi) directed the government to strengthen the NRPC, to render it an effective and independent institution; (vii) directed the Bangladesh Bank and Election Commission, to render the people and companies responsible of encroachment and pollution, respectively, ineligible for loans and disqualified from any kind of election; (viii) required public education and awareness-raising campaigns on the preservation of rivers in addition to the transmission of documentaries on Bangladesh Television²²⁸.

The case has been appealed before the Appellate Division of the High Court (hereinafter "Appellate Division")²²⁹, which recognized that only the Parliament can enact and amend laws and that, in the absence of specific laws, the Court could not give directions to government entities but only provide opinions or suggestions. The Appellate Division, therefore,

rivers and the guardians and framing, moreover, the rivers as legal minors as we will see in greater detail in par. 4.2: Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 166. ²²⁴Ibid.

²²⁵ Ibid., 274-276.

²²⁶ Ibid., 277-278.

 ²²⁷ Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 162, underscore that such duty is "a new obligation" of the NRPC.
 ²²⁸ Turag Case, 278-281.

²²⁹ Nishat Jute Mills Ltd. v Human Rights and Peace for Bangladesh (2020) W.P. 3039/2020 Appellate Division (Feb. 17, 2020), 2, English version available from: Anima Mundi Law Initiative (2021) <u>https://www.animamundilaw.org/rights-of-Nature-case-studies</u>" (hereinafter "Turag Appeal").

declared that the Court had exceeded its jurisdiction in requesting: (iv) amendments to the NRPC Act; (vi) strengthening of the NRPC; (vii) ineligibility for loans and disqualification from any kind of election, repealing the related orders²³⁰. The Appellate Division, however, recognized the Turag's critical contribution to the livelihoods of the citizens of Dhaka "as a source of water, fishes, communication and good harvest"²³¹ and that it had been continuously object of encroachment and grabbing. It moreover acknowledged that the said activities had caused "serious negative environmental impacts on the nearby areas and areas beside the Turag", adversely affecting also the livelihoods of the citizens of Bangladesh²³². In doing so, it upheld the rest of the judgement, not contesting either the conferral of the legal personality to rivers of Bangladesh nor the Court's orders concerning the removal of the illegal structures. It has been observed, therefore, that the Turag Case has "survived" this "early test"²³³.

The personhood model established in the Turag Case created a new range of legal and governance arrangements for the rivers' management²³⁴ as occurred in the Whanganui and the Atrato Case, expressly considered as "precedents" by the Court²³⁵. The governance model envisioned by the Turag Case, however, is very different from the collaborative governance approach established in Aotearoa New Zealand and Colombia. The river's guardianship has indeed been exclusively conferred to the government appointed NRPC, which, moreover, is currently deprived of legal powers due to the appeal²³⁶. Notwithstanding the Court's awareness of the need for community support, the novel governance of the rivers of Bangladesh does not empower or engage local communities²³⁷. The measures adopted by the Court to ensure community support, public education, awareness-raising campaigns and documentaries on pollution and the preservation of rivers, have been considered "unlikely sufficient" to effectively engage communities ²³⁸. Moreover, no provision for the protection of vulnerable

²³⁰ Ibid., 13-14.

²³¹ Ibid., 2.

²³² Ibid.

²³³ Mohammad Sohidul Islam, Erin O' Donnel (2020), Asia Pacific Journal of Environmental Law, 2, 176.

²³⁴ Ibid., 162.

²³⁵ Turag Case 274-276.

²³⁶ Erin O'Donnel (2021) *Griffith Law Review*, 12 underlines that due to the appeal the government of Bangladesh "may pass legislation to empower the river guardians in future but they are no longer under and obligation to do so"; Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 170 have underscored how due to the appeal the NRPC lacks the powers to be an effective guardian.

²³⁷ Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 175; David Takacs (2021) *University of Illinois Law Review*, 2, 597-598; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 360.

²³⁸ Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 175, although community awareness is also important to ensure community support as the educational workshops organized by the guardians in the Atrato Case demonstrate.

riverine communities is present in the Court's decision. The removal of the illegal structures on the riverbanks ordered by the Court, and upheld by the Appellate Division, is believed, therefore, to render the poor communities who have traditionally lived by the rivers in the absence of legal rights to do so vulnerable to eviction²³⁹.

As for the judgement's implementation and enforcement, the outcomes are, to date, limited due to the recent establishment of the novel framework and the NRPC's limited powers²⁴⁰. In 2019 the human rights organization Bangladesh Poribesh Andolan (hereinafter "BPA") reported the beginning of the eviction of informal settlements, confirming the initial fears that the implementation of the Court's orders could cause the eviction of vulnerable communities living in slums on the riverbanks²⁴¹. The BPA therefore called on the government to "take stock of poor communities who need resettlement" ²⁴² but aware of the deep interdependence of the people of Bangladesh and its rivers, it also recognized that "if enacted well, the verdict will be helpful in returning the rivers to the people who have historically depended on them"²⁴³. The Chairman of the NRPC on the other hand, acknowledging the potential competition, declared that the Commission was formulating policies also considering the needs of local communities, highlighting that "Protecting the rivers also means protecting the entire eco-system, which includes fishermen and farmers who live on the banks" further reassuring that "Their rights will also be protected"²⁴⁴.

Further advancements in the implementation of the Turag Case have been made in fisheries after experts had expressed concerns that extensive dredging was harming hilsa fish breeding²⁴⁵. Notices were issued against polluting organizations that were causing alarming

²³⁹Ibid.; David Takacs (2021) *University of Illinois Law Review*, 2, 597-598; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 377; Rina Chandran, (4 July 2019) "Fears of evictions as Bangladesh gives rivers legal rights", Reuters Asia <www.reuters.com/article/us-bangladesh-landrights-rivers/fears-of-evic tions-as-bangladesh-gives-rivers-legal-rights-idUSKCN1TZ1ZR> (accessed 4 November 2022).

²⁴⁰ Manjur Ahmed Chowdhury, current chairman of the NRPC, has underlined how it is the duty of the NRPC to identify the problems relating to the country's rivers and formulate recommendations being instead the responsibility of the concerned departments and agencies to implement such recommendations. Interviewed by Sohrab Hassan (17 April 2022) "River pollution has made Dhaka an ecologically dead city"<https://en.prothomalo.com/opinion/interview/river-pollution-has-made-dhaka-an-ecologically-dead-city>(accessed 8 November 2022).

²⁴¹ Ibid.

²⁴² Mohammad Abdul Matin, general secretary of human rights group Bangladesh Poribesh Andolan, interviewed by Rina Chandran, (5 July 2019) "Fears of evictions as Bangladesh gives rivers legal rights".

²⁴³Ibid.

²⁴⁴ Chairman Muzibur Rahman Howlader interviewed by Rina Chandran, (5 July 2019) "Fears of evictions as Bangladesh gives rivers legal rights". Ibid.

²⁴⁵ Manjur Ahmed Chowdhury interviewed by Sohrab Hassan (17 April 2022) "River pollution has made Dhaka an ecologically dead city" according to which, following the NRPC instructions, the district administration arrested the responsible and seized the dredges clearing the area completely.

changes in the rivers' fish²⁴⁶. In addition, according to the following Chairman of the NRPC (hereinafter "Chairman"), in November 2022 "almost 90% of the rivers around Dhaka have been retrieved from encroachment", mainly from "industries, people who had constructed residential buildings etc."²⁴⁷. As for the eviction of the vulnerable communities, the Chairman specified that they are paying attention to avoid "evicting common people from their land" and citing the public trust doctrine, declared that the NRPC's responsibility is "to ensure everyone's rights – be it the river or the people residing beside it²⁴⁸. At present, there is no evidence that the eviction of informal settings has continued. Indeed, the human rights organization that had denounced the beginning of the evictions, BPA, organized in December 2022 a discussion on the implementation of rivers' rights. Stressing the need to protect the rights of the rivers as living beings, the BPA further recognized how "The rights of rivers are being violated in the country" and that those responsible for the violations are "the government or elite businessmen", underlining corruption issues in the implementation of the Turag Case²⁴⁹. Finally, the Chairman highlighted that the NRPC actions have been to date inadequate due "to the lack of workforce" and "legal limitations" (although the NRPC Act apparently "is undergoing amendments")²⁵⁰.

https://www.thedailystar.net/news/bangladesh/news/rights-rivers-living-entity-must-be-protected-3206826 accessed 30 Decemer 2022).

²⁵⁰ Ibid.

²⁴⁶ Manjur Ahmed Chowdhury interviewed by Sharier Khan (26 October 2022): "We will have rivers cleaned by March 2023" The Business Standard<https://www.tbsnews.net/features/panorama/repeat-offenders-who-polluterivers-should-be-jailed-nrcc-chairman-520134>(accessed 8 November 2022) has underlined how due to pollution "only suckerfish can survive" as they are a "surface breather fish (...) the rivers are getting full of sucker fish and people are eating them as well, which is unhealthy".
²⁴⁷ Interviewed by Sharier Khan (26 October 2022) "We will have rivers cleaned by March 2023". The Chairman

²⁴⁷ Interviewed by Sharier Khan (26 October 2022) "We will have rivers cleaned by March 2023". The Chairman also represented that, to date, they had not been able to reduce the pollution although he believes he will have clean rivers by March 2023.

²⁴⁸ Ibid.

²⁴⁹ (28 December 2022) "Rights of rivers as living entity must be protected"

Chapter 4

Challenges, Debates, and Opportunities

4.1. The shortfalls of the analyzed case studies

The case studies analyzed in the previous chapter present several shortfalls. While some criticalities are shared by the three models, others are context specific.

Among the common shortfalls, it has been observed that neither the Whanganui nor the Atrato or the Turag and the other rivers of Bangladesh have "received formal legal rights to the water flowing within their banks"²⁵¹. Indeed, in the case of the Whanganui, as mentioned in paraph 3.1., the Whanganui Act expressly declares that it does not create or affect any right to water, with the consequence that the river has no rights to its waters²⁵². The Atrato, on the other hand, being a "subject of rights", is entitled only to the specific rights conferred by the Court ("to protection, conservation, maintenance and restoration"²⁵³) and has no right to own property nor rights to its water²⁵⁴. As for the Turag, while the Court recognized that encroachment and grabbing were the greatest environmental concerns affecting the river's flow²⁵⁵, it did not grant any of the rivers of Bangladesh rights to their waters²⁵⁶.

Another shared issue concerns the three rivers' limited role in water management²⁵⁷. Indeed, for the Whanganui, it is the strategy group (Te Kopuka), not the river via its guardians, who is responsible of developing and approving the collaborative plan for the river's management (Te Heke Ngahuru) ²⁵⁸. The lack of water rights limits moreover the role of the guardians, and of the strategy group from affecting water management directly²⁵⁹. For the Atrato, the institutional arrangement created by the Court does not directly empower the guardianship body in the management of the river having the Court focused rather on the

²⁵¹ Erin O'Donnel (2021) *Griffith Law Review*, 10-11. Although the author points out that the Whanganui and the Turag have been recognized also as living beings and that such qualification "may provide a future legal avenue to argue that this recognition implicitly include rights to water".

²⁵² Whanganui Act, (part. 2.16). Erin O'Donnel (2021) Griffith Law Review, 10; Erin O'Donnel (2020) Legal Rights for Rivers, 178.

²⁵³ Atrato case, 110.

²⁵⁴ Erin O'Donnel (2021) Griffith Law Review, 10; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) Journal of Water Law 25, 292; Erin O'Donnel (2020) Legal Rights for Rivers, 177.

²⁵⁵ Turag Case, 272.

²⁵⁶ Erin O'Donnel (2021) Griffith Law Review, 11.

²⁵⁷ Ibid.

²⁵⁸ Ibid, plan which still has to be adopted.

²⁵⁹ Ibid.

coordination of existing government departments for the fulfilment of its orders²⁶⁰. Finally, for the Turag, while the Appellate Division has struck down the Court's orders directing the government to empower the NRPC²⁶¹, it has upheld the Court's order requiring the NRPC's approval for new projects concerning rivers and water bodies, therefore, ensuring a limited role of the guardian in water management.

As mentioned, there are also context-specific shortfalls concerning, in particular, the Atrato and Turag case.

As for the Atrato Case, the first specific shortfall concerns the conferral of the legal guardianship to a state entity, the Ministry of the Environment, which could cause, in situations of conflict of interest, the stall of the guardianship body. It has been underlined that it would be difficult for the body to act "against another executive entity, not complying with its responsibilities, but led by the same government or political party as the ministry"²⁶². The lack of precise indications both in terms of the guardianship body's powers in civil and criminal litigation and administration of the compensation obtained through litigation are further constraints to the institution of legal proceedings and, therefore, to the effectiveness of the river's rights²⁶³. The difficulties in bringing legal actions on behalf of the river are further exacerbated by the lack of legal expertise of the community guardians²⁶⁴ and by the security situation in the region of Chocò. Indeed, many guardians fear that their participation in legal actions against both public and private sector actors could imply risks to their security²⁶⁵. Finally, as mentioned, the lack of resources is probably one of the most pressing issues and is

²⁶⁰ Ibid; Elizabeth Macpherson, Felipe Clavijo Ospina (2018) *Journal of Water Law* 25, 290. Although at least the plan to restore the environment resulted from the egalitarian participation of the community guardians in its formulation process.

²⁶¹ Ibid; Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 176. Turag Appeal, 14.

²⁶² Philip Wesche (2021) Journal of Environmental Law, 33, 550.

²⁶³ Philip Wesche (2021) Journal of Environmental Law, 33, 555; Regine Roncucci, (2019), Rights of Nature and the pursuit of environmental justice in the Atrato case, Wageningen University, 83; Lidia Cano Pecharroman (2018), Resources, 7, 13, 8.

²⁶⁴ Philip Wesche (2021) Journal of Environmental Law, 33, 549.

²⁶⁵ Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 199-200; which further underlines the tensions with armed groups responsible of illegal mining and drug cultivation; Philip Wesche (2021) *Journal of Environmental Law*, 33, 550. Further political challenges are highlighted in footnote 200 although they are out of the scope of the present paper.

considered the principal cause of the delays in the judgement's implementation²⁶⁶, deriving, moreover, from the judicial recognition of the Atrato as a subject of rights²⁶⁷.

As for the specific shortfalls concerning the Turag Case, the first issue is considered the judicial recognition of the river's legal personality²⁶⁸. Indeed, the Appellate Division found that the Court had exceeded its jurisdiction in directing the government to empower the NRPC, preventing the conferral of the necessary legal powers to the guardian to fulfil the obligation to free the rivers from pollution and encroachment²⁶⁹. Moreover, as mentioned, the Court did not empower or engage local communities²⁷⁰ adopting, by contrast, public education and awareness-raising campaigns and documentaries on pollution and the preservation of rivers to ensure community support. It is worth noting however, that the measures to protect the rivers seem to have been adopted in the interest of the citizens of Bangladesh, in accordance with the public trust doctrine, which seems to have guided the NRPC's actions insofar²⁷¹. A further challenge of the Turag case is the considered the lack of adequate workforce, which is probably the cause, along with the NRPC lack of legal power, for the delay in addressing the pollution issues²⁷².

²⁶⁶ Cyrus R. Vance Center for International Justice, et. al. (2020), "Rights of Rivers" 24; Anima Mundi Law Initiative (2021) <u>https://www.animamundilaw.org/rights-of-Nature-case-studies</u>"; Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, Wageningen University, 71; Philip Wesche (2021) *Journal of Environmental Law*, 33, 552. The said issue has been underscored also by Justice Palacio, chief justice of the Court, in explaining the slow progresses of the judgement's implementation: David Takacs (2021) *University of Illinois Law Review*, 2, 586.

²⁶⁷ Erin O'Donnel (2020) *Legal Rights for Rivers*, 174, has indeed underscored the limits of the judicial recognition due to the fact that the "Court lacks the power to allocate funding".

²⁶⁸ Hope M. Babcock, (2016) *Ecology Law Quarterly*, 43; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 373 which have underlined that "Courts that craft remedies which aim to manage ecosystems, establish complex governance structures, and balance government and civil society participation may push against the legal limits of the judicial role". By contrast the judicial recognition of the Atrato has not been considered a problem, having the Court taken "a limited amount of legislative and executive decisions, limiting the judgment to set an arrangement of norms and structural decisions that should be applied by other stakeholders": Regine Roncucci, (2019), *Rights of Nature and the pursuit of environmental justice in the Atrato case*, 83, although it has created funding issues.

²⁶⁹ With the consequence that the NRPC remains exclusively a "recommendatory body": Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 174; Erin O'Donnel (2021) *Griffith Law Review*, 12.

²⁷⁰ Rendering poor river communities vulnerable to eviction: Mohammad Sohidul Islam, Erin O' Donnel (2020), *Asia Pacific Journal of Environmental Law*, 2, 175; David Takacs (2021) *University of Illinois Law Review*, 2, 597-598; Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 360. Such fact has been criticized also by local human rights organizations: "The New Zealand ruling recognized communities as stakeholders, and that is key. Otherwise, fishermen and farmers who have traditionally lived by rivers, but do not have legal rights to do so, may be more vulnerable to eviction." Rina Chandran, (2019) "Fears of evictions as Bangladesh gives rivers legal rights". It's worth noting however that from the interviews to the former and current chairman of the NRPC the evictions seem to have interested especially industries, and that the NRPC is avoiding "the eviction of common people from their land" see page 48.

²⁷¹ See pages 47-48.

²⁷² Although, as mentioned, the Chairman believes Bangladesh will have clean rivers by March 2023. Interviewed by Sharier Khan (26 October 2022) "We will have rivers cleaned by March 2023".

4.2. Possible solutions and general recommendations

The lack of rights to water, mentioned in the previous paragraph, is a common issue in the three case studies. The said omission is believed to derive from the conferral to rivers of rights and powers "necessary for the functioning of a legal person in a human society" but not those needed by a river legal person²⁷³. A possible solution to such problem would be conferring to rivers "river rights" such as the right to flow, as suggested in the Universal Declaration of River Rights, as we will see in greater detail in the following paragraph. In addition, through the conferral of the right to its own waters, rivers would have a stronger role in water management²⁷⁴.

As for the context-specific shortfalls, the lack of a specific definition of the legal capabilities of the guardians²⁷⁵ seen in the Atrato Case underscores the importance of conferring specific legal powers to the appointed guardians. The Atrato Case further highlights the need for a dedicated fund for the collection of judicial compensations and clear directions for its administration, as provided by the Whanganui Act, along with community guardians' legal education to enhance the effectiveness of the river's rights²⁷⁶.

The delimitation of the guardians' accountability and liability is also of paramount importance. Indeed, the conferral of the legal personality to the Gange and Yamuna Rivers by the High Court of Uttarakhand (hereinafter "High Court")²⁷⁷ was stayed by the Supreme Court²⁷⁸ on the basis of a too generalized liability of the rivers' guardians determined by the High Court's decision²⁷⁹. In 2014 Mohammed Salim, a local resident, initiated a public interest litigation before the High Court to protect the sacred Gange and Yamuna Rivers from encroachment and pollution. In 2017 the High Court declared that the Gange and Yamuna

²⁷³ Erin O'Donnel (2021) Griffith Law Review, 16.

²⁷⁴ Ibid. 11.

²⁷⁵ Philip Wesche (2021) Journal of Environmental Law, 33, 555; Regine Roncucci, (2019), Rights of Nature and the pursuit of environmental justice in the Atrato case, Wageningen University, 72; Lidia Cano Pecharroman (2018), Resources, 7, 13, 8.

²⁷⁶ Philip Wesche (2021) Journal of Environmental Law, 33, 555.

²⁷⁷ Mohd Salim v. State of Uttarakhand, 126 of 2014, decided on Mar. 20, 2017 (Uttarak- hand HC) (India).

²⁷⁸ Uttarakhand v. Mohd. Salim., Special Leave to Appeal No. 016879 (Jul. 7, 2017), removing therefore the rivers' legal rights: Erin O'Donnel (2020) *Legal Rights for Rivers*, 170. It worth noting, however, that the Gange flows also across Bangladesh which has conferred legal personality to all its rivers. It could therefore be considered a river with legal personality following the Turag Case.

²⁷⁹ For a detailed analysis of the case see: Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 357-359; Craig M. Kauffman, Pamela L. Martin (2021) *The politics of rights of Nature*, 201-206; Erin O'Donnel (2020) *Legal Rights for Rivers*, 165-170; Cristy Clark, et. al, (2018) *Ecology Law Quarterly*, 45, 811-818.

Rivers are living entities and legal persons with the corresponding "right, duties and liabilities". It further appointed government officials as the rivers' guardians, *in loco parentis*, with the duty to "protect, conserve and preserve the rivers" as well as promoting their health and wellbeing. As seen in the Turag Case, such form of guardianship implies the qualification of the rivers as legal minors and determines, moreover, the responsibility of the guardians for the "actions" of the river.²⁸⁰ Due to this particular aspect of the Indian personhood model²⁸¹ the state government of Uttarakhand appealed the High Court's decision fearing that the officials appointed as river guardians *in loco parentis* could be liable for any damage caused by the rivers, also in case of flooding. Limitations of liability through the use of legal canons such as good faith as provided by the Whanganui Act and *force majeure* are therefore highly recommended.

The criticalities concerning situations of possible conflict of interest highlighted in the Atrato Case and Turag Case further suggest the need to confer the role of legal guardian to persons or entities which are independent "from existing government roles in development and environmental protection"²⁸².

Strong institutions and organizational capacity also play a key role in ensuring the effectiveness of the rivers' legal personality²⁸³. Indeed, in Bangladesh, despite the lack of legal powers of the NRPC, its collaboration with state departments and agencies has enabled some positive outcomes²⁸⁴.

A collaborative approach ensuring effective empowerment and engagement of local communities is also extremely important for the quality and legitimacy of decisions concerning the rivers' management. In the presence of Indigenous communities, such approach ensures their equalitarian participation in the river's management²⁸⁵. The conferral of legal personhood,

²⁸⁰ Erin O'Donnel (2020) Legal Rights for Rivers, 177; Craig Kauffman, Pamela L. Martin (2019) Vermont Law Review, 273; Craig M. Kauffman, Pamela L. Martin (2021) The politics of rights of Nature, 205; Nicola Pain, Rachel Pepper (2021) Fordham International Law Journal, 45,2, 359.

²⁸¹ Shared also by the Turag Case. The NRPC's lack of legal powers and consequently of legal responsibility for the rivers is probably the reason why the use of the *in loco parenti* doctrine in Bangladesh has not been considered to date an issue.

²⁸² Erin O'Donnel (2021) *Griffith Law Review*, 19; Philip Wesche (2021) *Journal of Environmental Law*, 33, 550. Erin O'Donnel (2020) *Legal Rights for Rivers*, 169 and Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 7 underline the same problem for the Gange and Yamuna Case in which the guardianship was conferred to the same state entities responsible of the river's dire state.

²⁸³ Erin O'Donnel (2021) *Griffith Law Review*, 16,19; Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 7; Philip Wesche (2021) *Journal of Environmental Law*, 33, 554 which further underlines the need for large scale public policy interventions "to strengthen state institutions and transform the economic drivers causing environmental degradation", as illegal mining in Colombia.

²⁸⁴ See pages 47-48.

²⁸⁵ Aside from the codification of Indigenous cosmologies and worldviews into law: Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 328-329; Gabriel Eckstein, et. al., (2019) *Water International*,

however, is considered an effective means for riverine ecosystem protection and for local communities' engagement also in the absence of Indigenous populations²⁸⁶ being replicable "anywhere citizens are looking to legalize a complicated, ecologically grounded recognition that we are fundamentally interconnected with the natural world"²⁸⁷. Indeed, a collaborative governance of the river is key in finding effective and democratic solutions to present and future challenges. For this purpose, the provision of management bodies comprising all interested stakeholders, as the Whanganui's strategy group, is also strongly recommended. It is paramount to foster collaboration among the different stakeholders and could be key in finding consensus-based solutions, especially with the agricultural sector, enabling sustainable approaches to food production. The importance of community support further suggests proceeding with the judicial enforcement of the river's rights only as a last resort ²⁸⁸. Public education and awareness-raising campaigns on the value and preservation of rivers are also recommended to ensure community support at large.

Where an effective engagement of local communities is not envisioned, the guardianship body should ensure that the protection of rivers does not infringe the rights of the local communities. In situations where environmental degradation is too critical to allow the mutual protection of the river and of the communities depending on it, as happened initially in the Turag Case, a social impact assessment along with the adoption of the necessary social protection measures is strongly recommended²⁸⁹.

The Atrato and the Turag case demonstrate, moreover, the importance of funding²⁹⁰. Law is thus considered the preferable means for the conferral of the legal personality due to

^{8;} Kaitlin Sheber (2020) *Hastings Environmental Law Journal*, 166; Denielle Perry, et. al. (2021) *Sustainability*, 13, 2347, 16; Sequoia L. Butler (2020) *Wisconsin International Law Journal*, 106.

²⁸⁶ Erin O'Donnel (2021) Griffith Law Review, 16,19; David Takacs (2021) University of Illinois Law Review, 2, 578-579.

²⁸⁷ David Takacs (2021) *University of Illinois Law Review*, 2, 578-579; Michele Carducci, et. al. (2020) "Towards an EU Charter of the Fundamental Rights of Nature" 6.

²⁸⁸ Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 12; Erin O'Donnel (2020) *Legal Rights for Rivers*, 30 indeed further underscores how rivers capacity to engage in policy debates is as significant as legal standing.

²⁸⁹ Mohammad Abdul Matin, general secretary of human rights group Bangladesh Poribesh Andolan, following the eviction of informal settlements along riverbanks had called for the government to "take stock of poor communities who need resettlement" interviewed by Rina Chandran, (5 july 2019) "Fears of evictions as Bangladesh gives rivers legal rights".

²⁹⁰ Erin O'Donnel (2021) Griffith Law Review, 19; Erin O'Donnel, Julia Talbot-Jones (2018) Ecology and Society, 23 (1), 7; Philip Wesche (2021) Journal of Environmental Law, 33, 555; issue underscored also by Justice Palacio, chief justice of the Court in the Atrato Case, in explaining the slow progresses of the judgement's implementation: David Takacs (2021) University of Illinois Law Review, 2, 586; Regine Roncucci, (2019), Rights of Nature and the pursuit of environmental justice in the Atrato case, Wageningen University, 71. Anna Arstein-Kerslake, et. al. (2021), Griffith Law Review, 30:3,543, which further underscores that: "Giving force and effect to the legal rights of Nature thus requires institutional capacity (organisation, funding, human resources)".

Courts' lack of power to allocate funds²⁹¹, and the risk of superseding the limits of jurisdiction in establishing novel governance arrangements²⁹². Indeed, the violation of the limits of jurisdiction has prevented the conferral of legal powers to the river guardian in the Turag Case and has further precluded the conferral of legal personality to the Colorado River. In 2017 a group of environmentalists sued the State of Colorado²⁹³, arguing that environmental laws, considering Nature as property, had failed to protect the environment and requested the court to recognize that the Colorado River had "rights to exist, flourish, regenerate and evolve". The Colorado Attorney General declared that the conferral of rights to the river requested by the plaintiffs "unacceptably impugned the State's sovereign authority to administer natural resources for public use and was well beyond the jurisdiction of the judicial branch of the government". Threatening personal sanctions for the temerity of the action, the Colorado Attorney General forced the plaintiffs to withdraw the complaint ²⁹⁴.

While legislation is considered the preferable means for all the above-mentioned reasons, the laws recognizing the rights of rivers must be sufficiently specific as for the rights conferred and the related institutional arrangements. Indeed, the Lake Eire Bill of Rights (hereinafter "LEBOR") lack of specificity on both such aspects, along with the broad liability it envisioned, has caused its declaration of unconstitutionality²⁹⁵. In 2019 voters in Toledo approved LEBOR following drinking water bans due to high levels of toxins in Lake Erie. The law recognized the lake's rights to "exist, flourish and naturally evolve" and Toledo citizen's "collective and individual rights to self-government" and to a "system of government that protects those rights". LEBOR further envisioned the invalidation of preexisting licenses and authorizations violating Lake Erie's rights creating a "blanket statements of liability, even for those who have been using Lake Erie for decades" causing LEBOR's judicial challenge and repeal for unconstitutional vagueness²⁹⁶. The Lake Erie case, therefore, further demonstrates

²⁹¹ See footnote 268; Erin O'Donnel (2020) *Legal Rights for Rivers*, 169 underlines the same problem for the Gange and Yamuna Case.

²⁹² See footnote 266. The "unelected, relatively insulated from accountability" nature of the components of the judiciary branch is a further argument against the judicial recognition of river's legal personhood: Nicola Pain, Rachel Pepper (2021) *Fordham International Law Journal*, 45,2, 373-374. Erin O'Donnel, Julia Talbot-Jones (2018) *Ecology and Society*, 23 (1), 7 even though with specific reference to the Gange and Yamuna Case, underline that the risks of appeal characterizing the judicial conferral of the legal personhood further demonstrates "the type of uncertainty that could be created by granting legal rights to rivers through the judicial system".

²⁹³ Colorado River Ecosystem v. State of Colorado, 1:17-cv-02316 (D. Colo. Sept. 25, 2017). For a detailed analysis of the case see: David Takacs (2021) *University of Illinois Law Review*, 2, 559-560; Cristy Clark, et. al, (2018) *Ecology Law Quarterly*, 45, 818-823.

²⁹⁴ Ibid.

²⁹⁵ Drewes Farms P'ship v. City of Toledo, 441 F. Supp. 3d 551 (N.D. Ohio 2020). For a detailed analysis of the case see: David Takacs (2021) University of Illinois Law Review, 2, 598-599; Dana Zartner (2021) Vermont Journal of Environmental Law, 22, 24-31.

²⁹⁶ Dana Zartner (2021) Vermont Journal of Environmental Law, 22, 20.

that the provision of clauses that expressly limit the law's effects on preexisting rights, as in the Whanganui Act, is not necessarily a shortfall, being critical for ensuring broad community acceptance²⁹⁷.

Indeed, the lack of direct effects on preexisting property rights, and on water rights especially, shared by the three case studies, are considered an attempt to avoid "issues of competition between rivers and people" and ensure broad community acceptance of rivers' legal personhood²⁹⁸. The importance of water for river legal persons, however, further suggests where the conferral of the right to water is not feasible, the adoption of clauses to balance the said omission and the following lack of the necessary guardians' consent for water uses. As mentioned, the Whanganui Act expressly states that it does not create or affect any right to water, with the consequence that the river has no rights to its waters²⁹⁹ and that the Guardians' consent is not required for water uses³⁰⁰. The said limitations, nevertheless, are balanced by several fundamental provisions. First, the Iwi have reserved the possibility of entering into further treaty negotiations relating to water³⁰¹. This reserve could probably allow the conferral to the river of the right to its waters in future if deemed necessary. In addition, while the Guardians' consent for water uses is not required, the Whanganui Act expressly provides that under the Resource Management Act (hereinafter "RMA")³⁰² a consent authority may determine "that Te Pou Tupa is an affected person for the purposes of applications for resource consent relating to water"³⁰³. It further specifies that if the "consent authority determines that Te Pou Tupua is an affected person in relation to a resource consent application relating to the Whanganui River or activities within the Whanganui River catchment that affect the river, the Te Pou Tupua written consent to the application is necessary"³⁰⁴. Moreover, as mentioned, under Part. 9 of the RMA, the Te Awa Tupua may apply for a water conservation order to protect its flows although, similarly to the abovementioned provisions of the Whanganui Act, the conservation order does not impact on existing permits as it may only impose "restrictions"

²⁹⁷ Ibid., underlines how such provision "may reduce the immediate effectiveness of the legislation" but it is also "a key factor in fostering acceptance by the community".

²⁹⁸ Erin O'Donnel (2020), *Legal Rights for Rivers*, 195 which underlines however, that such "strategies of avoidance simply shift the potential conflict in future".

²⁹⁹ Whanganui Act, (part. 2.16). Erin O'Donnel (2021) *Griffith Law Review*, 10; Erin O'Donnel (2020), *Legal Rights for Rivers*, 178.

³⁰⁰ Whanganui Act, (part. 2.46).

³⁰¹ Erin O'Donnell (2021) Griffith Law Review, 10.

³⁰² The Resource Management Act (1991) is the legal framework regulating water resource management in Aotearoa New Zealand.

³⁰³ Whanganui Act, (part. 2.46).

³⁰⁴ Whanganui Act, (part 2.63 (a) and (b).

on a regional council issuing new water and discharge permits"³⁰⁵. The RMA, however, explicitly enables to review the conditions of a resource consent by a consent authority to address adverse effects that might arise during the exercise of the consent among which, adverse impacts on the environment are expressly considered (art. 128.1 (a) (i)). It is therefore believed that in case of adverse impacts on the Whanganui's health and well-being a consent authority may well review the conditions of a resource consent negatively affecting the river. Indeed generally, since water resources are in the ownership of States, water licenses and permits can be modified in the public interest.

The provision of conditions balancing clauses that limit the law's effect both on preexisting and new water rights is therefore also suggested. Such clauses allow avoiding competition issues with other users while ensuring the river's effective protection.

4.3. The UN and civil society initiatives promoting RoN and the outcome of COP 15

The UNGA recognized International Mother Earth Day in 2009³⁰⁶ and launched, the same year, the Harmony with Nature Programme (hereinafter "HwN"), promoting the idea that "humanity can and should live in harmony with Nature"³⁰⁷. In 2011, HwN started creating interactive dialogues between academics, lawyers, and Indigenous peoples, reporting annually on the outcomes³⁰⁸. Through this cycle, HwN has advanced the Earth jurisprudence legal philosophy, which "recognizing that human wellbeing is dependent on the wellbeing of ecosystems which provide the conditions for life places the wellbeing of all members of the biotic community (including humans) ahead of human self-interest"³⁰⁹. With the emergence of the RoN movement, HwN recognized that "to achieve the greatest number of Sustainable Development Goals and comply with the 2030 Agenda for Sustainable Development, it is important to focus efforts to promote, respect, protect and guarantee the rights of Nature" ³¹⁰ and started focusing

³⁰⁹ Craig M. Kauffman, Pamela L. Martin (2021) The politics of rights of Nature, 6.

³⁰⁵ Ministry for the Environment, "Information sheet: Water Conservation Orders" Aotearoa New Zealand, available at: <u>https://www.epa.govt.nz/assets/Uploads/Documents/RMA-Proposals/Guidance/8f2f439a69/MFE-Infosheet-Water-Conservation-Orders.pdf</u>. For this reason, it has been observed that in case of the Te Awa Tupa application for a water conservation order: "it is difficult to see how it can do so without affecting other water users (...) whose rights are protected in other legislations" Erin O'Donnel, Elizabeth Macpherson (2018) *Australasian Journal of Water Resources*, 12.

³⁰⁶ UNGA, *Resolution adopted by the General Assembly at its 63rd session.*, 22 April 2009, A/RES/63/278.

³⁰⁷ UNG, *Resolution adopted by the General Assembly at its 64th session.*, 21 December 2009, A/RES/64/196. ³⁰⁸ Jeremy Schmidt, (2022) "Of Kin and System: Rights of Nature and the UN Search for Earth Jurisprudence" *Transactions of the Institute of British Geographers*, 1.

³¹⁰ UNGA (2017) Harmony with Nature, report of the U.N.Secretary-General, A/72/175, 5.

on the legal recognition of natural entities and reporting on cases of conferral of legal personality to rivers³¹¹.

While acknowledging the "widening of the categories of natural entities with recognized rights, from ecosystems to plants and non-human animals"³¹², the 2022 report underscores the critical role of aquatic ecosystems and rivers, in particular, in the RoN movement.³¹³ The report underlines moreover how most cases of conferral of legal rights to rivers are founded on the interdependence of human rights and rights of Nature and further acknowledges how such recognition "supports the commitments made by Member States in the 2030 Agenda regarding the human right to safe drinking water and sanitation and the implementation of target 6.6 of the Sustainable Development Goals on clean water and sanitation, which aims to protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes"³¹⁴. Finally, the report highlights the launch by civil society organizations of two initiatives to complement the UDHR and protect water bodies: the Universal Declaration of River Rights and the Universal Declaration of Ocean Rights ³¹⁵.

The Universal Declaration of River Rights (hereinafter "Declaration")³¹⁶ was drafted in 2020 by Earth Law Center (hereinafter "ELC") with the help of worldwide experts. As mentioned in the previous paragraph, in the analyzed case studies, rivers have been conferred rights and powers "necessary for the functioning of a legal person in a human society", but not of those needed by a river legal person³¹⁷. The Declaration, therefore, seeks to overcome such shortfall envisioning a common set of rights, fundamental to all rivers, developed on successful cases of conferral of legal personality and on ecological principles of river's health. The Declaration starts by acknowledging that rivers are "essential to all life" and underscores their vital role in ensuring biodiversity and hydrological cycles"³¹⁸. It emphasizes, moreover, how pollution, diversion, damming and extraction have caused alarming declines in biodiversity and ecosystems, exacerbating climate change, and are causing alarming adverse effects on human health. The Declaration further recognizes the inadequacy of international and national laws in protecting rivers and the consequent failure to ensure sufficient supplies of clean water for future generations. It further recognizes "the absolute dependence of people on rivers and

³¹¹ Ibid, 6-7 cites the Atrato and Whanganui Cases. The Turag Case is cited in the 2019 report: UNGA (2019) Harmony with Nature, report of the U.N. Secretary-General, A/74/236, 4.

³¹² An updated list of RoN worldwide is available at: http://harmonywithNatureun.org/rightsOfNature/.

³¹³ UNGA (2022) Harmony with Nature, report of the U.N.Secretary-General, A/77/244, 9.

³¹⁴ Ibid., 12.

³¹⁵Ibid., 9.

³¹⁶ Available at: https://www.rightsofrivers.org/#declaration.

³¹⁷ Erin O'Donnel (2021) Griffith Law Review, 16.

³¹⁸ Declaration, preamble, 1.

water-based systems" because of rivers critical role in providing "clean and bountiful water for drinking and sanitation, fertile soil, food sources for billions of people, recreation, cultural uses, and nourishment of the human spirit, as they have done since the beginning of human civilization"³¹⁹. It underscores, moreover, that rivers' degradation and exploitation "is not only an environmental issue, but also a rights concern for indigenous peoples and other local communities," which "threatens the very existence and way of life of those who rely upon river systems for their well-being"³²⁰. The Declaration then recognizes that all rivers are living entities³²¹ and establishes that all rivers possess at least the following rights³²²: the right to flow, the right to perform essential functions within its ecosystem, the right to be free from pollution, the right to feed and be fed by sustainable aquifers, the right to native biodiversity and the right to regeneration and restoration. As seen in par. 4.2., the conferral of the right to flow is essential to ensure rivers' ownership of their waters. Indeed, recognizing that "Flows must, at minimum, follow natural flow patterns and be sufficient in quantity to maintain the ecosystem health of the entire river system" the Declaration specifies that "rivers – not people – own the water that flows within them"³²³. It then requires the appointment of one or more legal guardians to ensure the implementation and enforcement of the abovementioned rights and specifies that such guardians must act "solely on behalf of the river's rights" and "may represent the river in any legal proceeding". The Declaration further prescribes for rivers on which Indigenous communities depend, that at least a river guardian is an Indigenous representative and urges "governments to ensure prompt and adequate financial mechanisms to realize these fundamental river rights, including the right of all rivers to restoration"³²⁴.

Finally, the ELC has formulated a set of questions and answers relating to the Declaration (hereinafter "Q&A")³²⁵. The Q&A specifies that the Declaration supports the rights of Indigenous peoples, acknowledging that the violation of their rights often occurs in situations of co-violations with rights of Nature which negatively impacts their health and food systems. It further underlines that the Declaration "emphasizes the rights of indigenous peoples and honors their role in protecting rivers, and also protects aquatic species (e.g. salmon) that are sacred to many cultures". With regards to the human right to water, the Q&A recognizes

³¹⁹ Ibid.

³²⁰ Ibid., 2.

³²¹ Ibid., 3.

³²² Bettina Wilk, Dries L. T. Hegger, Carel Dieperink, Rakhyun E. Kim and Peter P. J. Driessen (2019) *Water International*, 3 have underlined how such rights fulfill rivers' "needs to maintain their health and integrity". ³²³ Declaration, 3, footnote 10.

³²⁴ Declaration, preamble, 3.

³²⁵https://static1.squarespace.com/static/55914fd1e4b01fb0b851a814/t/59de7e6d914e6bbbe2bda609/150775358 1572/Universal+Declaration+of+River+Rights+-+Q%26A_ELC.pdf

that the rights of rivers do not contrast with the said right, emphasizing that most human water needs "drinking water, irrigation, manufacturing, hiking, fishing, recreation" rely on healthy water systems.

As mentioned, even more recently, the Framework agreement on biodiversity³²⁶ adopted at COP 15³²⁷ expressly promotes RoN, which figure both among the targets and as means for the Framework's successful implementation. Recognizing that biodiversity loss poses a threat to Nature's and humans' well-being, the Framework sets 23 conservation targets "to catalyze, enable and galvanize urgent and transformative action by Governments, subnational and local governments, and with the involvement of all of society to halt and reverse biodiversity loss". Among the most relevant targets, the Framework calls for urgent action to: ensure the restoration of 30% of all degraded terrestrial, inland water, and coastal and marine areas, by the year 2030 (target 2); reduce pollution by 2030, by halving, at least, the use of nutrients and pesticides (target 7); ensure the sustainable use of biodiversity enabling ecosystems to provide essential services for humanity, such as food and clean water (targets 9, 10, 11), mobilize by 2030 at least \$200 billion each year to implement national biodiversity strategies and action plans. Among the biodiversity strategies, the Framework expressly considers "Mother Earth centric actions", defined as "ecocentric and rights-based approaches enabling the implementation of actions towards harmonic and complementary relationships between peoples and Nature, promoting the continuity of all living beings and their communities" (target 19). The Framework further provides guidance for its implementation. First it explicitly recognizes "the important roles and contributions of indigenous peoples and local communities as custodians of biodiversity". It then acknowledges that "Nature embodies different concepts for different people, including biodiversity, ecosystems, Mother Earth, and systems of life" and explicitly recognizes "these diverse value systems and concepts, including, for those countries that recognize them, rights of Nature and rights of Mother Earth, as being an integral part of its successful implementation" (Section C(9). It, therefore, explicitly recognizes the importance of the RoN movement to halt biodiversity loss and ensure Nature's and humans' wellbeing.

³²⁶ Kunming-Montreal Global Biodiversity Framework CBD/COP/15/L.25

³²⁷ The United Nations Fifteenth Conference of the Parties to the Convention on Biological Diversity held in Montreal, Canada from 7 to 20 December 2022.

Conclusions

Rivers are the arteries of our planet. They play a vital role in tackling climate change, biodiversity loss and in supplying water of appropriate quality and quantity, which is essential for drinking, sanitation, and food production. Among the freshwater ecosystems, rivers are the ones that majorly contribute to food security, supporting one-third of the food globally produced. Indeed, they provide water for drinking and irrigation, fertile land for agricultural production, and further food supplies sustaining fisheries. Rivers are, therefore, key in ensuring the rights to water and food of both riverine communities that directly depend on them and of the whole population through vital supplies of natural fresh water and critical contributions to food production.

Access to water in sufficient quantity and quality is indeed a precondition for the realization of both the right to water and the right to food. As acknowledged by GC 15, water is essential to ensuring an adequate standard of living, being one the most fundamental conditions for survival. Vital to life, the right to water and the right to food both derive from the right to an adequate standard of living. Their common foundation demonstrates how deeply they are connected and expected to mutually support the realization of one another in contributing to an adequate standard of living. Indeed, after personal and domestic uses, GC 15 prioritizes access to water to prevent starvation, for subsistence farming and to secure Indigenous people's livelihoods. It expressly considers the right to water as a prerequisite of the right to adequate food requiring States to ensure sustainable access to water for agricultural production for the realization of the right to food. Due to the dependence of the availability, accessibility and quality of water on healthy functioning freshwater ecosystems, GC 15 further requires States to fulfil the right to water through the sustainable management of freshwater ecosystems to ensure sufficient and safe water for present and future generations. Specularly, GC 12 requires States to fulfil the right to food by strengthening people's access and utilization of natural resources, further requiring their sustainable management to ensure the availability of sufficient food for present and future generations.

Sustainability is, therefore, central in the management of natural resources as it ensures, for present and future generations, the services on which the rights to water and food depend. Nevertheless, freshwater ecosystems are declining to such an extent that the Special Rapporteur on the right to water has underscored that the restoration of freshwater ecosystems is paramount to ensure the realization of the said right. Acknowledged that the right to water and food are interrelated and depend on healthy freshwater ecosystems, the Special Rapporteur further calls on States to sustainably manage freshwater ecosystems also to ensure the right to food of riverine communities, recognizing how the degradation of rivers and other freshwater ecosystems also endangers such right. Rivers are indeed suffering from an alarming overexploitation which is jeopardizing their critical contributions to sustaining biodiversity, combating climate change, supporting agricultural systems and fisheries, and ensuring the physical availability and quality of water. Without a transformative change, States will not be able to ensure the fundamental human rights of present and future generations, which as the right to food, intensely depends on healthy freshwater ecosystems. As mentioned, the costs of Nature's loss are extraordinarily high and determine adverse effects on food prices, undermining the economic accessibility of sufficient amounts of food. Indeed, Nature's contributions to people are mainly irreplaceable or replaceable against extremely high costs, which do not cover all of Nature's benefits. This is especially true for the services provided by freshwater ecosystems and rivers in particular. While safe, high-quality water can be supplied through expensive water treatment facilities, such provision fails to ensure the multiple additional synergistic benefits enabled by rivers. Indeed, rivers provide vital contributions to food production, which, as seen, are not limited to the supply of natural freshwater. They are key in tackling biodiversity loss and climate change and have nourished humankind since the beginning of civilization with their cultural, recreational, and spiritual dimension. To ensure the enjoyment of the multiple benefits that rivers provide to us and our planet, innovative measures that effectively protect freshwater ecosystems and ensure their sustainable management are paramount.

The conferral of legal personality to rivers has the necessary potential to enable the transformative change needed to secure the availability and accessibility of water and food for present and future generations. As the case studies demonstrate, it is an innovative legal mechanism created to protect Nature and ensure its critical contributions to human beings. Indeed, it enables overcoming environmental laws' constraints, addresses the interdependence of humans and Nature advancing the realization of fundamental human rights and enables, moreover, the democratic, sustainable management of freshwater resources. It determines a paradigm shift of rivers in law from a rightless, voiceless legal object to a legal subject entitled to fundamental rights. Such a shift creates duties of care on both the appointed guardians and society at large, which should play a strong deterrent effect on potential polluters and encroachers, and enables the river's participation in decision-making processes affecting it. It, therefore, allows a stronger *ex ante* and *ex post* protection of rivers overcoming the many constraints of environmental laws, which also hinder the effectiveness of environmental

litigation. Built on the dependence of the human rights to life, health, food and water on ecosystem's health, the personhood model further enables to provide protection in situations of "co-violation". It is indeed designed to provide joint protection of the environment and of human rights, which as the right to water and the right to food, deeply depend on Nature's contributions. It allows States, moreover, to give the necessary special consideration to vulnerable groups, which are the ones whose fundamental rights are majorly impacted by environmental degradation, enhancing their access to water which is critical for also ensuring their right to food. It enables a collaborative approach to the river's governance, ensuring the effective empowerment and engagement of all interested stakeholders. Indeed, such an approach is essential for the sustainable management of the river, as it ensures the quality and legitimacy of the decisions and is key to finding consensus-based solutions to present and future challenges, especially with the agricultural sector.

In order to achieve the abovementioned positive outcomes, however, the new legal rights must be given sufficient force and effect. The legislative conferral of legal personality to rivers is therefore preferable to its judicial recognition as the establishment of the novel governance arrangements risks overcoming the limits of jurisdiction and Courts, moreover, lack the power to allocate funds. Funding is indeed critical for the personhood model's success, as also recognized by the Framework agreement on biodiversity, which, to this end, has secured considerable funds for the implementation of biodiversity strategies and action plans, among which it explicitly includes RoN initiatives. The said economic commitment of the State parties to the Framework is, therefore, a significant opportunity for introducing and funding RoN initiatives. The analysis of the case studies further highlights the importance of the specific definition of the guardians' legal capabilities along with the precise delimitation of their liability. Specificity is paramount also in the definition of the river's rights and of the related governance arrangements. A collaborative approach to the river's governance, for the abovementioned reasons, is also critical for the personhood model's success as to avoid competition issues, the judicial enforcement of the rivers' rights should be considered a last resort. Where inclusive and democratic governance of the river is not feasible, it is paramount for the guardians to ensure that the implementation of the rivers' rights does not infringe the fundamental rights of the local communities. It follows that where the rivers' conditions are too critical to allow the mutual protection of the river and of the communities depending on it, a social impact assessment, followed by the adoption of the necessary social protection measures, is crucial to ensure community support. Finally, the importance of water for river

legal persons suggests the conferral to rivers of the right to their waters. Where such recognition is not viable, the provision of clauses balancing the lack of the personhood model's effect both on preexisting and new water rights is paramount to ensure the river's effective protection and avoid competition issues.

Aside from the shortfalls and general recommendations, the legal personhood model enables to recognize, value and protect the symbiotic relationship between humans and Nature through an equitable balance that promotes our prosperous coexistence. It is an innovative legal mechanism with a powerful symbolic value able to transform our relationship with Nature from one of separation and dominion to one of unity and harmony, able to remind us what the Whanganui Iwi never forgot: we are the river and the river is us.

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