THE (HUMAN) RIGHTS OF NATURE:

A COMPARATIVE STUDY OF EMERGING LEGAL RIGHTS FOR RIVERS AND LAKES IN THE UNITED STATES OF AMERICA AND MEXICO

ELIZABETH MACPHERSON*

ABSTRACT

An international consensus of scientific experts is now demanding "immediate action" in response to the environmental, climate, and biodiversity crises. But are our legal and regulatory frameworks equipped to respond to the rapid pace of environmental degradation, biodiversity loss and climate change? What incidence is there, transnationally, of laws that seek to protect the Earth from the humans that inhabit it? In the past few decades, there is a growing social, legal, and political movement towards more ecocentric regulation of the planet, where new laws and institutions seek to protect natural resources for their own intrinsic value. In this paper, I consider recent efforts to protect the rights of rivers in the U.S. and Mexico, which are novel and emerging attempts to discover new pathways for enhanced protection of vulnerable waterways. These attempts are being pragmatically driven from the bottom up to the highest levels of the legislature or judiciary as local communities (and sometimes Indigenous Peoples) become increasingly frustrated with apathetic and complacent governmental responses to environmental challenges, using whatever legal tools and processes are available to them. However, rather than an Earth-centred revolution, efforts to protect the rights of nature are distinctly "human"; as communities appeal to human rights laws, and their enhanced constitutional status, to upset the status quo. There are important lessons to be learned from these experiences in other countries in terms of the ability to entrench transformative environmental protections via constitutional hierarchies and the potential for the rights and interests of humans to be both an enabler of, as well as a threat to, nature's rights.

INTRODUCTION

The future of the Earth's natural ecosystems, including its rivers and lakes, is uncertain. In mid-2019, the United Nations released the Report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, which classifies one million species as currently threatened with extinction.¹ At the same time, estimates about the rate of climate change continue to creep up, with environmental consequences and catastrophes forecast for the coming decades.² Climate change is expected to cause more frequent and more violent storms as well as longer and drier droughts. It will increase the risk of river salination, sedimentation and evaporation, while increasing demand for water for irrigation and urban use.³ These trends will have unprecedented impacts on our waterways, lakes and rivers, on which all systems of life, including humans, depend.

In this context, an international consensus of scientific experts is now demanding immediate action in response to the environmental, climate and biodiversity crises.⁴ But are our legal and regulatory frameworks equipped to respond to the rapid pace of environmental degradation, biodiversity loss and climate change? What incidence is there of laws that seek to protect the Earth from the humans that inhabit it? In the anthropocentric context of permissive and facilitative environmental management, where courts and legislatures are often used to legitimize ecologically destructive acts, is law in fact "complicit" in the Earth's destruction? Or is law simply too slow, too path dependent, or too weak to make a difference?

The regulation of land and resources is typically premised on the idea that the Earth's resources, including rivers, are disposable for the

Copyright © 2021 Elizabeth Macpherson.

^{*} Elizabeth Jane Macpherson, Ph.D., L.L.B., B.C.A., is an associate professor at the University of Canterbury School of Law. Many thanks to the New Zealand Law Foundation for the funding they provided for research assistance for this article by Julia Torres and Claire Thompson. I would also like to thank Rebecca Nelson who provided very helpful comments on a draft. All errors are my own. 1. Intergovernmental Sci.-Pol'y Platform on Biodiversity & Ecosystems Servs., Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services 4 (2019).

^{2.} *Id*. at 5.

^{3.} United Nations Educ., Sci. & Cultural Org., The United Nations World Water Development Report 2019: Leaving No One Behind 12–17 (2019); Intergovernmental Panel on Climate Change, Special Report: Global Warming of 1.5°C Summary for Policy Makers 8–9 (2019).

^{4.} Intergovernmental Sci.-Pol'y Platform on Biodiversity & Ecosystems Servs., supra note 1, at 8.

benefit of humans.⁵ However, in past decades there has been a growing social, legal, and political movement towards more ecocentric regulation of the planet, where laws and policies seek to protect natural resources for their own intrinsic value.⁶ Even the international community, which is dominated by the rubric of "sustainable development," is paying attention to the needs of Mother Earth, and there are a number of international movements seeking harmony between humanity and nature and pressing the need for declarations, treaties and agreements for nature's rights.⁷

At a domestic level, much attention has been given to progressive legislation and case law recognizing natural resources as legal persons and subjects, especially in Aotearoa, New Zealand, where the Whanganui River was recognized as a legal person as part of a reparative historical treaty settlement⁸ with M ori peoples in 2017.⁹ However, the tendency is spreading to other jurisdictions, including Colombia, India, Brazil, Argentina, Bangladesh, Sweden and Australia, where movements for the recognition of rivers as legal persons or subjects are well underway, sometimes driven by

^{5.} See generally RESEARCH HANDBOOK ON INTERNATIONAL LAW AND NATURAL RESOURCES x (Elisa Morgera and Kati Kulovesi eds., 2016) (describing the book's approach to natural resource law); DAVID R. BOYD, THE RIGHTS OF NATURE: A LEGAL REVOLUTION THAT COULD SAVE THE WORLD (2017); Bebhinn Donnelly & Patrick Bishop, Natural Law and Ecocentrism, 19 J. ENV'T L. 89, 90 (2006) ("anthropocentrism is the dominant ethic in current environmental law and policy"); Catherine J. Iorns Magallanes, M ori Cultural Rights in Aotearoa New Zealand: Protecting the Cosmology That Protects the Environment, 21 WIDENER L. REV. 273, 277 (2015); Elizabeth Macpherson & Erin O'Donnell, ¿Necesitan derechos los ríos? Comparando Estructuras Legales Para la Regulación de los Ríos en Nueva Zelanda, Australia y Chile, 25 REVISTA DE DERECHO ADMINISTRATIVO ECONÓMICO 95, 96 (2017).

^{6.} See generally James D. K. Morris & Jacinta Ruru, Giving Voice to Rivers: Legal Personality as a Vehicle for Recognising Indigenous Peoples' Relationships to Water Commentary, 14 AUSTRALIAN INDIGENOUS L. REV. 49, 50 (2010); Meg Good, The River as a Legal Person: Evaluating Nature Rights-Based Approaches to Environmental Protection in Australia, NAT'L ENV'T L. REV. 34, 34 (2013); Michelle Maloney, Building an Alternative Jurisprudence for the Earth: the International Rights of Nature Tribunal, 41 VT. L. REV. 129, 132 (2016); Vito De Lucia, Towards an Ecological Philosophy of Law: A Comparative Discussion., 4 J. HUM. RTS. & ENV'T 167, 183 (2013).

^{7.} PROGRAMME, http://www.harmonywithnatureun.org (last visited May 28, 2019) (discussing the United Nations Harmony with Nature Programme and the Ninth Interactive Dialogue of the General Assembly on Harmony with Nature); WORLD PEOPLE'S CONFERENCE ON CLIMATE CHANGE AND THE RIGHTS OF MOTHER EARTH, https://www.who.int/globalchange/news/2010/mother_earth_rights_22042010/en/ (last visited Apr. 19, 2020).

^{8.} Treaty settlements refer to the resolution of historical grievances concerning breaches of the Treaty of Waitangi/te Tiriti O Waitangi. As opposed to contemporary grievances, historical grievances date from 1840 to 1992, when te Tiriti – the partnership compact between M ori and British colonists, was signed by *rangatira* (chiefs) and the Queen, as negotiated by her agents.

^{9.} Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (N.Z.).

Indigenous Peoples.¹⁰ As I will discuss in this article, both the U.S. and Mexico are also sites for this emerging contestation and jurisprudence.

The first municipal "Bills of Rights" recognizing the rights of nature and inherent interests of waterways have, perhaps surprisingly, emerged from the U.S., a country with a questionable track record in terms of environmental protection and climate adaptation. The rights for nature debate in the U.S. is highly politicized and hard-fought, and attempts by non-governmental organizations (NGOs) to secure personhood for both the Colorado River and Lake Erie have been met with swift constitutional challenge and condemnation by the courts. Across the border, in Mexico, there have been efforts to recognize the rights of nature in the human rights protections of state-based constitutions, together with attempts by NGOs to secure the recognition of rivers as legal persons.

These developments are "fluid" in the sense that they arise from pragmatic and grassroots efforts for protection of waterways from the threats posed by humans and their resource use. However, given the highly contested nature of water resources, with competing claims from industry, urbanization and agriculture as well as social and environmental interests, these developments are vulnerable to opposition and reversal. In both contexts, there is a push for a "constitutionalization" of the rights of nature, where nature's rights may be secured as part of core human rights protections. These are invariably attempts to "trump" existing environmental and natural resource development laws in the pursuit of more protective responses than dominant legal frameworks by invoking a higher constitutional status. However, the backlash to rights of nature is also playing out at the constitutional level, as opponents invoke their own constitutional rights in resistance.

In this article, I interrogate the most recent attempts to protect the rights of rivers in the U.S. and Mexico. I argue that these

^{10.} RIGHTS OF NATURE LAW AND POLICY, http://www.harmonywithnatureun.org/rightsOfNature/(last visited June 5, 2019).

^{11.} See generally Toni Collins & Shea Esterling, Fluid Personality: Indigenous Rights and the "Te Awa Tupua (Whanganui River Claims Settlement) Act 2017" in Aotearoa New Zealand, 20 Melbourne J. of Int'l Law 197 (2019).

^{12.} See generally Erin O'Donnell, Competition or Collaboration? Using Legal Persons to Manage Water for the Environment in Australia and the United States, 34 ENV'T AND PLANNING L.J. 503 (2017).

^{13.} See generally Klaus Bosselmann, Global Environmental Constitutionalism: Mapping the Terrain, 21 WIDENER L. REV. 171 (2015).

^{14.} DUNCAN IVISON, RIGHTS 27 (2008).

developments, despite their contextual variance, are novel and emerging attempts to discover pathways for enhanced protection of vulnerable waterways in the face of increasing environmental degradation, biodiversity loss and climate change. These attempts are being pragmatically driven from the bottom up to the highest levels of the legislature or judiciary, as local communities and Indigenous Peoples become increasingly frustrated with apathetic and complacent governmental responses to environmental challenges, using whatever legal tools and processes are available to them. They are, perhaps ironically, distinctly "human" efforts, as communities appeal to human rights laws, and their enhanced constitutional status, to upset the status quo.

THE (HUMAN) RIGHTS OF NATURE

Western legal systems have traditionally treated humans as both the owners and beneficiaries of nature and allowed humans a position of dominance and control over nature, while natural resources are conceived of as existing in order to fulfil human needs.¹⁵ This anthropocentric view of human dominance over nature has been assumed in the design of both domestic and international legal systems and doctrine, including for the regulation of the environment and natural resources.¹⁶ Unlimited human exploitation of natural resources has been accepted as a precondition for economic growth¹⁷ and assumed in developmental policies of underdeveloped countries, including those in Latin America.¹⁸

However, the idea that nature might have its own rights to exist and thrive has emerged in Western legal thought as a counter-theory to the idea of unlimited exploitation of nature, in order to advance

^{15.} BOYD, *supra* note 5, at 102–105; Alberto Acosta, *Hacia la Declaración Universal de los Derechos de la Naturaleza*, 54 REVISTA AFESE 11, 12 (2017); Macpherson & O'Donnell, *supra* note 5, at 96; Elizabeth Macpherson & Felipe Clavijo Ospina, *The Pluralism of River Rights in Aotearoa New Zealand and Colombia*, 25 J. OF WATER L. 283, 285 (2018); ERIN O'DONNELL, LEGAL RIGHTS FOR RIVERS: COMPETITION, COLLABORATION AND WATER GOVERNANCE 92 (2018); ELIZABETH MACPHERSON, INDIGENOUS RIGHTS TO WATER IN LAW AND REGULATION: LESSONS FROM COMPARATIVE EXPERIENCE 22 (2019) (contrasting systems of water rights). This is not necessarily the case for non-Western legal systems, including Indigenous systems which may position humans as a component of nature rather than its dominator. See Iorns Magallanes, *supra* note 5, at 281–82.

^{16.} RESEARCH HANDBOOK ON INTERNATIONAL LAW AND NATURAL RESOURCES, *supra* note 5, at 517; Donnelly, *supra* note 5, at 90; Iorns Magallanes, *supra* note 5, at 275.

^{17.} See generally BOYD, supra note 5, at 115.

^{18.} See generally Acosta, supra note 15.

ecological protections.¹⁹ This is sometimes called an <u>"ecocentric"</u> theory of natural resource regulation, and it maintains that nature has intrinsic value, in contrast to the utilitarian or proprietary conceptualization of nature typical in hegemonic legal frameworks.²⁰ According to an ecocentric view, humans and non-humans belong to the same moral order as inhabitants of the Earth,²¹ and nature has intrinsic value which should be protected by law.²² As will be discussed in this article, this alternative view is apparent in environmental activism and reform in parts of the Americas, encouraging legal frameworks to reconceptualize relationships between humans and nature in a more harmonious or symbiotic way.²³

In Western legal culture, the case for recognizing the rights of nature is often credited to the work of Christopher Stone, particularly his 1972 book, *Should Trees Have Standing?*, ²⁴ although the origins of the movement go back much further. ²⁵ Stone argued that the rights of nature should be recognized for nature's own protection, ²⁶ recognizing the intrinsic value of nature beyond an enabler of human ends. In the same year Stone published his seminal piece on the rights of nature, Justice William O. Douglas of the United States Supreme Court called for legal personhood for nature in his dissenting opinion in the case

^{19.} For a general discussion on the origins of the rights of nature in Western thought see Christopher Stone, Should Trees have Standing? Law, Morality, and the Environment (2010); Boyd, *supra* note 5; Acosta, *supra* note 15; Macpherson & O'Donnell, *supra* note 5; Macpherson & Ospina, *supra* note 15; Cristy Clark et al., *Can You Hear the Rivers Sing? Legal Personhood, Ontology, and the Nitty-Gritty of Governance*, 45 Ecology L. Q. 787 (2019).

^{20.} See generally Macpherson & O'Donnell, supra note 5; Guillaume Chapron, Yaffa Epstein & José Vicente López-Bao, A rights Revolution for Nature, 363 SCI. 1392, 1392 (2019).

^{21.} See generally Thomas Berry, The Great Work: Our Way into the future (1999); Vito De Lucia, *Towards an Ecological Philosophy of Law: a Comparative Discussion*, 4 J. OF Hum. Rts. & the Env't 167, 175 (2013).

^{22.} MICHELLE MALONEY & PETER BURDON, WILD LAW - IN PRACTICE 75–94 (2014); Maloney, *supra* note 6, at 133; Sophia Imran, Khorshed Alam & Narelle Beaumont, *Reinterpreting the Definition of Sustainable Development for a More Ecocentric Reorientation*, 22 SUSTAINABLE DEV. 134, 137 (2014).

^{23.} BOYD, *supra* note 5, at 109–130; *see generally* Acosta, *supra* note 15, at 11; Macpherson & O'Donnell, *supra* note 5; Macpherson & Ospina, *supra* note 15; ERIN O'DONNELL, *supra* note 15; MACPHERSON, *supra* note 15.

^{24.} Christopher Stone, Should Trees Have Standing? Towards Legal Rights for Natural Objects, 45 S. CAL. L. REV. 450 (1972).

^{25.} See Max Maureira Pacheco, La Tripartición Romana del Derecho y su Influencia en el Pensamiento Jurídico de la Época, 28 REVISTA DE ESTUDIOS HISTÓRICO-JURÍDICOS 269 (2006) for an explanation of the "ius naturalis" category of law developed by the Roman jurists Gayo, Justinian and Ulpiano for example.

^{26.} STONE, *supra* note 19, at xi. In his introduction, Stone describes arriving at the idea during his search for evolving definitions of property.

Sierra Club v. Morton.²⁷ Stone's thesis re-emerged in 2006, when the Tamaqua Borough in Pennsylvania passed a bylaw recognizing the rights of nature,²⁸ opening the floodgates for various local municipalities in the U.S. to follow suit.²⁹

The American developments did not go unnoticed in Latin America, and the first national protection of the rights of nature was enacted in the Constitución de la República de Ecuador (Constitution of the Republic of Ecuador), which drew on Andean Indigenous Peoples' traditional worldviews and relationships with nature as sawak kawsay or buen vivir (living well). The Ecuadorian approach was replicated in Bolivia, which declared the rights of Mother Earth as a and overarching constitutional objective in the transversal Constitución Política del Estado Plurinacional de Bolivia (Political Constitution of the Pluri-national State of Bolivia),³⁰ followed by the Ley de los Derechos de la Madre Tierra (Law of the Rights of Mother Earth) and the Ley Marco de la Madre Tierra y Desarrollo Integral para el Buen Vivir (Framework Law of Mother Earth and the Integral Development for Living Well). By recognizing and providing legal force to the Indigenous concept of living well, the new Ecuadorian and Bolivian laws sought to reflect the laws of Indigenous Andean peoples as an alternative to neoliberal economic models and Western scientific discourses, which assumed the unlimited exploitation of Latin American resources.³¹

The rights of nature movement gained further momentum in 2017, with the declaration of legal personhood for the Whanganui River in

^{27.} Sierra Club v. Morton, 405 U.S. 727, 743 (1972) (Douglas, J., dissenting) ("The river, for example, is the living symbol of all the life it sustains or nourishes—fish, aquatic insects, water ouzels, otter, fisher, deer, elk, bear, and all other animals, including man, who are dependent on it or who enjoy it for its sight, its sound, or its life. The river as plaintiff speaks for the ecological unit of life that is part of it.").

^{28.} Tamaqua, Pa., Code § 260-61(F) (2020).

^{29.} BOYD, supra note 5, at 109-130.

^{30.} For a general discussion of these approaches to the rights of nature see Franco Alirio Ceballos Rosero, *Aproximaciones a los Derechos de la Naturaleza y el Buen Vivir Desde los Pueblos Originarios en Colombia: Retos Frente a los Desafíos Ambientales del siglo XXI,* 29 BOLETIN DE ANTROPOLOGIA 159 (2014); Victoria Haidar & María Valeria Berros, *Hacia un Abordaje Multidimensional y Multiescalar de la Cuestión Ecológica: La Perspectiva del Buen Vivir*, 108 REVISTA CRÍTICA DE CIÊNCIAS SOCIAIS 111 (2015); Gregor Barié Cletus, *Nuevas Narrativas Constitucionales en Bolivia y Ecuador: el Buen Vivir y los Derechos de la Naturaleza*, 59 LATINOAMÉRICA. REVISTA DE ESTUDIOS LATINOAMERICANOS 9 (2014).

^{31.} For a general discussion on this shift see Acosta, *supra* note 15; Rosero, *supra* note 30; Cletus, *supra* note 30; DAVID CORTEZ, LA CONSTRUCCIÓN SOCIAL DEL "BUEN VIVIR" (SUMAK KAWSAY) EN ECUADOR 23 (2011).

Aotearoa New Zealand. 32 The Whanganui River was declared to be a legal person in the Te Awa Tupua (Whanganui River Claims Settlement) Act following two decades of Treaty settlement negotiations between the New Zealand Crown and M ori iwi (tribes) of the Whanganui.³³ The enabling legislation provides that *Te Awa* Tupua (the Whanganui River) is a legal person with "all the rights, powers, duties and liabilities of a legal person"³⁴ and establishes the office of Te Pou Tupua to act as the "human face" of the river, like a guardian, with one member being appointed by the *iwi* and one by the Crown.³⁵ The legislation also prescribes values for the river's management, called *Tupua Te Kawa*, giving content to the river's rights to guide decision-making.³⁶ These include recognition of the river as an interconnected and living whole and the direct link between the health of the river and the health of the people.³⁷ The legislation also provides for a number of collaborative advisory and strategic committees and plans to protect and enable the river's rights.³⁸

In 2016, a decision of the Constitutional Court in Colombia (released publicly in 2017) declared the Atrato River to be a legal subject, taking direct inspiration from the New Zealand developments.³⁹ The claim was lodged by *Centro de Estudios para la Justicia social "Tierra Digna,"* an environmental and Indigenous rights NGO, on behalf of a number of Indigenous, Afro-descendant and peasant communities affected by illegal mining in the Atrato.⁴⁰ The claimants applied to the Constitutional Court using the *Acción de Tutela*, a type of writ for the protection of constitutional rights peculiar to Latin American countries of the civil law tradition. They sought protection of their fundamental rights to life, health, water, food security, clean and healthy environment, culture and territory, which they claimed were being infringed by the actions and omissions of the State.⁴¹ In particular, the communities alleged that a lack of

^{32.} In 2014, Te Urewera National Park became a legal entity with "rights, powers, duties and liabilities of a person". Te Urewera Act 2014, s 11 (N.Z.).

^{33.} Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (N.Z.).

^{34.} *Id.* at s 14(1).

^{35.} Id. at s 20.

^{36.} Id. at s 13.

^{37.} Macpherson & O'Donnell, supra note 5, at 111.

^{38.} Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (N.Z.) at ss 27, 29, 35.

^{39.} Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (2016).

^{40.} Id.

^{41.} CONSTITUCIÓN POLÍTICA DE COLOMBIA [C.P.].

intervention by the State had enabled uncontrolled illegal mining in the Atrato region, which had, in turn, polluted the river.⁴²

The Court was satisfied that the State had violated all of the fundamental rights alleged by the claimants but went further in its judgment and recognized the Atrato River as an "entidad sujeto de derechos" (legal subject) with its own rights of protection, conservation, maintenance, and restoration.⁴³ Following a similar model adopted for the Whanganui River in Aotearoa, New Zealand, the Court ordered the appointment of guardians to speak for the river, comprising representatives from the Government and the claimant communities. The Court also ordered the establishment of an advisory group to support the guardians and a special interdisciplinary advisory body to inform the Government and draft a strategic plan to decontaminate the river. The Court's analysis emphasized the "biocultural" rights of the Indigenous and Afro-descendant communities, who saw the river as an interconnected living whole in a symbiotic relationship with human existence. 44 The decision also drew heavily on international human and Indigenous rights protections and referred to domestic comparisons from Ecuador, Bolivia and New Zealand.45

Subsequently, attempts to recognize the rights of nature, including via legal person and subject models, have proliferated. In 2017, the Indian High Court in the State of Uttarakhand granted legal personhood to the rivers Ganges and Yamuna, while the Gangotri and Yamunotri glaciers were considered as legal minors (although some of these judgments have been overturned). The Australian State of Victoria also passed the Yarra River Protection (Wilip-gin Birrarung murron) Act 2017 recognising the Yarra River as "one living and integrated natural entity," with reference to the river relationships of traditional owners, the Wurundjeri people. In the Argentinian State of Entre Ríos, animals were declared to be legal persons in *Luz Marina Diaz v. Empresa de Servicios Públicos Del Municipio de La Plata*, 48

^{42.} Corte Constitucional [C.C.] [Constitutional Court], noviembre 10, 2016, Sentencia T-622/16 (2016).

^{43.} Id.

^{44.} Macpherson & Ospina, supra note 15, at 291.

^{45.} Id.

^{46.} ERIN O'DONNELL, supra note 15, at 167.

^{47.} MACPHERSON, supra note 15, at 87.

^{48.} Corte Constitucional [C.C.] [Constitutional Court] Luz Marina Diaz y otros v. Empresa de Servicios Públicos del Municipio de La Plata – Huila, No. 2019-114 (2019) [herinafter La Plata Huila River Case].

followed by a broader recognition of the rights of nature by way of local ordinance in Santa Fe.⁴⁹ In Colombia alone, the Atrato case has been followed by numerous other decisions of various courts recognising the rights of the Amazon ecosystem,⁵⁰ Cauca River,⁵¹ La Plata River,⁵² spectacled bear,⁵³ and *Páramo de Pisba* (a high-altitude ecosystem).⁵⁴ More recently, the Colombian Department of Nariño issued an Executive Decree, currently pending legislative approval, which recognizes the rights of the "Priority Ecosystems of the Department" and legal subjects.⁵⁵ Further developments have occurred in Bangladesh, where the High Court recognized the legal rights of rivers,⁵⁶ and in the Philippines, with a "Rights of Nature Bill" proposed following a 2007 case seeking guardianship for marine mammals.⁵⁷ And the list goes on.

Rights-for-nature activists and those seeking the recognition of rivers as legal persons or subjects have employed different strategies and mechanisms around the world. Sometimes they employ legal models and sometimes political models, via court declarations or

^{49.} COMISIÓN DE GOBIERINO Y SEGURIDAD CIUDADANA, [Committee on Government and Citizen Security], Municipal Council of Santa Fé, Ordenanza [Ordinance] CO-0062-01489129-5 adj CO-0062-01486894-7 Article IV.

^{50.} Corte Suprema de Justicia [C.S.J.] [Supreme Court], cinco de abril de dos mil dieciocho, Andrea Lozano Barragán, Victoria Alexandra Arenas Sánchez, Jose Daniel y Felix Jeffry Rodríguez peña y otros v. Presidente de la República y otros, (2018).

^{51.} Juan Luis Castro Córdoba and Diego Hernán David Ochoa v. Ministerio de Ambiente y Desarrollo Sostenible EPM, Hidroeléctrica Ituango et al, Tribunal Superior, Sala Cuarta Civil Medellin [Medellin State Superior Tribunal, Fourth Civil Court] (Colombia) (2019).

^{52.} La Plata Huila River Case, *supra* note 48.

^{53.} Corte Constitucional [C.C.] [Constitutional Court] Luis Domingo Gomez Maldonado v. Corporación Autónoma Regional de Caldas Corpocaldas (2017) Tribunal Superior Sala Civil [Civil Chamber] (Colombia) 2017-00468-02 (Case Chucho Bear).

^{54.} Corte Constitucional [C.C.] [Constitutional Court] Juan Carlos Alvarado Rodriguez y otros v. Ministerio de Medio Ambiente y otros, (2018) Tribunal Administrativo de Boyacá [Administrative Tribunal of Boyacá] (Colombia) 15238-3333-002-2018-00016-01. For a general discussion about the Colombian jurisprudence see Elizabeth Macpherson, Julia Torres Ventura & Felipe Clavijo Ospina, Constitutional Law, Ecosystems and Indigenous Peoples in Colombia: Biocultural Rights and Legal Subjects, 9 TRANSNATIONAL ENV'T L. 521 (2020).

^{55.} LM ARÉVALO SÁNCHEZ, PLAN DE ACCIÓN BIODIVERSIDAD 2006-2030 NARIÑO [Action Plan for Biodiversity 2006- 2030 Nariño] (2007); Gobernación de Nariño [Nariño State Government], ¡Nariño, Primer Departamento en Colombia en Reconocer los Derechos de la Naturaleza! [Nariño, First Department in Colombia that Recognises the Rights of Nature] (2019), http://xn—nario-rta.gov.co (last visited July 28, 2019).

^{56.} Sebastian Bechtel, *Legal Rights of Rivers – An International Trend?*, CLIENT EARTH (Mar. 13, 2019), https://www.clientearth.org/legal-rights-of-rivers-an-international-trend/.

^{57.} Leilani Chavez, *Philippine Bill Seeks to Grant Nature the Same Legal Rights as Humans*, MONGABAY ENV'T NEWS (Aug. 20, 2019), https://news.mongabay.com/2019/08/philippine-bill-seeks-to-grant-nature-the-same-legal-rights-as-humans/.

orders, or legislative or administrative decrees. This is done variously (and in an ad hoc manner) within and between common law and civil law traditions, sometimes with reference to Indigenous or chthonic normative systems and principles. Sometimes, the resulting models recognize broad rights for nature, and sometimes they recognize specific natural resources as legal persons or subjects of rights. Sometimes this is done at a local level and sometimes at a state or national level. Sometimes, legal rights for nature and legal person or subject models are secured within constitutional frameworks giving them status as "supreme law," and sometimes not. Sometimes they are accompanied by detailed institutional frameworks (e.g. guardianship models) and public funding, and sometimes they are created with little or no consideration of the mechanisms for their implementation. Although the rights of nature movement is clearly a transnational trend, there are as many differences between models as similarities, and there is a need for theoretical clarity around what the rights of nature really entail.⁵⁸ Even as the theory catches up, if grassroots realities continue to drive legal developments, only time will enable us to evaluate the impact of the movement, which may well progress unevenly and rely precariously on favourable socio-political or constitutional conditions.

There are, however, two things that are characteristic of all efforts to recognize the rights of nature and nature's resources. In all cases, there is a deeply held concern amongst communities (and sometimes regulators) about the environmental crisis and a growing unease about the threats posed by humans to the climate, environment and biodiversity. Ultimately, there is growing unease about the threat we humans pose to our own existence. All cases, too, have a distinct grassroots flavour, where local communities (and their sympathizers) appeal to unorthodox legal tools in place of existing environmental and natural resource law frameworks considered inappropriate, ineffective or poorly executed.

Due to the highly contested status of natural resources like rivers, subject to competing claims from industry, urbanization and agriculture as well as social and environmental interests and existing,

^{58.} Clark et al., *supra* note 19, at 830–448.

^{59.} See, e.g., Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services, supra note 1.

^{60.} See, e.g., Chapron, Epstein, and López-Bao, supra note 20; MACPHERSON, supra note 15; ERIN O'DONNELL, supra note 15; Clark et al., supra note 19; Lidia Cano Pecharroman, Rights of Nature: Rivers That Can Stand in Court, 7 RESOURCES 1, 10–11 (2018).

entrenched legal and policy frameworks, these developments are vulnerable to opposition, or worse, to their own irrelevance. As O'Donnell has argued, legal rights for rivers can create an adversarial relationship between humans and nature, in fact weakening community support for protecting the environment. Yet, rather than pitting humans against nature, the rights of nature movement is characteristically a "human" movement, as human rights protections are co-opted, adapted and "stretched" to pursue improved environmental outcomes, and constitutional protections are secured to "trump" business as usual.

WATER RIGHTS AND LEGAL RIGHTS FOR RIVERS IN THE UNITED STATES

I. Water Law Frameworks in the United States

The United States of America is a federated republic of 318.9 million people spread across 50 States.⁶² Water conditions in the U.S. are highly variable. For example, there are extremely dry conditions in California's Death Valley and extremely wet conditions in Hawaii.⁶³ As in many other parts of the world, the main demand for water resources, including both surface flows from rivers, lakes and reservoirs and groundwater aquifers,⁶⁴ is for industry and agriculture.⁶⁵

The regulation of water in the U.S. is carried out at multiple (and sometimes competing) levels. The U.S. Constitution sets the bounds of government power and the entitlements of citizens, including core human rights protections.⁶⁶ At the federal level, there are a number of laws concerning water management and allocation, including the Clean Water Act,⁶⁷ which regulates the discharge of pollutants into water and

^{61.} For a general discussion of these arguments see ERIN O'DONNELL, *supra* note 15; Macpherson and O'Donnell, *supra* note 5, at 97; MACPHERSON, *supra* note 15; Julia Talbot-Jones & Jeff Bennett, *Toward a Property Rights Theory of Legal Rights for Rivers*, 164 ECOLOGICAL ECON. 106352 (2019).

^{62.} OECD POPULATION DATA, http://data.oecd.org/pop/population.htm (last visited June 5, 2019).

^{63.} WEATHER, https://www.nps.gov/deva/learn/nature/weather-and-climate.htm (last visited May 28, 2021); HAWAII WEATHER, https://www.hawaii-guide.com/hawaii-weather (last visited May 28, 2021).

^{64.} WATER FACTS - WORLDWIDE WATER SUPPLY, https://www.usbr.gov/mp/arwec/water-facts-ww-water-sup.html (last visited June 5, 2019).

^{65.} Id.

^{66.} For a discussion on the U.S. Constitution see MARK TUSHNET, THE CONSTITUTION OF THE UNITED STATES OF AMERICA: A CONTEXTUAL ANALYSIS (1st ed. 2009).

^{67. 33} U.S.C. § 1251 (1972).

sets quality standards for surface waters, and the Safe Drinking Water Act,⁶⁸ which sets standards for drinking water consumption and the implementation of regulations by the States.⁶⁹ Both pieces of legislation are administered by the Environmental Protection Agency, which has a broad mandate to protect human health and the environment.⁷⁰

Many states have also passed laws with respect to the regulation of water. For example, the State of California has its own Water Code, ⁷¹ Colorado has the Colorado Water Quality Control Act, ⁷² and Pennsylvania has the Clean Streams Law. ⁷³ States also have their own constitutions and reflect federal human rights protections ⁷⁴ in their state legislative codes. ⁷⁵ Within each state, various local government authorities, with varying regulatory powers, have the power to pass bylaws or "ordinances," some of which include environmental or water protections. ⁷⁶ These ordinances may be proposed by elected officials or members of the public and are subject to deliberative public notification and hearing processes before being put to a vote by the relevant authority. ⁷⁷

In terms of water distribution and use, the approach taken by regulators varies depending on which part of the U.S. is concerned. In the semi-arid western states, the doctrine of prior appropriation is the dominant approach governing the allocation and use of water.⁷⁸ Dating back to the 1850s, the prior appropriation doctrine vests water in the state, where rights to use water are "first in time, first in right," and water must be taken for "reasonable and beneficial use." Under this

^{68. 42} U.S.C. § 300f (1974).

^{69.} AD Tarlock, Safe Drinking Water: A Federalism Perspective, 21 Wm. & MARY ENV'T L. & POL'Y REV. 233, 241 (1997).

^{70.} *Id*.

^{71.} CA Water Code (2018).

^{72.} COLO. REV. STAT. § 25-8-103 (2013).

^{73. 35} Pa. Cons. Stat. § 691.1 (2019); LAWS, REGULATIONS AND GUIDELINES, https://www.dep.pa.gov:443/Business/Energy/OilandGasPrograms/OilandGasMgmt/Pages/Laws, -Regulations-and-Guidelines.aspx (last visited Jun. 5, 2019).

^{74.} See especially The Civil Rights Act of 1964, 42 U.S.C. §§ 2000d et seq. (2018).

^{75.} See, e.g., CAL. CIV. CODE §§ 43-53.7 (West).

^{76.} ORDINANCE PROCESS, http://statescape.com/resources/local/ordinance-process.aspx (last visited June 5, 2019); DURHAM, NC., CODE art. IV. § 70 (2019).

^{77.} ORDINANCE PROCESS, http://statescape.com/resources/local/ordinance-process.aspx (last visited June 5, 2019).

^{78.} Zachary Donohew, *Property Rights and Western United States Water Markets*, 53 AUSTL. J. OF AGRIC. AND RES. ECON. 85, 89 (2009).

^{79.} Id.

hierarchy, older rights (or "senior" rights) have a higher security (and value) than newer rights. Senior rights are often referred to as "wet rights," as opposed to the junior "paper rights," since the latter give way to senior rights in times of scarcity. Water rights acquired in a prior appropriation context may be lost in two ways: either as a result of using water beyond what is reasonable and beneficial and causing injury to other users or for failing to use the water over consecutive years. This creates perverse incentives: for example, it is in the interest of a senior rightsholder (many of whom hold water for productive agricultural purposes) to "consume as much water as possible over the long term." Furthermore, the "no injury rule" constrains rightsholders to continue to exercise their water rights for their original use, disincentivizing other less intensive water uses.

Competition and scarcity around water access in western states provided conditions suitable for the development of water markets, where water rights can be priced and traded.⁸⁴ Meanwhile, over 70 water quality markets, mostly within the fisheries sector or for air quality control schemes, operate similarly to carbon credit systems, allowing high polluters to purchase reductions from sources with lower polluting outputs.⁸⁵ Drought-prone states, such as California, have also established water banks to facilitate large-scale voluntary transfers of water, which ease the economic, social and environmental disruptions posed by severe water shortages.⁸⁶

In the well-watered eastern states, water is allocated via the common law doctrine of riparian rights, which provides that the owner of a parcel of land may use water adjacent to or flowing through their property for purposes associated with the land.⁸⁷ The water user is required to make "reasonable use" of the water so that downstream

^{80.} WATER LAW OVERVIEW, https://nationalaglawcenter.org/overview/water-law/ (last visited June 17, 2019).

^{81.} *Id*.

^{82.} Mark Squillace & Anthony McLeod, *Marketing Conserved Water*, 46 ENV'T L. 1, 21–22 (2016).

^{83.} Donohew, supra note 78, at 93.

^{84.} EELP Staff, *Hydraulic Fracturing (Fracking) on Federal and Indian Lands*, HARV. ENV'T L. PROGRAM, (Sept. 21, 2017) https://eelp.law.harvard.edu/2017/09/hydraulic-fracturing-on-federal-and-indian-lands/.

^{85.} Caela O'Connell et al., *Trading on Risk: The Moral Logics and Economic Reasoning of North Carolina Farmers in Water Quality Trading Markets*, 4 ECON. ANTHROPOLOGY 225, 227 (2017).

^{86.} CALIFORNIA DROUGHT WATER BANK, https://www.innovations.harvard.edu/california-drought-water-bank (last visited May 28, 2021).

^{87.} MACPHERSON, supra note 15, at 55.

users are not adversely affected in a provision similar to the "no injury" rule.⁸⁸ However, riparian rights cannot be forfeited for non-use, and they are not allocated according to priorities, meaning, for example, that all users are equally affected by supply shocks such as droughts.⁸⁹

Although prior appropriation regimes are prevalent in the western states and riparian rights endure in the East, statutory permit regimes are increasingly common throughout the U.S., some of which introduce public interest or environmental considerations into permitting processes. Subterranean waters, known as groundwater in the U.S., have generally been treated separately from surface rights in state laws. The use of groundwater is regulated differently across states due to differences in recharge rates, surface water interaction and size of the groundwater basin. Groundwater allocations are typically described as being difficult to enforce, observe and measure, and ongoing increases on demand, especially in western states, suggest a need for reform.

A sketch of water regulation in the U.S. cannot be completed without considering Indigenous (First Nation) water rights. There are 567 tribal entities in the U.S. living on Indian reservations, which are recognized as domestic-dependent, sovereign nations by the U.S. federal government.⁹⁵ The First Nation peoples have federally recognized rights to take water inside their reservations sufficient to fulfil the purpose of the reservation.⁹⁶ First Nations' water rights may be adjudicated by the courts or allocated by the federal government,⁹⁷

^{88.} Id.

^{89.} Donohew, supra note 78, at 85.

^{90.} Rebecca Louise Nelson & Debra Perrone, Local Groundwater Withdrawal Permitting Laws in the South-Western U.S.: California in Comparative Context, 54 GROUNDWATER 747, 750 (2016).

^{91.} Donohew, supra note 78, at 91.

^{92.} David Getches, *The Future of Winters*, *in* Future of Indian and Federal Reserved Water Rights: the Winters Centennial 307 (Barbara Cosens & Judith V. Royster eds., 2012).

^{93.} Donohew, supra note 78, at 91.

^{94.} Michael C. Nelson, *Post Decree Administration of Winters Rights in Multi Jurisdictional Settings, in* FUTURE OF INDIAN AND FEDERAL RESERVED WATER RIGHTS: THE WINTERS CENTENNIAL 147 (Barbara Cosens & Judith V. Royster eds., 2012).

^{95.} INDIGENOUS WORLD 2019: THE UNITED STATES OF AMERICA, https://iwgia.org/en/usa/3375-iw2019-usa (last visited June 5, 2019); Matthew L.M. Fletcher, *A Short History of Indian Law in the Supreme Court*, 40 HUMAN RIGHTS MAGAZINE (May 2015), https://link.gale.com/apps/doc/A417472227/LT?u=duke_law&sid=summon&xid=d92896a4.

^{96.} L.M. Fletcher, supra note 95.

^{97. 43} U.S.C. § 666 (2018). The McCarran Amendment waived federal sovereign immunity for the adjudication and administration of federal water rights, in order to enable state

in reliance on the Winters doctrine⁹⁸ and the McCarran Amendment.⁹⁹ However, the issue of Indigenous water rights in the U.S. remains contentious, especially in places of water scarcity where, despite being prior in time, First Nations' water rights are prioritized after the rights of others.¹⁰⁰ There is also ongoing uncertainty surrounding whether tribal water rights include groundwater, producing a "patchwork of tribal groundwater rights."¹⁰¹

Legal Rights for Rivers in the United States

Aside from water scarcity concerns, the U.S. faces serious challenges in terms of the quality of water resources and impacts on rivers from discharges and contaminants. In this context, and in response to the failure of existing federal and state laws to properly manage water resources into the future, there is growing community-based rights-of-nature activism in the U.S., seeking to protect rivers and ecosystems from human impacts. The pragmatic appeal of legal rights for nature is particularly apparent in the U.S. constitutional context. Given the lack of a general public interest standing in Article III of the U.S. Constitution, claimants taking matters to the court on environmental grounds must prove that they have suffered an injury. The distinction is less pronounced in countries like New Zealand or Australia, where environmental public interest litigation is allowed without personal injury; although, as mentioned above, "rights of

administration of water, which opened the way for adjudication and negotiated settlements with respect to Tribal water rights, although controversy continues to surround its application to reserved water rights.

- 98. See generally Winters v. United States, 207 U.S. 564 (1908). Pursuant to the 'Winters Doctrine', tribes have typically 'senior rights' (existing from the date of creation of their reservation) to take water on reservation lands sufficient to fulfil the purposes of the reservation, which cannot be forfeited for 'non-use'.
- 99. See e.g., Cynthia Brougher, Congressional Research Service, Indian Reserved Water Rights Under the Winters Doctrine: An Overview (2011); L.M. Fletcher, *supra* note 95.
 - 100. See generally BROUGHER, supra note 99.
- 101. Philip Womble et al., *Indigenous Communities, Groundwater Opportunities*, 361 Sci. 453, 453 (2018).
- 102. Complaint for Declaratory Relief at 2, Colorado River Ecosystem v. State of Colorado, (D. Colo 2017) (Civ. No. 1:17-cv-02316).
- 103. Hope M. Babcock, A Brook with Legal Rights: The Rights of Nature in Court, 43 ECOLOGY L.Q. 1, 24–40 (2016). Under Article III, a plaintiff must establish; (1) that they suffered injury in fact, invading a legally protected interest which is (a) concrete and particularised, and (b) actual or imminent (not conjectural or hypothetical); (2) a causal relation between the injury and the conduct of the complaint, fairly traceable to the defendant's action(s) (not an independent third party); and (3) that it is likely (not speculative) that the injury will be redressed by way of judicial decision.

nature" developments have also occurred in New Zealand and Australia in a specific Indigenous context.

As mentioned, rights of nature activism resurfaced in the U.S. in 2006 with the Tamaqua Borough Sewage Sludge Ordinance in Pennsylvania, which recognized ecosystems as legal persons in an attempt to bar coal-mining companies from dumping sewage sludge into open pit mines¹⁰⁴ and to regain local supervision over the compliance and enforcement of applicable state and federal laws. 105 The Ordinance's purpose is to protect "the health, safety and welfare" of Tamaqua Borough residents¹⁰⁶ by recognizing their "fundamental and inalienable right[s] to a healthy environment" and "to the integrity of their bodies," meaning "a right to be free from unwanted invasions of their bodies by pollutants."107 The Ordinance declares it unlawful to interfere with these rights and the right of natural ecosystems to exist and flourish "for the enforcement of the civil rights of those residents, natural communities, and ecosystems."108 Following the Tamaqua Ordinance, other local government authorities have followed suit. Thirty-six municipalities across the U.S. have made various claims, ¹⁰⁹ and over 100 local municipalities in the Pennsylvania Coal region having passed rights-of-nature laws. 110

The city of Pittsburgh, Pennsylvania, also passed an ordinance in 2010¹¹¹ to supplement the Pittsburgh Code, ¹¹² which recognizes the rights of "natural communities:"

Natural communities and ecosystems, including, but not limited to, wetlands, streams, rivers, aquifers, and other water systems, possess inalienable and fundamental rights to exist and flourish within the City of Pittsburgh. Residents of the City shall possess legal standing to

^{104.} Tamaqua, Pa., Code \S 260 (2020) (paying particular attention to "Land Application or Land Apply").

^{105.} *Id.* Individuals are not barred from dumping sewage sludge provided they comply with relevant laws including testing procedures for contaminants.

^{106.} Id.

^{107.} Id.

^{108.} Id.

^{109.} Amended Complaint for Declaratory Relief, Colorado River Ecosystem v. State of Colorado, (D. Colo 2017) (Civ. No 1:17-cv-02316).

^{110.} Kate Beale, Rights for Nature: In PA's Coal Region, A Radical Approach to Conservation Takes Root, HUFFPOST (Feb. 2, 2009), https://www.huffpost.com/entry/rights-for-nature-in-pas_b_154842.

^{111.} PITTSBURGH, PA., Ordinances No 37-2010, § 1.

^{112.} PITTSBURGH, PA., 6 § art. 1 Ch. 618.

enforce those rights on behalf of those natural communities and ecosystems.¹¹³

This amendment was directed at unconventional gas extraction (fracking), specifically the discharge of "toxins into the air, soil, water, environment, and the bodies of residents"¹¹⁴ as a result of the activity. As well as underscoring the importance of community decisionmaking, 115 the Code prohibited commercial extraction of gas within the city and removed the potential for corporations to override community decision-making concerning the environment. 116 Although at this stage drilling companies rarely contemplate drilling within the city's boundaries, the Ordinance holds strong symbolic value, further emboldening other local government authorities to act similarly.¹¹⁷ Since then, a court order has prevented the Pennsylvanian Public Utility Commission from reaching a final decision on their finding that the Ordinance conflicted with state environmental laws. 118 Yet fracking companies, having secured drilling rights in the surrounding rural counties, have become increasingly interested in the city's adjacent lands. Well permits have been issued or planned for sites just six kilometres from the city limits, effectively in suburban "backyards." ¹¹⁹

Initially, courts upheld the right of municipal boroughs to utilize zoning laws in order to determine the location of drilling activities. ¹²⁰ In 2012, however, the Pennsylvania State legislature passed "Act 13," an amendment and expansion to the Oil and Gas Act, which, *inter alia*, sought to consistently implement regulatory parameters by preempting local government authorities from banning or restricting oil and gas activities. ¹²¹ In a landmark decision, the Pennsylvania Supreme Court in *Robinson Township v. Commonwealth* partially struck down

^{113.} Id. at 618.03.

^{114.} Id. at 618.01.

^{115.} *Id.* at 618.01.

^{116.} *Id.* at 618.04(a).

^{117.} Matt Stroud, *Five years on: What did Pittsburgh lose by Banning Fracking?*, PITTSBURGH BUSINESS TIMES (Nov. 16, 2015), https://www.bizjournals.com/pittsburgh/news/2015/11/16/five-years-later-pittsburgh-fracking-ban.html.

^{118.} Nathaniel L Foote, *Not in My Backyard: Unconventional Gas Development and Local Land Use in Pennsylvania and Alberta, Canada*, 3 PA. STATE J.L. & AFF. 235, 249–250 (2015).

^{119.} Reid Frazier, *Pittsburgh Suburbs Decide as Fracking Comes Near: Welcome it, or Resist?*, THE ALLEGHENY FRONT (Feb. 9, 2018), https://www.alleghenyfront.org/pittsburgh-suburbs-decide-as-fracking-comes-near-welcome-it-or-resist/.

^{120.} Huntley & Huntley v. Borough Council, 964 A.2d 855, 869 (Pa. 2009) (US).

^{121. 58} PA. CONS. STAT. § 3304(b)(5)-(6).

Act 13 on constitutional grounds, 122 since the state's Environmental Rights Amendment provided for the right to "clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment." Although local government authorities may resume enforcing zoning laws to protect their communities, this may result in a very uneven stance on drilling activities. However, positioning environmental concerns as human rights issues 124 appears to hold more potential for their protection, on the basis that a right to a healthy environment is a non-negotiable component of fundamental individual and community rights.

In 2013, another local ordinance,¹²⁵ this time in the city of Santa Monica,¹²⁶ was added to the Santa Monica Municipal Code, which recognized the rights of natural communities and ecosystems to exist and flourish.¹²⁷ Concerning water, the codified Sustainability Rights Ordinance states that residents have the right to:

[C]lean water from sustainable sources; marine waters safe for active and passive recreation; clean indoor and outdoor air; a sustainable food system that provides healthy, locally grown food; a sustainable climate that supports thriving human life and a flourishing biodiverse environment; comprehensive waste disposal systems that do not degrade the environment; and a sustainable energy future based on renewable energy sources.¹²⁸

The codified Ordinance forms part of the environmental public policy of the city, with a 2014 amendment to the Santa Monica Sustainable City Plan that incorporated the rights of nature as a guiding principle. Together, these enshrine the city's commitment to sustainable rights for its human and non-human inhabitants, are recognizing nature's inalienable and fundamental rights to exist, thrive and evolve and the rights of the individual human

^{122.} Robinson Township v Commonwealth, 83 A.3d 901, 999 (Pa. 2013).

^{123.} THE CONSTITUTION OF PENNSYLVANIA 1968, art. I § 27.

^{124.} See generally Damien Short et al., Extreme Energy, "Fracking" and Human Rights: A New Field for Human Rights Impact Assessments?, 19 THE INTERNATIONAL JOURNAL OF HUMAN RIGHTS 697 (2015).

^{125.} SANTA MONICA CAL., Ordinance No. 2421 CCS § 1 (2013).

^{126.} SANTA MONICA CAL., Santa Monica Municipal Code, §12 Ch 12.02 amended by Ordinance No. 2611 CCS §10 (2019).

^{127.} Id. at 12.02.020(c).

^{128.} *Id.* at 12.02.020(c).

^{129.} SANTA MONICA, SUSTAINABLE CITY PLAN 7 (2014).

^{130.} Id.

beings that inhabit the City of Santa Monica to a clean, healthy and sustainable environment."¹³¹

The emphasis on the rights of nature in the U.S. ordinances has emerged squarely from grassroots frustration with existing environmental laws and a desire for transformative change at the insistence not just of local communities but also of activist environmental NGOs like the Earth Law Center. 132 The Santa Monica Sustainability Rights Ordinance, for example, specifically states that existing U.S. environmental laws including the Clean Water Act, ¹³³ Clean Air Act,134 and the National Environmental Policy Act135 insufficiently safeguard rights and are "grossly inadequate to avert the mounting environmental crisis," which in turn "necessitates reexamination of the underlying social and legal assumptions about our relationships with the environment and a renewed focus on effectuating these rights." However, as examined below, while local governments have managed to pass a rights of nature approach under the radar, attempts to provide for the legal rights of rivers and lakes have floundered at higher levels, encountering fierce opposition from states.

First Nations have also been involved in the U.S. rights of nature movement, using their jurisdiction as domestic-dependent, sovereign nations to pass rights of nature laws. In 2015, the Ho-Chunk Nation General Council incorporated the rights of nature in the "Constitution of the Ho-Chunk Nation," and in 2017, the Ponca Nation in Oklahoma passed a tribal law recognizing the rights of nature as part of a movement against fracking. In 2019, the White Earth Nation

^{131.} SANTA MONICA CAL, *supra* note 126, at 12.02.020(c).

^{132.} See generally Earth Law Center, Community Toolkit for Rights of Nature (2019).

^{133. 33} U.S.C. §1251 (1972).

^{134. 42} U.S.C. §7401 (1970).

^{135. 42} U.S.C. §4321 (1969).

^{136.} SANTA MONICA CAL, *supra* note 126, at 12.02.020(d)-(e).

^{137.} THE CONSTITUTION OF THE HO-CHUNK NATION, https://ho-chunknation.com/wp-content/uploads/2019/05/Constitution-of-The-HoChunk-Nation.pdf (last visited May 28, 2021); RESOLUTION TO AMEND THE HO-CHUNK NATION CONSTITUTION AND PROVIDE FOR THE RIGHTS

OF

NATURE

 $https://d3n8a8pro7vhmx.cloudfront.net/honorearth/pages/2098/attachments/original/1446129806/hoChunk_RightsOfNature_Resolution_Sep2015.pdf?1446129806 (last visited Sept. 18, 2019).$

^{138.} ADVANCING LEGAL RIGHTS OF NATURE: TIMELINE, https://celdf.org/advancing-community-rights/rights-of-nature/rights-nature-timeline/ (last visited Sept. 18, 2019); PONCA NATION OF OKLAHOMA TO RECOGNIZE THE RIGHTS OF NATURE TO STOP FRACKING, https://intercontinentalcry.org/ponca-nation-oklahoma-recognize-rights-nature-stop-fracking/ (last visited Sept. 18, 2019).

Band of Ojibwe in Minnesota passed an ordinance to protect wild rice (called *Manoomin*) as a central food for the continuation of their culture and identity.¹³⁹ The ordinance recognizes the legal right for *Manoomin* to "to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation."¹⁴⁰

Most recently, in May 2019, the Yurok Tribal Council in California passed the "Resolution Establishing the Rights of the Klamath River," emphasizing the strong connection between the Yurok Tribe and the Weron or Klamath River. 141 The resolution protects the river's rights "to exist, flourish, and naturally evolve; to have a clean and healthy environment free from pollutants; and to be free from contamination by genetically engineered organisms."¹⁴² The resolution is strongly worded, serving as a warning to "[t]he United States of America, the State of California and all other entities which threaten and endanger the freshwaters, ecosystem and species of the Klamath River, that it has become necessary to provide a legal basis to protect the Klamath River, its ecosystem and species for the continuation of the Yurok people and the Tribe for future generations."143 Additional reference was made to Article 26 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), 144 on the rights of Indigenous Peoples to their lands, territories and resources, combining ecological and Indigenous rights jurisprudence. In the U.S., First Nation rights-of-nature laws, like Indigenous-driven rights-of-nature models in other parts of the world, draw on Indigenous worldviews that emphasize the interconnectedness that Indigenous peoples perceive between humans and nature. 145

^{139.} CHIPPEWA ESTABLISHING RIGHTS OF MANOOMIN ON WHITE EARTH RESERVATION AND THROUGHOUT 1855 CEDED TERRITORY, files.harmonywithnatureun.org/uploads/upload764.pdf (last visited June 17, 2019).

^{140.} Id.

^{141.} RESOLUTION ESTABLISHING THE RIGHTS OF THE KLAMATH RIVER, files.harmonywithnatureun.org/uploads/upload833.pdf (last visited Jun 17, 2019).

^{142.} Id.

^{143.} Id.

^{144.} UNITED NATIONS, UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES (2017) (this report can be found at https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.).

^{145.} See generally Linda Te Aho, Te Mana o te Wai: An Indigenous Perspective on Rivers and River Management, 35 RIVER RSCH. APPLICATIONS 1615 (2019).

II. The Legal Rights of the Colorado River

The Colorado River is located in the southwestern U.S., flowing 2,330 kilometres through seven American and two Mexican States before finding its way to the Pacific Ocean in the Gulf of California. 146 The river is of immense economic and social value in the U.S. and supplies water to Las Vegas, Denver, Salt Lake City, Albuquerque, Los Angeles, and San Diego and other cities across seven states (Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona and California). The river has been estimated to contribute \$1.4 trillion in economic benefit to the U.S. 147 and has been disputed and settled in transboundary national and binational agreements since 1948. 148 For example, the treaties and arrangements known as the "Law of the Rivers," allocate the flow of 17 million acre-feet of water per year among various states. 149 The river also flows through the reservations of several Native American tribes 150 and across the border into Mexico. 151

However, the Colorado River is unwell. Complex and interconnected pressures from land use such as agriculture, combined with inadequate management have led to a deterioration in the water quality and quantity and the biodiversity of the Colorado River. Huge quantities of water are diverted out of the river to supply urban, agricultural and industrial areas, causing "changes in timing, duration variation and magnitude of hydrologic conditions." In addition to

^{146.} COLORADO RIVER, https://www.americanrivers.org/river/colorado-river/ (last visited Oct. 22, 2019).

^{147.} For a discussion of the Colorado River's importance see COMMITTEE ON THE SCIENTIFIC BASES OF COLORADO RIVER BASIN WATER MANAGEMENT ET AL., COLORADO RIVER BASIN WATER MANAGEMENT: EVALUATING AND ADJUSTING TO HYDROCLIMATIC VARIABILITY (2007); ECONOMIC IMPACT OF THE COLORADO RIVER, https://www.nature.org/en-us/about-us/where-we-work/priority-landscapes/colorado-river/economic-importance-of-the-colorado-river/ (last visited May 28, 2021).

^{148.} CO Rev Stat § 37-61-101 (2016) (Colorado River Compact) (compact with Arizona, California, Colorado, Nevada, New Mexico, Utah, Wyoming from 1922); Treaty Between Mexico and the United States for the Utilisation of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, U.S.-Mx., opened for signature 3 February 1944, 59 Stat. 1223 TS 944 (entered into force 8 November 1945).

^{149.} Complaint for Declaratory Relief, *supra* note 102, at 20–21.

^{150.} TRIBES AND WATER IN THE COLORADO RIVER BASIN, https://www.coloradoriverresearchgroup.org/uploads/4/2/3/6/42362959/crrg_tribal_water_rights.pdf (last visited May 28, 2021).

^{151.} DAVID CARLE, INTRODUCTION TO WATER IN CALIFORNIA 86–130 (2d. ed. 2009).

^{152.} See generally Natalie Triedman, Environment and Ecology of the Colorado River Basin (2012).

^{153.} Id. at 103.

poor management, climate change is exacerbating the environmental impacts on the river, increasing the incidence of drought and threatening riparian species and natural communities.¹⁵⁴

The environmental plight of the Colorado River, and the people who care for it, led the NGO Deep Green Resistance and others to file an application for Declaratory Relief with the District Court of Colorado 2017 on behalf of the Colorado River ecosystem, which they described as:156

The area bound by the highpoints and ridgelines where drop-by-drop and grain-by-grain, water, sediment, and dissolved materials ebb their way toward the Gulf of California: some 246,000 square miles (640,000 km²) in southwest North America including portions of Colorado, New Mexico, Wyoming, Utah, Nevada, Arizona, California in the United States, and portions of Baja California and Sonora in Mexico.

Having a significant relationship with and dedication to the river, the plaintiffs claimed to be the "next friend"¹⁵⁷ or "guardian being bound to act in the river's best interests and to advocate for their inherent and constitutionally-secured rights."¹⁵⁸ In terms of relief, the plaintiffs requested that the Court "recognize and declare that the Colorado River is capable of possessing rights similar to a 'person,'" and declare "that the Colorado River has certain rights to exist, flourish, regenerate, and naturally evolve.".¹⁵⁹

The plaintiffs argued that environmental laws have failed "to stop the degradation of the natural environment, and consequently, [have] failed to protect the natural and human communities," where the legal system is dominated by a culture that considers nature as an object of property. Legal personhood for the river, they argued, is necessary to make the river ecosystem's rights "visible" to the institutions of government, in much the same way as African American

^{154.} See e.g., COMMITTEE ON THE SCIENTIFIC BASES OF COLORADO RIVER BASIN WATER MANAGEMENT ET AL., supra note 147; CARLE, supra note 151; Triedman, supra note 152.

^{155.} In the US court system, a 'next friend' or (*prochein ami*) is a person who commences and takes responsibility for legal proceedings on behalf of another person who does not have capacity to bring proceedings (e.g. a child or a person with a mental disability). PROCHEIN AMI, https://www.merriam-webster.com/dictionary/prochein%20ami (last visited May 28, 2021).

^{156.} Complaint for Declaratory Relief, supra note 102, at 3.

^{157.} ERIN O'DONNELL, supra note 15, at 97.

^{158.} Complaint for Declaratory Relief, *supra* note 102, at 7.

^{159.} Id. at 2-3.

^{160.} Id. at 2.

^{161.} Id.

and women's rights became visible to the courts in the 1800s. ¹⁶² They drew an analogy to the development of legal personality for corporations, which would not otherwise be able to defend themselves. ¹⁶³ The failure by the State to recognize the river's rights, they ultimately argued, violated its due process rights, its interests in "life, liberty and property" granted by the Fifth Amendment, ¹⁶⁴ and its right of equal protection from arbitrary exercise or abuse of government power as provided by the Fourteenth Amendment ¹⁶⁵ to the United States Constitution. ¹⁶⁶

Colorado swiftly filed a motion to dismiss the case. ¹⁶⁷ The State argued that Deep Green Resistance lacked standing ¹⁶⁸ to bring the claim as next friend of the river ¹⁶⁹ due to a lack of an actual or imminent concrete injury, ¹⁷⁰ and, without legal personality, ¹⁷¹ the river ecosystem itself holds no rights. ¹⁷² A legal person, it argued, does not encompass objects like the soil, water, and plants that, together with animals, create an ecosystem. ¹⁷³ In any event, any future injury to the Colorado River ecosystem is not traceable to any state action because the allocation framework for the river is the result of 95 years of interstate compacts, international treaties, statutes and case law referred to as the "Law of the River," ¹⁷⁴ and the State never had an intention to harm the river. ¹⁷⁵ The State further alleged that the plaintiffs' reliance on the Fifth and Fourteenth Amendments was misplaced and that their claims were based on rhetoric ¹⁷⁶ and raised non-justiciable issues of policy in

^{162.} *Id.* The comparison of nature to gender and race-based rights may also have been a poor choice, given the ongoing sense of injustice around such human rights.

^{163.} *Id.* at 13–14. Clark et al argue that the use of the corporate analogy in the Colorado River case muddied the waters, which arguably weakened the claim, since a corporation is both a human construct and a fictionalised person, while the natural world actually exists.

^{164.} U.S. CONST. amend V.

^{165.} Id. at amend XIV.1.

^{166.} Complaint for Declaratory Relief, *supra* note 102, at 23–25.

^{167.} Defendant's First Motion to Dismiss, Colorado River Ecosystem v. State of Colorado (D. Colo 2017) (Civ. No. 17-cv-02316).

^{168.} See infra note 103

^{169.} Defendant's First Motion to Dismiss, *supra* note 167, at 7–11.

^{170.} Id. at 8-11.

^{171.} Id. at 12.

^{172.} *Id.* at 11–13.

^{173.} Id. at 12.

^{174.} Id. at 12-13.

^{175.} Defendant's Second Motion to Dismiss, Colorado River Ecosystem v. State of Colorado (D. Colo 2017) (Civ. No. 17-cv-02316).

^{176.} Id. at 17.

an attempt to fabricate a self-declared right of representation.¹⁷⁷ In very strong language, it argued that to "alter the fabric of American domestic and foreign policy" would "[fly] in the face of the entire framework for addressing such concerns,"¹⁷⁸ a responsibility, in its view, that rested exclusively with Congress.¹⁷⁹

The plaintiffs cited a range of domestic and international precedents for the rights of nature, including Justice William O. Douglas's dissent in Sierra Club v. Morton, New Zealand's Te Urewera Act, the Ecuadorian Constitution, the declaration of the Atrato River as a legal subject by the Constitutional Court of Colombia, and the Indian High Court cases recognizing legal rights for rivers in the State of Uttarakhand. 180 The plaintiffs elaborated their claims in an amended complaint, 181 and the defendant once more responded by filing a second motion to dismiss. 182 By this point, the office of the Attorney General had threatened to invoke legal proceedings against the plaintiffs, referring to regulations which sanctioned unlawful and frivolous claims. 183 Two days later, the plaintiffs voluntarily dismissed the case, acknowledging that "the expansion of rights is a complex and difficult matter" that may be better approached "when conditions are appropriate."184 The following day, the District Court of Colorado accepted the plaintiff's dismissal, and the case was over before it had really begun.¹⁸⁵

Despite the clearly desperate state of the Colorado River ecosystem and the failure of existing environmental laws to slow its decline, the river could not compete with the rights of humans. The Colorado River case shows the vulnerability of the rights-for-nature movement in the fact of competing claims and, within a certain constitutional context, just how fiercely states will resist rights for

^{177.} Defendant's First Motion to Dismiss, *supra* note 167, at 16.

^{178.} Defendant's Second Motion to Dismiss, *supra* note 175, at 19.

^{179.} Defendant's First Motion to Dismiss, *supra* note 167, at 16–17.

^{180.} Defendant's Second Motion to Dismiss, *supra* note 175, at 20–22.

^{181.} Amended Complaint for Declaratory Relief, supra note 109.

^{182.} Defendant's Second Motion to Dismiss, *supra* note 175.

^{183.} Chris Walker, Attorney to Withdraw Colorado River Lawsuit Under Threat of Sanctions, WESTWORD (Dec. 4, 2017), https://www.westword.com/news/colorado-river-lawsuit-to-be-withdrawn-due-to-potential-sanctions-9746311.

^{184.} Plaintiff's Unopposed Motion to Dismiss Amended Complaint With Prejudice, Colorado River Ecosystem v. State of Colorado (D. Colo 2017) (Civ. No. 1:17-cv-02316).

^{185.} Order to Dismiss, Colorado River Ecosystem v. State of Colorado (D. Colo 2017) (Civ. No. 1:17-cv-02316).

nature where they conflict with entrenched human productive interests.

III. The Lake Erie Bill of Rights

Lake Erie is the eleventh largest lake in the world. It supports the economies of the four U.S. states of New York, Pennsylvania, Ohio and Michigan and the Canadian province of Ontario. The area supported by the lake is home to more than 12 million people across 17 metropolitan areas. However, since the 1960s, the lake has experienced consecutive algae blooms and now has "dead zones" caused by contamination from industrial discharges, urban wastewater, and the use of fertilizers and pesticides in farming. In 1969, one of the rivers flowing through Cleveland, Ohio famously caught fire, provoking the development of the Clean Water Act.

Although water quality in Lake Erie improved after the passage of the Clean Water Act, it did not solve the problems of algae blooms and dead zones. In 2012 and 2014, Toledo, Ohio, experienced significant water shortages, causing stores to close, restaurants to empty and hospital surgeries to delay. ¹⁹⁰ As a result, the city and a group of citizens calling themselves "Toledoans for Safe Water" developed a proposal for a "Lake Erie Bill of Rights," which they submitted as a petition to amend the Toledo City Charter. ¹⁹¹ Toledoans for Safe Water claimed that such action was necessary because of the dominance of the industrial, commercial and agricultural activities affecting the lake, which were being prioritized ahead of the rights and health of the people and communities living around it. ¹⁹²

Leading the campaign in support of the Bill, Toledoans for Safe Water successfully acquired the requisite signatures to submit the

^{186.} Timothy Williams, Legal Rights for Lake Erie? Voters in Ohio City Will, N.Y. TIMES (Feb. 17, 2019) https://www.nytimes.com/2019/02/17/us/lake-erie-legal-rights.html.

^{187.} LAKE ERIE, https://www.epa.gov/greatlakes/lake-erie (last visited Aug. 20, 2019).

^{188.} Id.

^{189.} Becky Oskin, *Lake Erie Dead Zone: Don't Blame the Slime!*, LIVE SCIENCE (Jan. 6, 2015), https://www.livescience.com/49347-lake-erie-dead-zone-drought.html.

^{190.} Emily Chung, What's Behind Lake Erie's Algae Explosion, CBC NEWS (Aug. 7, 2014), https://www.cbc.ca/news/technology/lake-erie-s-algae-explosion-blamed-on-farmers-1.2729327; Tom Henry, Lawsuit Filed Against Lake Erie Bill of Rights, TOLEDO BLADE, (Feb. 27, 2019), https://www.toledoblade.com/local/environment/2019/02/27/lawsuit-filed-against-lake-erie-bill-of-rights-district-court-lebor/stories/20190227090.

^{191.} THE LAKE ERIE BILL OF RIGHTS,

https://lakeerieaction.wixsite.com/safewatertoledo/lake-erie-bill-of-rights (last visited Sept. 28, 2019).

^{192.} Id.

petition to a public ballot; however on August 28, 2018, the Lucas County Board of Elections voted 4-0 to reject the petition, relying on legal advice that suggested that (1) the Bill created a new cause of action, which (2) conferred jurisdiction on the Lucas County Court of Common Pleas. 193 Seeking to rectify this, citizens filed an action in the Ohio Supreme Court for a writ of mandamus, a court order compelling lawful compliance. In Twitchell v. Saferin, 194 the writ was denied, with the court relying on an earlier decision in State ex rel. Flak v. Betras, 195 which upheld the Board's right to determine whether the initiative fell within the constitutional scope of the power to enact via a citizens' initiative. Concurring in the judgment only, Justice Kennedy contended that the court in Flak had erroneously confused the relevant constitutional authority.¹⁹⁶ Although this was ineffectual to the case at hand, there was clear authority for a municipal ordinance, if passed, to override the Board's decision. Sure enough, the Toledo City Council passed Ordinance 497-18 on 4 December 2018, accepting the petition, with the ballot for special election to be held on February 26, 2019. With the Supreme Court meanwhile confirming Justice Kennedy's arguments in a separate case, ¹⁹⁷ an opposing judicial action easily failed the requirement for procedural or legislative illegality for a writ of prohibition. 198 Finally, the vote was held, and with 61 percent favor, 199 the Toledo City Charter was amended to include the Lake Erie Bill of Rights.²⁰⁰The newly adopted Lake Erie Bill of Rights declares that "Lake Erie, and Lake Erie watershed, possess the right to exist, flourish and naturally evolve."201 This holistic view of the ecosystem

^{193.} See generally State ex rel. Twitchell v. Saferin, 119 N.E.3d 365 (Ohio 2018).

^{194.} Id. at 367.

^{195.} State ex rel. Flak v. Betras, 95 N.E.3d 329, 330 (Ohio 2017).

^{196.} State ex rel. Twitchell, 119 N.E.3d at 10–11. Kennedy J noted that provisions governing an amendment to the Toledo City Charter, found in Article XVIII, Section 9 of the Ohio Constitution, differed from the constitutional provisions governing citizen iniatives to enact municipal ordinances in Article II, Section 1f. The Court had earlier conflated these provisions. When following its revised distinction, a citizens initiative endorsed by the City Council as an ordinance to the ballot (as opposed to an initiative to create an ordinance) applied under Article XVII, Section 9.

^{197.} State ex rel. Maxcy v. Saferin, 122 N.E.3d 1165, 1168–1170 (Ohio 2018).

^{198.} State ex rel. Abernathy v. Lucas City Board of Elections, 125 N.E.3d 822, 835–836 (Ohio 2019).

^{199.} TOLEDO, OHIO, QUESTION 2, "LAKE ERIE BILL OF RIGHTS" https://ballotpedia.org/Toledo,_Ohio,_Question_2,_%22Lake_Erie_Bill_of_Rights%22_Initiative_(February_2019) (last visited Oct. 19, 2019).

^{200.} TOLEDO, OHIO, Charter of the City of Toledo, Ohio, Lake Erie Bill of Rights, Ch XVII (US).

^{201.} Id. at § 253.

includes "all natural water features, communities of organisms, soil as well as terrestrial and aquatic sub ecosystems that are part of Lake Erie and its watershed."202 The document emphasizes the need for a shift in the way that lakes are managed, due to ineffective existing laws and institutions:

We the people of the City of Toledo find that laws ostensibly enacted to protect us, and to foster our health, prosperity, and fundamental rights do neither; and that the very air, land, and water on which our lives and happiness depend - are threatened. Thus it has become necessary that we reclaim, reaffirm, and assert our inherent and inalienable rights, and to extend legal rights to our natural environment in order to ensure that the natural world, along with our values, our interests, and our rights, are no longer subordinated to the accumulation of surplus wealth and unaccountable political power.²⁰³

Like other rights of nature protections in the United States, and in various jurisdictions around the globe, the lake's rights are effectively an extension of human rights protections secured for the people of Toledo.²⁰⁴ These include the right of the people of the City of Toledo "to a clean and healthy environment, which shall include the right to a clean and healthy Lake Erie and Lake Erie ecosystem,"205 and "a collective and individual right to self-government in their local community, a right to a system of government that embodies that right, and the right to a system of government that protects and secures their human, civil, and collective rights."206 The Lake Erie Bill of Rights further specifies that protected rights are "self-executing," meaning that they do not require empowering legislation. As such, any person could take to the courts under the Lake Erie Bill of Rights to plead for themselves, or on behalf of the lake.²⁰⁷ The Lake Erie Bill of Rights also includes penalties and enforcement provisions, making it an offense to infringe the rights protected in it and declaring it (apparently retrospectively) unlawful to grant water permits or concessions in contravention of its principles.²⁰⁸

Unsurprisingly, the successful incorporation of the Lake Erie Bill of Rights in the Toledo City Charter was an alarming turn of events for

^{202.} Id. at § 254(a).

^{203.} Id. at § 253.

^{204.} See generally Macpherson, supra note 15, at 285.

^{205.} TOLEDO, OHIO, *supra* note 200, at § 254(b).

^{206.} Id. at § 254(c).

^{207.} Id. at § 254(d).

^{208.} *Id.* at §§ 255–257.

the industrial and agricultural sectors, whose interests now appeared to be defeasible by legal action. From an industry standpoint, any alleged activity was not only lawful but enjoyed legal protections, such as the Ohio State's "right-to-farm" laws, which have severely limited the right of citizens to sue neighboring farms for harms suffered by pollution and drastically restricted legal avenues to oppose agricultural runoff.²⁰⁹ Yet the Lake Erie Bill of Rights appeared to ignore (or even override) the legality of any conduct in question by purporting to dispossess companies of "any other legal rights, powers, privileges, immunities or duties that would interfere with the rights or prohibitions enumerated by [the Lake Erie Bill of Rights]," should they violate or seek to violate its rights or prohibitions. ²¹⁰ Furthermore, strict liability applied to any violations regardless of jurisdiction.²¹¹ This attempt to trump existing laws and regulatory frameworks is blatant in the Lake Erie Bill of Rights, which declares the lake's rights as "inherent, fundamental and unalienable."²¹²

The day after the ballot vote passed, however, the Drewes, a family that has continued to farm in the Lake Erie watershed for five generations, filed a complaint in the Ohio Supreme Court against the city of Toledo (*Drewes Farms Partnership v. City of Toledo*), seeking a preliminary injunction and declaratory relief to render the Lake Erie Bill of Rights void and unenforceable.²¹³ Understandably, the plaintiffs voiced serious concerns with the document's legal uncertainty, especially concerning its lack of applicable standards and criteria for violations.²¹⁴ Although they claimed to have undertaken efforts beyond mere compliance with the relevant environmental regulations for farming fertilization, they considered the use of fertilizers essential, therefore exposing them to potential liability, which, they argued, would expose them to risk of bankruptcy²¹⁵ and "arbitrary enforcement."²¹⁶

^{209.} H. Claire Brown, *How Ohio's Chamber of Commerce Killed an Anti-Pollution Bill of Rights*, THE INTERCEPT (Aug. 29, 2019) https://theintercept.com/2019/08/29/lake-erie-bill-of-rights-ohio/.

^{210.} TOLEDO, OHIO, *supra* note 200, at § 257(a).

^{211.} Id. at § 256(c).

^{212.} Id. at § 254(d).

^{213.} Plaintiff's Complaint, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{214.} Id. at 12.

^{215.} Id. at 13.

^{216.} Id. at 16.

Moreover, in the plaintiffs' view, the Lake Erie Bill of Rights amounted to a constitutional infringement. Since the Lake Erie Bill of Rights denied its violators the ability to defend their alleged violations, ²¹⁷ it interfered with rights in the First, Fifth and Fourteenth Amendments to the United States Constitution: freedom of speech and the right to petition for redress of grievances, due process, and equal protection. ²¹⁸ Taking an unhelpfully binary approach to rights, the Lake Erie Bill of Rights does not provide guidance for conflicting interests. Its opponents argued that the Lake Erie Bill of Rights has extended beyond its lawful scope—conflicting with state, federal, and even foreign laws, as the Canadian jurisdiction is within the Lake's watershed. ²¹⁹

The city's power to enforce the Lake Erie Bill of Rights was suspended with Judge Zouhary's grant of a preliminary injunction on March 18, 2019.²²⁰ On the same day, attorneys representing Toledoans for Safe Water and the Lake Erie Ecosystem filed to intervene, and separately, to dismiss the case.²²¹ Although the Supreme Court allowed the State of Ohio to intervene in support of the plaintiffs,²²² intervention for the defendant was denied.²²³ The representing attorneys failed to secure a motion to stay the proceedings²²⁴ until they had appealed this decision,²²⁵ which, ultimately, the Sixth Circuit Court

^{217.} TOLEDO, OHIO, *supra* note 200, at § 257(a).

^{218.} U.S. CONST., amend XIV.1.

^{219.} Plaintiff's Complaint, *supra* note 213, at 19–21.

^{220.} Preliminary Injunction Order, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{221.} Peggy Kirk Hall, *Ohio Agricultural Law Blog - Case Watch: The Lake Erie Bill of Rights Lawsuit*, OHIO AG L. BLOG (Mar. 28, 2019), https://farmoffice.osu.edu/blog/thu-03282019-1220pm/ohio-agricultural-law-blog-case-watch-lake-erie-bill-rights-lawsuit.

^{222.} Order Granting Motion to Intervene, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{223.} Order Denying Motion to Intervene, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ). Note where the Court reiterated that the Lake Erie Ecosystem could only intervene in the Lucas County Court of Common Please, thus lacking standing for the federal division. If this interpretation holds, it would curtail the right to appeal (and, perhaps, the right of due process under the Constitution).

^{224.} Order Denying Motion to Stay, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{225.} Notice of Appeal, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

of Appeals rejected.²²⁶ The city has invoked 16 legal defenses ²²⁷ and has filed to cross-motion since the Drewes and the State's lodging of motions for a judgment on the pleadings. While the State of Ohio contends that the rights of nature model is conceptually incompatible, claiming that "indistinct harms are in direct conflict with state and federal law,"228 the city, ironically, alleges indistinct harm in a different sense—that its lack thereof, or speculative, theoretical basis could not fulfil the defendants' standing requirements.²²⁹ As the relatively passive actor in the amendment process, the city argues that its actions could not be traced to the harm alleged, even if it were shown that harm was imminent. Indeed, it proceeded to reframe the Lake Erie Bill of Rights's ambiguity in its own favor. On the city's interpretation, the Lake Erie Bill of Rights did not remove legal defenses; it merely concluded that existing legality could not conclusively establish a defense, 230 while the Bill's incorporation of state laws 231 meant that the Lake Erie Bill of Rights did not directly supplant state authority but merely augmented its environmental protections.²³²

Whether the Drewes, non-residents of Toledo and Lucas County, will be able to defeat a citizens' initiative remains to be seen. Three of those citizens, meanwhile, filed for an injunction in the County Court in June 2019, seeking to block the State's limitation of the Lake Erie Bill of Rights. Concurrently, corporate influences made their presence known, with a last-minute amendment from the Chamber of Commerce to the biannual Budget Bill, which contained the following:

Nature or any ecosystem does not have standing to participate or bring an action in any court of common pleas.

^{226.} Ellen Essman, *Case Watch: LEBOR and Lake Erie Battles Linger*, OHIO AG L. BLOG (Aug. 1, 2019), https://farmoffice.osu.edu/blog/thu-08012019-928am/ohio-ag-law-blog%E2%80%94case-watch-lebor-and-lake-erie-battles-linger.

^{227.} Defendant's Answer to Plaintiff's Complaint, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{228.} State of Ohio's Motion for Judgment on the Pleadings, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{229.} Cross Motion to Plaintiff's Motion for Judgment of the Pleadings, Drewes Farms Partnership v. City of Toledo (N.D. Ohio 2019) (Civ. No. 3:19-cv-00434-JZ).

^{230.} Id. at 15.

^{231.} TOLEDO, OHIO, *supra* note 200, at § 257(b).

^{232.} Cross-motion to Plaintiff's Motion for Judgment of the Pleadings, supra note 229, at 19.

^{233.} Bill Lyons, Exposed: Chamber of Commerce Uses Ohio Representative as Conduit to Undermine Rights of Nature in Ohio, THE COLUMBUS FREEPRESS (Sept. 29, 2019), https://columbusfreepress.com/article/exposed-chamber-commerce-uses-ohio-representative-conduit-undermine-rights-nature-ohio.

No person, on behalf of or representing nature or an ecosystem, shall bring an action In any court of common pleas.²³⁴

Having since been signed into law by Governor DeWine, the provision may well act as a legislative bar to judicial claims on behalf of the lake, although this, too, may be challenged. Curiously, the new budget establishes "H2Ohio," a water quality initiative endowed with \$172 million (USD) to tackle Lake Erie pollution and support initiatives towards its protection.²³⁵ Clearly, the Lake Erie Bill of Rights has been taken seriously, as the State's renewed efforts and reassertion of its right to regulate dually appears affected citizens who have been deprived of the rights protected by the Bill and defends against the claims of ineffective and reckless governance which, in the opinion of many Toledoans, necessitates its protection. With opposition in judicial, legislative and executive branches of government, the Lake Erie case demonstrates the breadth of difficulties that may be encountered in rights of nature claims. The backlash to rights of nature in the U.S. is also being played out at the constitutional level, as human opponents invoke their own constitutional rights in resistance to the rights of nature.

WATER RIGHTS AND LEGAL RIGHTS FOR RIVERS IN MEXICO

I. Water Law Frameworks in Mexico

Mexico has 120 million inhabitants²³⁶ spread across 33 federated states covering 197.3 million hectares of territory.²³⁷ There is huge variance in the standard of living of its inhabitants. While Mexican gross domestic product is among the 15 highest in the world, 43.6 percent of Mexicans (some 53.4 million people) live in poverty.²³⁸ Mexico has dramatically low rates of human access to water and sanitation according to international standards.²³⁹

^{234.} State of Ohio House Bill 166 § 2305.011 (2019).

^{235.} Andrew J. Tobias, *Ohio Gov. Mike DeWine Signs State Budget Bill; Nixes 'Price Transparency' Measures*, CLEVELAND (July 18, 2019), https://www.cleveland.com/open/2019/07/ohio-gov-mike-dewine-signs-first-budget-bill.html.

^{236.} POBLACIÓN, https://www.inegi.org.mx/temas/estructura/ (last visited Sept. 25, 2019).

^{237.} REFERENCIAS GEOGRÁFICAS Y EXTENSIÓN TERRITORIAL DE MÉXICO, https://www.inegi.org.mx/inegi/spc/doc/internet/1-

geografiademexico/man_refgeog_extterr_vs_enero_30_2088.pdf (last visited Sep 25, 2019).

^{238.} ANEXO ESTADÍSTICO DE PROBREZA EN MEXICO, https://www.coneval.org.mx/Medicion/MP/Paginas/AE_pobreza_2018.aspx (last visited Sept. 25, 2019).

^{239.} United Nations Human Rights Council, Report of the Special Rapporteur on the human rights to safe drinking water on his Mission to Mexico 6 (2017).

There is also massive diversity in the natural environment in Mexico, with a large number of biological species, ecosystem variability and different climatic conditions across the country. Rainfall conditions range from 500 mm per year in drought-affected areas to 20,000 mm per year in humid areas. The rivers of Mexico form a hydrological network 633 kms long with more than 50 main rivers and 653 aquifers. However, Mexico's rivers are often overallocated to productive uses, and rivers and lakes close to urban areas experience high levels of pollution. Data from the *Comisión Nacional del Agua* [National Water Commission] suggests that water take is up to 1.8 times the renewable rate in Mexico, and local water authorities are reputed to be ineffective.

Mexico is a federated republic and follows the civil law tradition.²⁴⁵ Power is distributed across three branches of government of equal power (legislative, executive and judicial) at three levels (federal, state and municipal).²⁴⁶ The *Constitución Política de los Estados Unidos Mexicanos* [Political Constitution of the United States of Mexico] (Mexican Constitution)²⁴⁷ is the supreme constitutional law for the national federation²⁴⁸ and sets out the overarching constitutional framework and human rights protections.²⁴⁹ The Mexican Constitution also includes a number of provisions with respect to water.²⁵⁰ Article 27 confirms national ownership or dominium over water and waterways under federal administration,²⁵¹ and article 115 requires municipalities to provide access to water, sanitation services and infrastructure as a public service within their geographical jurisdictions.²⁵² In Mexico's

^{240.} SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES, ATLAS DE AGUA EN MÉXICO: 2016 8 (2016).

^{241.} Id. at 51.

^{242.} See generally Secretaria de Medio Ambiente y Recursos Naturales, Reporte Hidrológico (2007).

^{243.} COMISION NACIONAL DEL AGUA, ESTADÍSTICAS DE AGUA EN MÉXICO 60 (2017).

^{244.} See Carlos A. López-Morales & Maria Azahara Mesa-Jurado, Valuation of Hidden Water Ecosystem Services: The Replacement Cost of the Aquifer System in Central Mexico, 9 WATER 571, 572 (2017).

^{245.} José María Serna de la Garza, Constitution of Mexico: A contextual Analysis 135–159 (2013).

^{246.} Id. at 1-18.

^{247.} Constitución Política de los Estados Unidos Mexicanos.

^{248.} *Id.* at art. 1. (establishing the hierarchy of laws in Mexico).

^{249.} SERNA DE LA GARZA, *supra* note 245, at 135–159.

^{250.} Constitución Política de los Estados Unidos Mexicanos.

^{251.} Id. at art. 27.

^{252.} Id. at art. 115.

complex regulatory regime for water, there are concurrent or dual powers to regulate and administer water between federal, state, and municipal authorities, together with specific requirements for states and municipalities to comply with federal laws.²⁵³

The National Water Commission is responsible for the regulation of "national waters,"²⁵⁴ with powers to grant water concessions in the public interest.²⁵⁵ This is done under the *Ley Nacional del Aguas* (National Water Law) and accompanying regulations,²⁵⁶ which govern the management and use of groundwater aquifers, the administration of hydrological policy, the authorization of water use via the allocation of water rights, and the prevention of water pollution.²⁵⁷

The Mexican Constitution provides that the federation is formed by free and sovereign states that are free to create their own constitutions and laws for their internal regulation as long as these laws do not contradict the Mexican Constitution. Accordingly, state governments may regulate the water within their territory but only those waters not considered to be "national waters." The National Water Law provides for coordination on certain activities between the federal, state and municipal governments. and enables the federal government to "assign" aquifers for regulation by states or municipalities, but in reality, there is no clear distinction between what are and are not national waters.

In practice, state-based water authorities regulate and support water delivery through municipal bureaucracies that manage water infrastructure, potable water supply, sewerage infrastructure, and

^{253.} Id. at art. 27.

^{254.} *Id.* at art. 27 para. 5. The section lists the national waters or waters under the administration and property of the Federal Government, such as lakes, rivers that cross state's borders, subsoil water, rivers that finish its trajectory in the Sea: those of rivers and their direct or indirect tributaries from the point in their source where the first permanent, intermittent, or torrential waters begin, to their mouth in the sea, or a lake, lagoon, or estuary forming a part of the public domain; those of constant or intermittent streams and their direct or indirect tributaries', 'those of springs that issue from beaches, maritime areas, the beds, basins, or shores of lakes, lagoons, or estuaries in the national domain; and waters extracted from mines and the channels, beds, or shores of interior lakes and streams in an area fixed by law'.

^{255.} Id. at arts. 27, 5, 3 XII.

^{256.} Ley de Aguas Nacionales art. 13 XVI, Diario Oficial de la Federación 1992.

^{257.} Id.

^{258.} Constitución Política de los Estados Unidos Mexicanos arts. 40, 41 & 124.

^{259.} *Id.* at art. 124.

^{260.} Ley de Aguas Nacionales art. 3 XXVIII, Diario Oficial de la Federación 1992.

^{261.} Id. at art. 3 VIII.

wastewater treatment.²⁶² In 1983, Article 115 of the Mexican Constitution was amended to transfer certain water-related powers from federal to state governments. While municipalities charge the public for water services, state and federal governments retain funding contributions for specified purposes, including the construction of infrastructure, reforestation or charges for the rights of use of water.²⁶³ As a result, municipalities have been given the "ultimate responsibility" for providing water and sanitation services to their residents, either directly or indirectly (through sub-contracting),²⁶⁴ and each state congress approves water tariffs and plans and allocates funding for water and sanitation infrastructure.²⁶⁵

The Mexican Constitution includes a number of human rights protections in its Article 4, within which there are guarantees of "third generation human rights," including environmental rights protections. Amongst the rights recognized in Article 4 is the human right to water and sanitation, ²⁶⁶ worded similarly to the *United Nations General Assembly Resolution on the Human Right to Water and Sanitation*, ²⁶⁷ although it does not define measures for provision or implementation. ²⁶⁸ Article 4 provides:

All people have the right to a healthy environment for their development and wellbeing. The State will guarantee the respect of this right. Those who cause environmental damage and deterioration will be responsible in terms prescribed by law.²⁶⁹

In 2007, the federal Judicial Power of Mexico²⁷⁰ declared that the right to an adequate environment, also enshrined in Article 4, encompasses two aspects: (1) an *erga omnes* (enforceable) right to sustainability and environmental preservation implying protection from damaging effects, and (2) the obligation of authorities to monitor,

^{262.} ANDRÉS MANUEL LÓPEZ OBRADOR, DECRETO LEY DE AGUAS DEL DISTRITO FEDERAL 44 (2006).

^{263.} Ley de Aguas Nacionales art. 9 XXIX, Diario Oficial de la Federación 1992..

^{264.} UNITED NATIONS HUMAN RIGHTS COUNCIL, *supra* note 239, at 5.

^{265.} ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, SÍNTESIS DE LOS ESTUDIOS TERRITORIALES DEL VALLE DE MÉXICO (2015).

^{266.} Constitución Política de los Estados Unidos Mexicanos art. 4.

^{267.} G.A. Res. 64/292, United Nations Resolution on the Human Right to Water and Sanitation (July 28, 2010).

^{268.} Lucero Radonic, Environmental Violence, Water Rights, and (Un) Due Process in Northwestern Mexico, 42 LATIN AM. PERSP. 27, 152 (2015).

^{269.} Constitución Política de los Estados Unidos Mexicanos art. 4.

^{270.} Suprema Corte de Justicia de la Nación, Semanario Judicial de la Federación y su Gaceta 996–997 (2007).

conserve and guarantee human rights.²⁷¹ In 2011, following the opinion of the Inter-American Court of Human Rights in the *Radilla* case,²⁷² the Mexican Supreme Court of Justice issued a landmark decision requiring the judiciary to uphold the compliance of domestic law with international human rights and directing the courts to favor whichever best protects the individual if the two should conflict.²⁷³ This means that the international right to water is also enforceable in Mexico to the extent that it provides more fulsome protection than domestic law.

In the Mexican legal system, constitutional norms are implemented via secondary laws, which detail rules and institutions for their implementation. To provide for the human right to water and sanitation, it was necessary to amend the National Water Law, still although are no secondary laws guiding implementation.²⁷⁴ A secondary law for the human right to water was proposed by Congress in 2015 but was opposed by civil society and environmental activists due to perceived concerns with legal irregularities and its impact on rural communities, indigenous peoples and other vulnerable populations.²⁷⁵ Some were concerned that the human rights discourse was being coopted to protect the rights of private interests and thereby prioritize the use of water for mining and energy.²⁷⁶

Mexico also has a rich Indigenous history, and almost 13 percent of the population self-identify as Indigenous.²⁷⁷ Their particular rights, including to their lands and territories, have been generally ignored since the arrival of and conquest by the Spanish Imperial Crown, although their interests are longstanding and fiercely defended. There is evidence of pre-colonial civilizations in Mexico dating from 1500

^{271.} Francisco Javier Camarena Juarez, *The Earth Charter as an Environmental Policy Instrument in Mexico: A Soft Law or Hard Law Perspective.*, in The Earth Charter, Ecological Integrity and Social Movements, 234 (Laura Westra & Mirian Vilela eds., 2014).

^{272.} Radilla Pacheco v. Mexico, Preliminary Objections, Merits, Reparation and Costs, Inter-Am. Ct. H.R. (Nov. 23, 2009).

^{273.} Id.

^{274.} STATEMENT BY MR. LEO HELLER, SPECIAL RAPPORTEUR ON THE HUMAN RIGHTS TO SAFE DRINKING WATER AND SANITATION AT THE 39TH SESSION OF THE HUMAN RIGHTS COUNCIL,

https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=23539&LangID=E (last visited Oct. 1, 2019).

^{275.} Videosanunciacion FPA, Centro Mexicano de Derecho Ambiental/Ley General de Aguas, YOUTUBE (Apr. 13, 2015), https://www.youtube.com/watch?v=MhJrI6aWu-c.

^{276.} Id.

^{277.} UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, STATE OF THE WORLD'S INDIGENOUS PEOPLES: INDIGENOUS PEOPLES ACCESS TO HEALTH SERVICES (2015).

BCE.²⁷⁸ The Aztec empire, in the central area of Mexico, flourished until around the fourteenth century, with its nucleus in the city of Tenochtitlan, which is now known as Mexico City.²⁷⁹ During the Spanish subjugation, pre-colonial groups were killed, displaced and dispossessed of their lands and culture. Some hid their culture and survived by accepting catholic evangelization and working for the Spanish Crown.²⁸⁰ Others retreated to or remained in isolated communities and conserved their languages and cultural ways of living for centuries.

Perhaps ironically, Indigenous Mexicans played an important part in independence from the Spanish Crown in 1821, fighting in various battles without recognition or reciprocal protection of their territories by the newly republican Government.²⁸¹ Later that century, the republican Government passed the Ley de Desamortizacion de bienes de Manos Muertas (Law of Confiscation of Properties from Dead Hands), known as the Ley Lerdo, which declared that the "empty" properties of Indigenous Peoples and the Catholic Church would be made available for privatization.²⁸² Consequently, 85 percent of land in the country was concentrated in only 1 percent of families, entrenching structural class difference.²⁸³ In the revolution of 1910, Indigenous groups fought to recover land stolen under the Ley Lerdo, yet it wasn't until 1915-1920 that the "indigenism" movement secured legal recognition of Indigenous land rights via the "ejido:"284 a constitutionally recognized rural or Indigenous community with collective land title and certain self-government rights via internal regulatory and decision-making power.²⁸⁵ In Mexico there are now almost 32,000 ejidos distributed across 100,000 hectares.²⁸⁶

^{278.} ALFREDO BARRERA-VÁSQUEZ ET AL., HISTORIA DOCUMENTAL DE MÉXICO 1 (2019).

^{279.} INPI, *Indicadores Socioeconómicos de los Pueblos Indígenas de México*, GOBIERNO DE MÉXICO (July 9, 2015), https://www.gob.mx/inpi/documentos/indicadores-socioeconomicos-de-los-pueblos-indigenas-de-mexico-2015.

^{280.} BERNAL DÍAZ DEL CASTILLO, THE DISCOVERY AND CONQUEST OF MEXICO (Farrar, Straus and Cudahy trans., H. Bulff ed. 1956).

^{281.} Id.

^{282.} VALENTINA EDUWIGES ESTRADA-GUEVARA, GOBERNANZA INTERCOMUNITARIA DEL AGUA PARA USO DOMÉSTICO EN LA REGIÓN HIDROPOLÍTICA: MUNICIPIOS DE LAS MARGARITAS Y MARAVILLA TENEJAPA (2017).

^{283.} Marcela Gonzalez Rivas, Ethnolinguistic Divisions and Access to Clean Water in Mexico, 49 LATIN AMERICAN RSCH. REV. 129, 133 (2014).

^{284.} Constitución Política de los Estados Unidos Mexicanos art. 27.

^{285.} Id. at art. 27.

^{286.} J. Carlos Morett-Sánchez & Celsa Cosíio-Ruiz, *Panorama de los Ejidos y Comunidades Agrarias en México*, 14 AGRICULTURA, SOCIEDAD Y DESARROLLO 125, 127–128 (2017).

The Mexican Constitution confers powers on each of the 33 federated states to regulate Indigenous issues,²⁸⁷ but Indigenous territorial rights, and specifically *ejidos*, come within federal jurisdiction under the *Ley Agraria* (Agrarian law).²⁸⁸ Public water services on *ejido* lands are provided by the local municipality, but if the Indigenous communities wish to access water for other purposes, they must engage with the National Water Commission except in the case of streams or rivers within *ejido* lands, which the Indigenous authorities have autonomy and self-determination over for their own water regulation.²⁸⁹ The jurisdictional complexity is exacerbated by a common incidence of informal or customary water use and management agreements that are not readily ascertainable by governments.²⁹⁰

Although Mexico was one of the first countries to ratify the Convention Concerning Indigenous and Tribal Peoples in Independent Countries (No. 169) (ILO Convention 169),²⁹¹ the *ejidos* have not always been respected by local, state, and national governments and have in fact been subject to further encroachment and displacement, producing ongoing conflict between Indigenous groups and the Mexican government.²⁹² Restrictions on privatization of communal land were removed as early as 1920s under the Ley Lerdo, ²⁹³ leading to the gradual alienation of Indigenous lands.²⁹⁴ In 1994, Mexico negotiated the North American Free Trade Agreement (NAFTA), representing a shift from agrarian redistribution to a new market-focused approach²⁹⁵ in applying the World Bank's structural adjustment policies. However, Indigenous and rural communities fared worst in the reforms, with the highest levels of poverty and lowest levels of education, inadequate infrastructure, poor access to health services; in some cases, they were still used as slaves.²⁹⁶ As the

^{287.} Constitución Política de los Estados Unidos Mexicanos art. 2.

^{288.} Id. at art. 27.

^{289.} ESTRADA-GUEVARA, supra note 282.

^{290.} Id.

^{291.} International Labour Organization Convention, Convention Concerning Indigenous and Tribal Peoples in Independent Countries No. 169 28 ILM 1382 (1989) (entered into force 5 September 1991) (Convention 169).

^{292.} PABLO GONZÁLEZ CASANOVA ET AL., EL ZAPATISMO Y LOS DERECHOS DE LOS PUEBLOS INDÍGENAS 23 (2001).

^{293.} Ley de Desamortización de Bienes de Manos Muertas, Diario Oficial de la Federación (1920).

^{294.} *Id*.

^{295.} PABLO GONZÁLEZ CASANOVA ET AL., supra note 292, at 23.

^{296.} Id.

government focused on the private sector, Indigenous groups organized an insurgence in 1994 in the State of Chiapas called the *Ejército Zapatista de Liberación Nacional* (Zapatista Army of National Liberation).²⁹⁷

After years of conflict and negotiations between the Mexican government and the Zapatista Army, a peace agreement was reached between 1994 and 1998. The agreement led to the *Ley de Derechos y Cultura Indígena del Estado de Chiapas* [Indigenous Rights and Culture Law of the State of Chiapas] and, later, the recognition of some Indigenous rights in the Mexican Constitution.²⁹⁸ Articles 1, 2, 4, 18, and 115 of the Mexican Constitution were amended to recognize the pluricultural composition of the nation, the right to self-determination, the cultures and territories of Indigenous Peoples, and the authorities and ways of internal regulation of these groups.²⁹⁹ Nonetheless, poverty and disadvantage within Mexico is at its highest levels in Indigenous communities, and *ejidos* have the least secure access to potable water, with an estimated 21 percent of communities (1.5 million Indigenous people) without proper access to water and sanitation.³⁰⁰

II. Legal Rights for Rivers in Mexico: State-Based Constitutions and the Rights of Nature

Mexico has largely flown under the radar in terms of the rights of nature movement; however, following the U.S. tradition in recent years (and like similar developments in other parts of Latin America, including Ecuador, Bolivia, Argentina, Colombia),³⁰¹ there have been

^{297.} FRANCISCO LÓPEZ BÁRCENAS, LEGISLACION Y DERECHOS INDIGENAS EN MEXICO (2010); PABLO GONZÁLEZ CASANOVA ET AL., *supra* note 292.

^{298.} Ian Flannigan Sprague, Clarifying Limbo: Disentangling Indigenous Autonomy from the Mexican Constitutional Order, 8 PERSP. ON FEDERALISM 36 (2016); LEGISLACION Y DERECHOS INDIGENAS

EN MEXICO,

http://www.lopezbarcenas.org/files/escritos/legislacion_y_derechos_indigenas_en_Mexico.pdf (last visited June 6, 2019).

^{299.} BÁRCENAS, supra note 297.

^{300.} Lucero Radonic, Through the Aqueduct and the Courts: An Analysis of the Human Right to Water and Indigenous Water Rights in Northwestern Mexico, 84 GEOFORUM 151, 151–152 (2017).

^{301.} See, e.g., Corte Suprema de Justicia [C.S.J.] [Supreme Court], cinco de abril de dos mil dieciocho, Andrea Lozano Barragán, Victoria Alexandra Arenas Sánchez, Jose Daniel y Felix Jeffry Rodríguez peña y otros v. Presidente de la República y otros, (2018); Juan Luis Castro Córdoba and Diego Hernán David Ochoa v. Ministerio de Ambiente y Desarrollo Sostenible EPM, Hidroeléctrica Ituango et al., Tribunal Superior, Sala Cuarta Civil Medellin [Medellin State Superior Tribunal, Fourth Civil Court] (Colombia) (2019); Constitución de la República de Ecuador; Ley de Derechos de la Madre Tierra (Bolivia).

a number of declarations of legal rights for nature as part of constitutional human rights protections.

The first of these was in 2014, when the *Constitución Política del Estado de Guerrero* (Political Constitution of the State of Guerrero) (Guerrero State Constitution) was amended to insert the following new paragraph in Article 2:

The precautionary principle is the basis of economic development and the State must guarantee and protect the rights of nature in relevant legislation.³⁰²

Article 2 also provides for other overarching principles of constitutional importance including, "respect for life in all its manifestations." However, while other environmental rights, like the right to live in a clean and healthy environment and the right to water, are elaborated in specific provisions of the Guerrero Constitution, the right to nature enjoys no similar extension.

The Guerrero rights for nature provision was spearheaded by local political candidates who encouraged a number of congressional commissions on Environment, Indigenous Issues, Migration and Rural Development to propose the initiative. Yet the rights of nature alluded to in Article 2 are not mentioned in any other laws in the State of Guerrero. For example, the *Ley de Equilibrio Ecológico y Protección al Ambiente* (Law of Ecological Equilibrium and Protection of the Environment) makes no mention of the precautionary principle or the rights of nature.

The second Mexican State to recognize the rights of nature in its constitution is the newly-formed State of Mexico City. Almost 9 million inhabitants live in the State of Mexico City, 306 at the center of the Metropolitan zone of the Mexican Valley, comprising 60 municipalities and 20 million people in total. 307 The City was renamed from the previous *Distrito Federal* in 2017 and its status elevated from federal

^{302.} Constitución Política del estado de Guerrero art. 2 (Constitution of the State of Guerrero).

^{303·} Id.

^{304.} José Gilberto Garza Grimaldo, *Los Derechos de La Naturaleza En México*, 1 REVISTA MEXICANA DE CIENCIAS AGRÍCOLAS 181 (2015).

^{305.} Ley de Equilibrio Ecológico y Protección al Ambiente del Estado de Guerrero (Law of Ecological Equilibrium and Environmental Protection for the State of Guerrero).

^{306.} NÚMERO DE HABITANTES. CIUDAD DE MÉXICO, http://cuentame.inegi.org.mx/monografias/informacion/df/poblacion/ (last visited Jun 10, 2019).

^{307.} Organization for Economic Coppoeration and Development, supra note 265.

territory to federated state.³⁰⁸ As an autonomous state, Mexico City has power to create its internal laws following the usual hierarchical order (with the Constitution at the top).³⁰⁹

The reform of the Mexican City Constitution developed from 2012 to 2018, led by Governor Miguel Angel Mancera. 310 The new Constitution evolved out of a three-year consultation process, unprecedented in the Mexican context, involving 500 meetings and dialogues with civil society and the participation of external advisors and local and international actors.³¹¹ This process was propelled forward by the right to public participation in Article 26 of the federal Mexican Constitution,³¹² which encourages states and municipal entities to similarly intensify their public consultation efforts. During the transition from Distrito Federal to Mexico City State, the idea of a progressive and innovative Constitution for the new State attracted participants to the consultation sessions, where they shared their aspirations for the City in light of the social and environmental challenges it faced. 313 Eventually, the Constitución Política de la Ciudad de México [Political Constitution of the City of Mexico] (Mexico City Constitution), approved in 2016, inserted new language into its human rights protections, including a number of new environmental rights.³¹⁴ These included the right to a clean and healthy environment in Article 13(1):

All people have the right to a healthy environment for their development and wellbeing. The authorities must adopt necessary measures, within their functions, for the protection of the environment and the preservation and restoration of ecological equilibrium, with the objective of satisfying environmental requirements for the development of present and future generations.³¹⁵

^{308.} Constitución Política de los Estados Unidos Mexicanos art. 44.

^{309.} Constitución Política de los Estados Unidos Mexicanos arts. 1, 44.

^{310.} UNIDAD PARA LA REFORMA POLÍTICA DE LA CDMX, RAZONES Y AVANCES: CONSTITUCION CIUDAD DE MÉXICO 2–5 (2016).

^{311.} Id.

^{312.} CONSTITUCIÓN POLÍTICA DE LOS ESTADOS UNIDOS MEXICANOS art. 26. This article provides that the Government will establish participatory processes to identify the aspirations and needs of society and incorporate them into the Federal administration's development plans and programs.

^{313.} UNIDAD PARA LA REFORMA POLÍTICA DE LA CDMX, *supra* note 310, at 7–15.

^{314.} Recent regulatory reforms include gender rights, use of marihuana for medical purposes, internal migration, sustainable mobility, animal rights and rights to nature, among others.

^{315.} Constitución Ciudad de México art. 13.

Article 13 continues at paragraph (2) to promote citizen participation in the protection of environmental rights and at paragraph (3) to refer to the rights of nature as a legal subject:

For the fulfilment of this disposition [the right to a healthy environment] a secondary law will be passed with the objective of recognising and regulating the broad protection of the rights of nature and all its ecosystems and species as a collective entity legal subject.³¹⁶

The Mexico City Constitution entered into force in September 2018, and by the end of that year, it was already subject to seven constitutional challenges before the Superior Tribunal of Justice in Mexico City. The challenges covered a range of topics from the use of cannabis for medicinal purposes to transgression into federal matters. One of these challenges alleged the violation of federal power to regulate water, which the Superior Tribunal of Justice denied on the basis that water is a human right, the realization of which is the obligation of all levels of government. Stephanology in the superior Stephanology in the obligation of all levels of government.

Like the State of Guerrero, there is still no secondary law in the State of Mexico City to elaborate fully on the protection of the rights of nature. Mexico City does have two secondary laws dealing with environmental matters. The first of these is the *Ley Ambiental de Protección a la Tierra* [Environmental Law for the Protection of the Earth] (Environmental Law for the Protection of the Earth), which changed its name from simply the "Environmental Law" to the more ecocentric title referring to the protection of the Earth in 2000.³²⁰ Ecocentric language was inserted into other parts of the Environmental Law for the Protection of the Earth, including article 86 bis 1:

The Earth is a living and dynamic system formed by the indivisible community of all life systems and living beings, interrelated, interdependent and complementary, that share a common destiny.³²¹

^{316.} Id. at art. 13.A.3.

^{317.} LEYES SECUNDARIAS PUEDEN FRENAR LA CONSTITUCIÓN,

https://www.eluniversal.com.mx/metropoli/cdmx/leyes-secundarias-pueden-frenar-laconstitucion (last visited June 10, 2019).

^{318.} SE SUMA EL SENADO A LAS 'QUEJAS' CONTRA CONSTITUCIÓN DE LA CDMX, https://www.elfinanciero.com.mx/nacional/se-suma-el-senado-a-las-quejas-contra-constitucion-de-la-cdmx (last visited June 10, 2019).

^{319.} ACCIÓN DE INCONSTITUCIONALIDAD CONTRA CONSTITUCIÓN CIUDAD DE MÉXICO, https://www.scjn.gob.mx (last visited June 10, 2019).

^{320.} Grimaldo, supra note 304.

^{321.} Ley Ambiental de Protección a la Tierra del Distrito Federal art. 86 (2000).

There are a number of other progressive elaborations of the Earth's interests and human obligations towards the Earth in Article 86 bis, even referring to the perspectives of Indigenous Peoples.³²² Article 86 bis 2 provides that in order to protect natural resources, the Earth will adopt the character of a "collective entity subject to the protection of the public interest,"³²³ in language very close to the idea of the "legal subject" or "legal person." The inhabitants of Mexico City are charged with a number of responsibilities towards the Earth, including keeping it alive, maintaining its diversity, conserving its water, keeping it clean, maintaining its ecological equilibrium, restoring its ecosystems, and freeing it from pollution.³²⁴

However, the Environmental Law for the Protection of the Earth is still an anthropocentric statute, defining natural resources as "natural elements suitable for beneficial use by people." In terms of water, although 2017 amendments added principles for "resilience" in the use, management and infrastructure for the consumption of water, 326 the Law facilitates the sustainable exploitation of water for human use, within the broader, federal water regulation. Despite its name, therefore, the Environmental Law for the Protection of the Earth lacks clear rules and institutions to implement and guarantee the rights of nature.

The other secondary environmental law in the State of Mexico City is the new *Ley Constitucional de Derechos Humanos y sus Garantías de la Ciudad de México* (Constitutional Law for the Human Rights and Guarantees of Mexico City). However, despite being the secondary law concerned with the human rights protections in Article 13 of the Mexico City Constitution, the Constitutional Law for the Human Rights and Guarantees of Mexico City does not mention the rights of nature at all. Chapter VIII of the Law, entitled "Livable City," guarantees the right to a clean environment and specifically recognizes certain rights for animals; however, there is no reference to

^{322.} Id. at art. 56.

^{323.} *Id*.

^{324.} Id. at art. 86.

^{325.} Id. at art. 5.

^{326.} Ley Ambiental de Protección a la Tierra del Distrito Federal art. 5, art. 9.IV, art. 9.XXIX, art. 9.LIII, art. 10.IV, art. 13, art. 22, art. 23 & art. 106 (2017).

^{327.} Ley Ambiental de Protección a la Tierra del Distrito Federal art. 4 & art. 5 (2000).

^{328.} Decreto de la Ley de Derechos Humanos y Garantias de la Ciudad de Mexico (2019).

^{329.} Ley Ambiental de Protección a la Tierra del Distrito Federal arts. 94-100 (2000).

^{330.} Decreto de la Ley de Derechos Humanos y Garantias de la Ciudad de Mexico art. 94 (2019).

a broader protection of the rights of nature as a legal subject. ³³¹ It is hard to view this as anything other than a deliberate omission, given the temporal proximity of the Constitutional Law for the Human Rights and Guarantees of Mexico City and the Mexico City Constitution, and the extensive general wordiness of the former. If neither current secondary law provides for the rights of nature, it may be that a secondary law is pending. Yet, the political landscape is uncertain, as Mexico City enters a new administration with its own priorities for 2019 to 2025, and there has recently been a change of Federal Government.

There is yet one further State Constitution to recognize the rights of nature in Mexico. In June 2019, the Congress of the State of Colima passed an amendment to incorporate a protection of the legal rights of nature in the *Constitución Política del Estado Libre y Soberano de Colima* (Political Constitution of the Free and Sovereign State of Colima) (Colima State Constitution).³³² The reform proposal began, rather dramatically, by declaring that "humanity and nature are not in harmony."³³³ The document proposed a new Chapter for the Colima State Constitution on "The Rights of Humans and of Nature." Within this, Article 1 Ter provided:

"Nature is a living organism, where life is created and reproduced, upon which depends the survival and quality of life of human beings and all other living things that coexist within her, for which she has the right for her existence to be respected, for the restoration and regeneration of her natural cycles, and for the conservation of her structure and ecological functions." 334

The proposed amendments to the Colima State Constitution, curiously, have been modelled very closely on the 2008 Ecuadorian Constitution.³³⁵ As explained, the Constitution of Ecuador is often credited with the origins of the modern rights of nature movement, although commentators are increasingly critical of the perceived failures of the Ecuadorian model,³³⁶ and recent rights for nature developments have found their inspiration elsewhere, in particular in

^{331.} Id.

^{332.} Iniciativa con Proyecto de Decreto para Adicionar los Derechos de la Naturaleza (2019) (amendment to the State of Colima's state constitution).

^{333.} Id.

^{334.} Id.

^{335.} Constitución de la República de Ecuador arts. 71-72 (2008).

^{336.} Clark, supra note 19, at 797–800; see generally Craig M. Kauffman & Pamela L. Martin, Can Rights of Nature Make Development More Sustainable? Why Some Ecuadorian lawsuits Succeed and Others Fail, 92 WORLD DEV. 130–142 (2017).

Aotearoa New Zealand and Colombia.³³⁷ Nonetheless, the Colima proposal adopted, almost wholesale, large tracts of the rights of nature provisions in Articles 71 to 74 of the Ecuadorian Constitution.³³⁸ This included the anthropocentric entitlement that "people and communities have the right to benefit from the environment and natural riches to allow them to live with dignity."³³⁹ The paradox inherent in the concept of *buen vivir* (living well) in the poorly implemented Ecuadorian and Bolivian Constitutions has highlighted the difficulty of enabling both sustainability and development where nature and humans compete for rights.³⁴⁰

The amendment was passed in August 2019, incorporating environmental rights into the Colima Constitution and recognizing the rights of nature as follows:

Nature, comprised of all its ecosystems and species as a collective legal subject, must be respected in its existence, in its restoration and in the regeneration of its natural cycles, together with the conservation of its ecological structure and functions, as established by law.³⁴¹

The Colima Constitution also emphasizes the public interest in protecting the rights of nature, reducing the potential for conflict between the rights of nature and the rights of people, providing:

Biodiversity, natural ecosystems, genetic heritage and native species are public goods of the public interest, to be used in accordance with law; their protection, preservation and recuperation is a shared responsibility for the public, private and social sectors.³⁴²

In a very recent judgment of the Supreme Court of Mexico concerning the Laguna El Carpintero mangrove in the State of Tamaulipas, the Court elaborated on the connection between human rights and environmental rights in the Mexican constitutional context. In that case, the Court found that the human right to a healthy environment under Article 4 of the Mexican Constitution has two dimensions. One of these dimensions is the typical anthropocentric objective of guaranteeing the rights of humans. However, the other dimension seeks to protect the environment as a legal subject for its own intrinsic value, requiring the active defense and restoration of

^{337.} MACPHERSON, supra note 15, at 222.

^{338.} Constitución de la República de Ecuador (2008).

^{339.} Iniciativa con Proyecto de Decreto para Adicionar los Derechos de la Naturaleza (2019) (amendment to the State of Colima's state constitution).

^{340.} Haidar, supra note 30.

^{341.} Constitución Política del Estado Libre y Soberano de Colima art. 2.IX(a) (2017).

^{342.} Id.

nature.³⁴³ The court reached this analysis with reference to an advisory opinion of the Inter-American Court of Human rights in relation to environmental and human rights,³⁴⁴ which recognizes the autonomous status of the human right of a healthy environment as a legal interest in and of itself, "even in the lack of certainty or evidence of the risks to individual people,"³⁴⁵ due to the potential impact of environmental damage other living organisms.³⁴⁶

Although the recent proliferation of constitutional rights of nature protections in various Mexican states suggests potential for enhanced protection of nature by trumping existing environmental laws, the constitutional declarations lack detail and elaboration. Without clear rules and institutions for their implementation, and in the presence of strong competing interests and existing entrenched regulatory frameworks, they are vulnerable to opposition or irrelevance.

III. Legal Rights for the Magdalena River

The Magdalena River is the last "living" river in Mexico City.³⁴⁷ It begins over 3000 meters above sea level in the mountain range called *Sierra de las Cruces* in the National Park *Los Dinamos* and crosses four municipal boundaries until being subsumed into the water infrastructure of the capital.³⁴⁸ One-fifth of the river's flow is consumed as urban water supply for the metropolitan area of Mexico City, with the rest being captured by the wastewater and sewage systems.³⁴⁹ In pre-Colonial times, three rivers and various lakes provided water to the great Tecnochtitlan—the Aztec capital.³⁵⁰ However, the development of large agricultural landholdings (*haciendas*) near these waterbodies brought new settlements and, eventually, urbanization. In conjunction with urbanization, the rivers were canalized alongside highways and

^{343.} Supreme Court de Justicia de la Nación 2018, Vecinos Laguna del Carpintero v. Presidente Municipal de Tampico Tamaulipas y otros.

^{344.} Medio Ambiente y Derechos Humanos Opinion Consultiva, Advisory Opinion OC-23/2017, Inter-Am. Ct. H.R. (Nov. 15, 2017).

^{345.} Id. at 62.

^{346.} *Id.* at 62.

^{347.} BIBIANA MONSIVAIS MONTOLIU & FRANCESC MAGRINYÀ, PROGRAMA DE RESCATE INTEGRAL DEL RÍO MAGDALENA EN MÉXICO DISTRITO FEDERAL 37 (2014).

^{348.} Id. at 40-2.

^{349.} Id. at 40-2.

^{350.} SECRETARIA DEL MEDIO AMBIENTE GOBIERNO DEL DISTRITO FEDERAL, PROGRAMA DE RESCATE INTEGRAL DE LOS RÍOSE MAGDALENA Y ESLAVA (2012).

buildings, leaving the Magdalena clean and free only in the first fifth of its extension.³⁵¹

The quality of the Magdalena River within the urban area is assessed as "bad" according to federal regulations for minimum standards on water supply for human consumption.³⁵² Water quality is compromised by unregulated economic activities like tourism and extensive cattle raising along the river.³⁵³ During the rainy season, lowlying areas of the river flood, prompting urgent, partial responses every vear.³⁵⁴ Between 2006 and 2012 a number of academic institutions and government agencies gathered with the aim of rescuing the Magdalena River and its tributary, the Eslava River. Since 2006, a coalition of government and civil society have developed an "Integral Rescue Program" for the Magdalena and Eslava Rivers, 356 in conjunction with the City's Procuraduría Ambiental y de Ordenamiento Territorial (Administrative Omudsman for Environment and Management).³⁵⁷

Local groups and rural communities opposed the Rescue Program for the Magdalena river in the early stages of its implementation, as they were concerned about the construction of a sewage water treatment plant in Alvaro Obregón, reforestation and gardens in Chimalistac, and the construction of water infrastructure in the Magdalena.³⁵⁸ In response to this opposition, the Government changed its strategy and opened up consultation, information and education around the Rescue Programme and sought to develop "nucleos agrarios," or rural communities, as legitimate agents for the defense of Magdalena River via a collaborative model.³⁵⁹ Alluding to legal person models, the communities would become the "guardians" of the river, to uphold and protect the river's rights.³⁶⁰

^{351.} MONTOLIU, *supra* note 347, at 42-5.

^{352.} Id. at 45.

^{353.} Id. at 40-2.

^{354.} RÍO MAGDALENA, LUCHANDO POR SU PRESERVACIÓN, https://www.aztecauno.com/desafio/videos/capitulos/rio-magdalena-luchando-por-su-preservacion/429541 (last visited June 11, 2019).

^{355.} SECRETARIA, supra note 350.

^{356.} Id.

^{357.} Id.

^{358.} Id. at 72.

^{359.} MONTOLIU, *supra* note 347, at 74-6.

^{360.} Daniel F Robinson & Nicole Graham, Legal Pluralism, Justice and Spatial Conflicts: New Directions in Legal Geography, 184 GEOGRAPHICAL J. 3 (2017).

Between 2014 and 2016, as Mexico City developed a proposal for a new and innovative constitution, the rights of nature, or, more specifically, the plan to rescue the Magdalena river, won space into the discourses of civil society.³⁶¹ This coincided with the Foro Mundial de los derechos de la Madre Tierra (World Forum for the Rights of Mother Earth) held in Mexico City in 2016, bringing together politicians, scientists, philosophers, ecologists, artists, and social leaders with the ultimate goal of legislating for the rights of Mother Earth.³⁶² One of the outcomes of this forum was the suggestion of an amendment to the Mexican Constitution to protect the rights of nature.³⁶³ Although difficulties were perceived at a national level,364 2018 saw a change of government in Mexico City. Its Legislative Assembly gave new impetus to the restoration of the Magdalena River, 365 drawing on urban community sentiment about the loss of the river's natural heritage, 366 which was widely considered to be an undervalued element of the urban space.³⁶⁷

Activism around the Magdalena River in fact drove the inclusion of the rights of nature in the Mexico City Constitution in 2018, and the Earth Law Centre (the same NGO involved in rights for nature claims in the U.S.) continues to work with local organizations and citizens to advocate for the rights of the Magdalena River, as well as the Atoyac River in the State of Puebla and the San Pedro Mezquital River in the State of Duranto.³⁶⁸ However, despite the strong Indigenous

^{361.} Primer Foro Mundial por los Derechos de la Madre Tierra, https://worldconsciouspact.org/es/destacado/primer-foro-mundial-los-derechos-la-madre-tierra/ (last visited May 28, 2021).

^{362.} See generally The Rights of Nature, First International Forum for the Rights of Mother Earth (2016).

^{363.} Id. at 2.

^{364.} CONSTANZA PRIETO FIGELIST, LINEAMIENTOS GENERALES DEL PROYECTO DE LEY QUE CONCEDERÍA PERSONALIDAD JURÍDICA AL RÍO MAGDALENA, CIUDAD DE MÉXICO 1 (2017).

^{365.} GACETA PARLAMENTARIA, http://aldf.gob.mx/gaceta-parlamentaria-903-1.html (last visited May 28, 2021).

^{366.} Manuel Perló Cohen & Itzkuauhtli Zamora Saenz, Perspectivas Ambientales sobre la Contaminación y la Recuperación del Río Magdalena en la ciudad de México, 33 REVISTA INTERNACIONAL DE CONTAMINACIÓN AMBIENTAL 377 (2017).

^{367.} Arsenio Ernesto González Reynoso, Universidad Nacional Autónoma de México & Programa Universitario de Estudios sobre la Ciudad, *Plan Maestro de Manejo Integral y Aprovechamiento Sustentable del río Magdalena, in* RESCATE DE RÍOS URBANOS: PROPUESTAS CONCEPTUALES Y METODOLÓGICAS PARA LA RESTAURACIÓN Y REHABILITACIÓN DE RÍOS 82–103 (2010).

^{368.} Darlene Lee, *Mexico on the Vanguard for Rights of Nature*, EARTH L. CTR. (Nov. 21, 2017), https://www.earthlawcenter.org/blog-entries/2017/11/mexico-on-the-vanguard-for-rights-of-nature.

population in Mexico and their existing constitutional protections, the voices of Indigenous Peoples are conspicuously silent in the Mexican rights of nature debate.

It is apparent from the Mexican developments that local organizations and individuals are pushing a rights of nature agenda in reaction to governmental apathy and inefficient protection of rivers and ecosystems. However, if states are to be compelled to comply with their environmental obligations, it will require more than a change in language, and it is critical that local water users (including Indigenous Peoples) drive the shift. In highly contested spaces where environmental, social and economic interests coexist, effective institutions and mechanisms will ultimately be needed to implement the rights of nature and protect vulnerable waterways and ecosystems. Within an anthropocentric legal system, the absence of supporting regulatory detail leaves the rights of nature isolated and potentially powerless in its defense.

CONCLUSION

Rights of nature activism has developed around efforts to protect vulnerable waterways in both the U.S. and Mexico. Despite the clear (and increasing) legal, political and social differences between the American and Mexican federations, there are some interesting common lessons from the experiences of both countries. Where and natural existing environmental resource laws within anthropocentric Western legal frameworks have failed to adequately protect aquatic ecosystems, local communities are increasingly appealing to courts and legislatures for a more transformative protection of nature. These are desperate attempts to prevent or reverse environmental damage, by trying to trump hegemonic legal frameworks, perceived to be ineffective or captured by competing interests. In order to do so, communities leverage human rights protections and their enhanced constitutional status, which offers potential to override other regulatory frameworks. However, competing interests have also, at times, invoked constitutional protections to resist the rights of nature.

The U.S. experience has played out in two distinct ways. First, local communities have managed to secure fairly expansive rights of nature protections in local government ordinances or local "Bills of

Rights,"³⁶⁹ especially in a context of concern about water, seemingly "flying under the radar." Yet, the legal force of such local government declarations of the rights of nature is uncertain, and they are unlikely to be able to compete with more secure rights for other water users under state or federal laws, let alone the U.S. Constitution. More ambitious attempts to secure legal rights for the Colorado River—via the court—and Lake Erie—in the State legislature—have been fiercely resisted, and opponents of the rights of nature have mobilized constitutional protections against local communities and environmental activists.

In Mexico, the rights of nature have been protected in the constitutions of various states by adding to existing human rights norms. The Mexican case, therefore, appears to hold more promise, as the rights of nature may, in fact, be able to trump other interests via their constitutional status. However, the wording of the Mexican nature protections is broad and aspirational, lacking detail around funding and institutions. Whether these broad declarations in fact disrupt existing legal frameworks for the regulation of lakes and rivers is yet to be seen. There is movement towards the recognition of the legal rights of the Magdalena River, but the courts have not yet recognized any specific river to be a legal subject or person in Mexico.

Recent efforts to protect the rights of rivers in the U.S. and Mexico, despite their contextual variance, are novel and emerging attempts to discover new pathways for enhanced protection of vulnerable waterways in the face of increasing environmental degradation, biodiversity loss and climate change. These attempts are being pragmatically driven from the bottom up to the highest levels of the legislature or judiciary using whatever legal tools and processes are available to local communities (and sometimes Indigenous Peoples) as they become increasingly frustrated with apathetic and complacent governmental responses to environmental challenges. However, rather than an Earth-centred revolution, efforts to protect the rights of nature are distinctly "human," as communities appeal to human rights laws, and their enhanced constitutional status, to upset the status quo. There are important lessons to be learned from these experiences in other countries, in terms of the ability to entrench transformative environmental protections via constitutional hierarchies and the

^{369.} Since the writing of this article, in November 2020, A further municipal "Wekiva River and Econlockhatchee River Bill of Rights" was passed by Orange County, Florida to recognise the rights of all rivers in the region.

potential for the rights and interests of humans to be both an enabler of, as well as a threat to, nature's rights.