Attempting to Define the Human Right to Water with an Annotated Bibliography & Recommendations for Practitioners*

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ABSTRACT

This Article investigates research issues related to the right to water, attempts to define and narrow the scope of the human right to water, and suggests research methodologies. Specifically, this Article provides a definition of the human right to water and identifies the difficulties of researching the human right to water. Next, it delineates international principles and other mechanisms that can be useful in protecting individuals and people affected by water issues, including quantity, quality, and access. Then, it selectively reviews current literature and domestic laws that provides some useful starting points for contemporary legal research on the human right to water. This Article concludes by offering recommendations for researchers and practitioners.

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Introduction

Countries, small and large, developed and developing, all have issues relating to water quality, quantity, and access. These issues require immediate and efficient solutions because of water's critical importance to human health, life, and dignity. A lack of water can lead to death from dehydration, as well as other serious diseases and risks, including diarrhea, arsenicosis, fluorosis, schistosomiasis, helminthiasis, malaria, legionellosis, and trachoma. Women, children, minority groups, indigenous peoples, refugees, and prisoners are the most vulnerable to water-related problems.

Goal 7.C of the Millennium Development Goals ("MDGs"), based on the United Nations Millennium Declaration ("Millennium Declaration"),⁴ set a target to reduce by half the number of people without sustainable access to safe drinking water and basic sanitation by 2015.⁵ The Millennium Declaration's overall target was reached in 2010, and a total of 2.6 billion people gained access to improved water sources between 1990 and 2015.⁶ However, there was a serious disparity in progress among regions. The goal was not fully reached in

^{1.} Committee on Economic, Social & Cultural Rights [CESCR], General Comment No. 15 (2002): The Right to Water (Arts. 11 and 12 of the Covenant) ¶ 1, U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003) [hereinafter General Comment No. 15].

^{2.} Water-related Diseases: Information Sheet, WORLD HEALTH ORGANIZATION [WHO], http://www.who.int/water_sanitation_health/diseases-risks/diseases/diseasefact/en (last visited Feb. 15, 2017).

^{3.} General Comment No. 15, supra note 1, ¶ 16; see, e.g., Council of Europe: European Monitoring Centre on Racism and Xenophobia, Breaking the Barriers—Romani Women and Access to Public Health Care 15 (2003); World Summit for Children, World Declaration on the Survival, Protection and Development of Children, UNICEF (Sept. 30, 1990), https://www.unicef.org/wsc/declare.htm.

^{4.} G.A. Res. 55/2, United Nations Millennium Declaration ¶ 19 (Sept. 8, 2000) [hereinafter UN Millennium Declaration]. In 2000, world leaders adopted the United Nations Millennium Declaration as a U.N. General Assembly resolution, which set out what are known as the eight "Millennium Development Goals." See We Can End Poverty: Millennium Development Goals and Beyond 2015, UNITED NATIONS, http://www.un.org/millenniumgoals/bkgd.shtml (last visited Jan. 12, 2018).

^{5.} Goal 7: Ensure Environmental Sustainability, UN MILLENNIUM DEV. GOALS, http://www.un.org/millenniumgoals/environ.shtml (last visited Jan. 12, 2018).

^{6.} WHO & UNICEF, Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment 4 (2015).

developing regions due to, among other causes, physical water scarcity,⁷ the failure of institutions, lack of infrastructure, poverty, and rapid growth of population.⁸ Particularly, four developing regions—Caucasus and Central Asia, Northern Africa, Oceania, and sub-Saharan Africa—failed to reach the target.⁹ Further, 80 percent of people in the rural areas of those regions still cannot access improved drinking water sources.¹⁰ As of 2015, approximately 663 million people were still drinking unimproved drinking water,¹¹ and as of 2012, 1.8 billion people were still drinking from fecally contaminated sources.¹² The sanitation issue is more serious: 2.4 billion people still lack improved sanitation facilities, and only 27 percent of the population of the least developed countries has gained access to improved sanitation since 1990.¹³

The issues relating to water originate from multiple sources, including political, economic, social, cultural, and environmental causes. A wide variety of solutions to drinking water, sanitation, and access problems have been suggested by international organizations, non-governmental organizations, human rights activists, and national governments. One of the most promising approaches to solve water issues is for international entities—including national governments, international organizations, and multinational enterprises—to legally recognize access to water as a human right under international law. The United Nations ("UN") and other international entities have recognized the human right to water, and scholars in the field have encouraged its proliferation. ¹⁴ In this approach, international entities assume active duties to protect and promote an individual

^{7.} UN WORLD WATER ASSESSMENT PROGRAMME, THE UNITED NATIONS WORLD WATER DEVELOPMENT REPORT 2016: WATER AND JOBS 18 (2016).

^{8.} See WHO & UNICEF, supra note 6, at 2. The World population is expected to grow to 9.7 billion in 2050 and 11.2 billion in 2100 from the current population of 7.3 billion. UN Dep't of Econ. & Soc. Affairs, World Population Prospects: The 2015 Revision, Key Findings and Advance Tables 8 (2015), https://esa.un.org/unpd/wpp/Publications/Files/Key_Findings_WPP_2015.pdf.

^{9.} WHO & UNICEF, supra note 6, at 4.

^{10.} See id.

^{11. &}quot;Improved" or "unimproved" have been used by the Joint Monitoring Programme of WHO and UNICEF. Improved drinking water is normally protected from outside contamination but is not equal to safe drinking water. Drinking Water, WHO 22, http://www.who.int/water_sanitation_health/monitoring/water.pdf (last visited Jan. 12, 2018). Unimproved water is just above open defecation in the five stages of water management: Safely managed, basic, limited, unimproved, and open defecation. See WHO & UNICEF, Progress on Drinking Water, Sanitation and Hygiene—2017 Update and SDG Baselines 2 (2017), http://apps.who.int/iris/bitstream/10665/258617/1/9789241512893-eng.pdf?ua=1.

^{12.} World Leaders Call for Action on Water, The World Bank (Sept. 21, 2016), http://www.worldbank.org/en/news/press-release/2016/09/21/world-leaders-call-for-action-on-water.

^{13.} WHO & UNICEF, supra note 6, at 5.

^{14.} CESCR, General Comment No. 6 (1995): The Economic, Social and Cultural rights of Older Persons ¶ 5, 32, U.N. Doc. E/1996/22 (Dec. 8, 1995); see also Malgosia Fitzmaurice, The Human Right to Water, 18 FORDHAM ENVIL. L. REV. 537, 539–40 (2007); Peter H. Gleick, The Human Right to Water, 1 Water Policy 487, 488 (1998); Stephen C. McCaffrey, The Human Right to Water: A False Promise?, 47 U. OF PAC. L. REV. 221, 223 (2016); Edith Brown Weiss, The Evolution of International Water Law, in COLLECTED COURSE OF THE HAGUE ACAD. INT'L L. 308, 332 (2009). But I do not believe the human right to water has risen to the status of customary international law; it needs time to be followed by state practices with opinio juris.

human right to water and to prevent violations of that right. The human right to water includes the obligations by international entities to avoid depriving people of water, to protect people against deprivation of water by others, and to provide for the subsistence of those unable to provide water for themselves.¹⁵ When effectively implemented and enforced, it ensures people's access to adequate quantities of safe water.¹⁶ The human right to water is based on legally binding instruments that allow everyone to actively participate in the decision making process on water issues, including allocation, and to claim their rights instead of passively waiting for a charitable gift.¹⁷ It allows the prior appropriation of water for a beneficial use to be superior to any other claims, such as a property right.¹⁸

In order for governments, non-governmental organizations, and individuals to effectively advocate and claim the human right to water, they need access to research that provides all the applicable legally binding instruments and persuasive sources of law, including decisions from international and national courts and opinions of highly qualified publicists. The human right to water research presented herein will contribute to advocacy and litigation efforts at local, city, county, state, national, and international levels. Researching the human right to water requires use of a wide variety of legal instruments and documents produced by inter-governmental and non-governmental organizations and states. This research is made more difficult by the complex interplay of interests behind the recognition of the human right to water, the difficulty of defining water and the human right to water, the diversity of stakeholders involved (including indigenous people and minority groups), as well as the complicated and interdisciplinary nature of research (including data, statistics, strategies, implementation plans, and training materials). It is further convoluted by the many different types of relevant legal sources, including international treaties, international custom, general legal principles, jurisprudence, soft law, and domestic laws.

This Article is intended to ease the difficulty of researching the human right to water. Part I explains the many ways that society has defined water, including as a human right. This Part will also identify some of the challenges in conducting human right to water research. Part II delineates the history of international laws relating to water, and various mechanisms and international principles that can be useful for protecting the human rights of people vulnerable to water-related problems. In Part III, this Article will then selectively review books, articles, jurisprudence, and domestic laws that provide excellent starting points for human

^{15.} HENRY SHUE, BASIC RIGHTS: SUBSISTENCE, AFFLUENCE, AND U.S. FOREIGN POLICY 52–53 (1996). It also imposes transnational duties on one government to avoid depriving people living in another territory, under another government, of access to water. *Id.* at 150–52.

^{16.} McCaffrey, supra note 14, at 223-24.

^{17.} Inga T. Winkler, The Human Right to Water: Significance, Legal Status and Implications for Water Allocation 214, 220 (2012).

^{18.} A. Dan Tarlock, The Future of Prior Appropriation in the New West, 41 Nat. Res. J. 769, 769–71 (2001).

right to water research. Finally, the Article concludes with some recommendations and directions for conducting human right to water research.

I. Defining Water

A. WATER'S TRADITIONAL DEFINITIONS AND THEIR LIMITATIONS: ENVIRONMENTAL, PUBLIC HEALTH, AND SOCIAL & CULTURAL

Defining water is a complex task, as it can be framed in terms of quality, quantity, affordability, access, location, and usage. The clear delineation of each relevant international legal discipline is difficult to place due to the increase in multidisciplinary research, including human rights, international environmental law, Law of the Sea, law on international water courses, and international humanitarian law, which are all inextricably connected. Different international legal regimes may be relevant, depending on which definitions water researchers select. The same body of water in a particular place and time can be claimed by different entities against different entities, and these relations can be regulated by different legal schemes. Humans, either individually or collectively, claim their human right to water against states and other entities, including multinational corporations, under the human rights legal regime. This section will provide an overview of four key ways in which water has been traditionally defined, including definitions from the perspective of 1) navigation, 2) environment, 3) social and cultural, and 4) public health.

1. Navigational Definitions

Water has traditionally been regulated for its navigational purposes. Historically, states asserted rights to non-navigational and navigational use of water, encompassing both quality and quantity of water. ¹⁹ Although the sea is regulated by the Law of the Sea, ²⁰ surface water and ground water, which are also sources of drinking water and sanitation, have been internationally regulated by the Law of International Watercourses. ²¹ International civil society, represented by the International Law Association ²² and the U.N. International Law Commission, has made efforts to create legal regimes for the use of water by states since the late 1960s. Specifically, the International Law Commission completed a project to develop principles for non-navigational uses of international watercourses in

^{19.} Convention on the Law of the Non-Navigational Uses of International Watercourses, arts. 9, 21, U.N. Doc. A/CONF.51/869 (Aug. 11, 1997) [hereinafter UN Watercourses Convention].

^{20.} The principal international legal regime is the United Nations Convention on the Law of the Sea, Dec. 10, 1982,1833 U.N.T.S. 3.

 $^{21. \ \}textit{See, e.g.}, \ \textbf{Stephen McCaffrey}, \ \textbf{The Law of International Watercourses} \ (2007).$

^{22.} The Helsinki Rules on the Uses of the Waters of International Rivers, U.N. Doc. A/CONF.52/484 (1967) [hereinafter Helsinki Rules].

1994; the sixth Committee working group finished drafting articles on the topic in 1997, and then the UN General Assembly adopted the Convention on the Law of Non-Navigational Uses of International Watercourses in May 1997 ("1997 Treaty"). The 1997 Treaty covers non-navigational uses of international watercourses, such as surface water and ground water, and includes measures to protect, preserve, and manage them. In this arena, states claim their rights *vis-à-vis* other states. The 1997 Treaty emphasizes the equitable and reasonable utilization of an international watercourse, the obligation not to cause significant harm, and the obligation for states sharing a given watercourse to cooperate.

2. Environmental Definitions

Water can be defined as an environmental resource. International environmental law primarily regulates the sustainable maintenance of water quality for future generations. This water, related to both drinking and sanitization, is claimed by states against other states in relation to their own citizens. Under this definition, governments, non-governmental organizations, and individuals' rights to use water are socially restricted by a responsibility to protect water for use by future generations. Sometimes, this sustainable development concept of water under international environmental law is misused to conflict with the human right to water. Governments in developing countries sometimes restrict their citizens' access to water for the purpose of environmental protection. ³⁰

A series of declarations and action plans since the 1970s—the Stockholm Declaration,³¹ the Rio Declaration,³² the New Delhi Statement,³³ the Dublin

^{23.} UN Watercourses Convention, supra note 19.

^{24.} The treaty did not expressly cover aguifers.

^{25.} UN Watercourses Convention, supra note 19, at art. 1.

^{26.} Id. at arts. 5. 6.

^{27.} Id. at art. 7.

^{28.} Id. at art. 8.

^{29.} See Karin Simonson, The Global Water Crisis: NGO and Civil Society Perspective 7 (2003).

^{30.} For example, in Talamanca in Coast Rica, the government restricted the use of land and water by local and indigenous people, saying that the restriction needs to protect the environment while the hidden purpose for the restriction is to protect their tourist industry. See The Paradox of Tourism in Costa Rica, Cultural Survival Q. Mag. (Mar. 1990), https://www.culturalsurvival.org/publications/cultural-survival-quarterly/paradox-tourism-costa-rica. In order to solve this problem, Costa Rica adopted the Payment for Environmental Services Program, but its impacts were low and did not increase or decrease substantially poverty in Costa Rica. See Juan Robalino et al., Local Effects of Payments for Environmental Services on Poverty, Env't for Dev. (May 2014), http://www.rff.org/files/sharepoint/WorkImages/Download/EfD-DP-14-12.pdf.

^{31.} U.N. Conference on the Human Environment, *Declaration of the United Nations Conference on the Human Environment*, princ. 5, U.N. Doc. A/CONF.48/14/Rev.1, Ch.1 (June 16, 1972) [hereinafter Stockholm Declaration].

^{32.} U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, princ. 3, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. 1), annex I (Aug. 12, 1992).

^{33.} Global Consultation on Safe Water and Sanitation, *New Delhi Statement*, A/C.2/45/3 (1990) [hereinafter *New Delhi Statement*].

Statement on Water and Sustainable Development ("Dublin Statement"), ³⁴ and Agenda 21³⁵—emphasized the scarcity of fresh water and the environmentally sustainable development of water resources for future generations. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes³⁶ followed this tradition and codified the general environmental principles relating to international water, such as the precautionary principle, the polluter-pays principle, and sustainable development.³⁷

3. Social and Cultural Definitions

Water also has a social and cultural meaning to traditional local or indigenous groups of people.³⁸ This is especially true when governments and multinational enterprises have restricted access to water.³⁹ Indigenous people have complex social-ecological linkages—cultural, religious, and recreational ties—to water in both developing and developed countries.⁴⁰ Indigenous populations living in communitarian cultures⁴¹ have especially meaningful linkages to water, as they collectively rely on the same water source and make a common access and usage plan for it. Restricting access to water by general application to a whole nation or state may result in collective harms to a local community, destroy the whole community, and lead to forced economic migration and conflicts.⁴²

4. Public Health Definitions

Water can further be defined as a public health resource. Public health definitions of water are most closely associated with the human right to water because both rights can be asserted by individuals or communities against their

^{34.} International Conference on Water and the Environment, Dublin Statement on Water and Sustainable Development, princ. 1 (Jan. 31, 1992), http://www.un-documents.net/h2o-dub.htm [hereinafter *Dublin Statement*].

^{35.} U.N. Conference on Environment and Development, *Agenda 21*, U.N. Doc. A/CONF.151/26 (Vol. II) (Aug. 13, 1992) [hereinafter *Agenda 21*].

^{36.} Convention on the Protection and Use of Transboundary Watercourses and International Lakes, *opened for signature* Mar. 17, 1992, 1936 U.N.T.S. 269 [hereinafter Helsinki Convention].

^{37.} Id. at art. 2.

^{38.} General Comment No. 15, supra note 1, ¶ 6.

^{39.} See Eileen L. Lutz, Indigenous Peoples and Water Rights, 29–4 CULTURAL SURVIVAL Q. MAG. (2005), https://www.culturalsurvival.org/publications/cultural-survival-quarterly/indigenous-peoples-and-water-rights; see also Jootaek Lee, Contemporary Land Grabbing: Research Sources and Bibliography, 107 L. LIBR. J. 259 (2015).

^{40.} Marcus Finn & Sue Jackson, *Protecting Indigenous Values in Water Management: A Challenge to Conventional Environmental Flow* Assessments, 14 Ecosystems 1232, 1233 (2011).

^{41.} See Seven Dimensions of Culture: Understanding and Managing Cultural Differences, https://www.mindtools.com/pages/article/seven-dimensions.htm (last visited Nov. 20, 2017).

^{42.} High and Dry: Climate Change, Water, and the Economy, THE WORLD BANK, http://www.worldbank.org/en/topic/water/publication/high-and-dry-climate-change-water-and-the-economy (last visited Jan. 27, 2018).

own states.⁴³ The World Health Organization ("WHO")⁴⁴ emphasizes that safe drinking water quality is fundamentally important to human development and well-being.⁴⁵ Health-based government regulations and effective drinking water management practices for water suppliers, communities, and households are necessary for safe drinking water.⁴⁶ To effectively maintain safe drinking water, the WHO also published The Guidelines for Drinking-water Quality (hereinafter "Guidelines"), which provide:

- · health-based targets;
- · water safety plans;
- monitoring of the safe drinking water framework;
- · verification of drinking water quality;
- identification of priority concerns;
- · development of drinking-water quality standards;
- · drinking-water regulations; and
- support for policies and programs to address local requirements and circumstances.⁴⁷

The Guidelines reaffirm the link between water and life and health, stating that safe drinking water is "essential to sustain life," and leads to "tangible benefits to health." They narrowly target vulnerable populations, including infants and young children, persons with disabilities, and the elderly. The safety and quality of drinking water is affected by microbial, chemical, and radiological aspects in many specific circumstances, including climate change, rainwater harvesting, vended water, bulk water supply, desalination systems, dual piped water supply systems, disasters, buildings, health-care facilities, aircrafts, airports and ships, packaged drinking water, and food production and processing. 49

However, the guidelines do not clearly define what is "safe" for drinking water. Although they are intended to keep the maintenance of the quality of water to the highest possible level,⁵⁰ the WHO framework does not support the adoption of

^{43.} See Guidelines for Drinking Water Quality, India Water Portal (2011), http://www.indiawaterportal.org/articles/guidelines-drinking-water-quality-fourth-edition-world-health-organisation-2011; WHO, GUIDELINES FOR DRINKING-WATER QUALITY 10 (2011), http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151_eng. pdf; Drinking Water Quality, Water Supplies Department, http://www.wsd.gov.hk/en/core-businesses/water-quality/my-drinking-water-quality/index.html (last visited Jan. 14, 2018); Our Drinking Water Quality, PUB: SINGAPORE'S NATIONAL WATER AGENCY, https://www.pub.gov.sg/Documents/Singapore_Drinking_Water_Quality.pdf (last visited Jan. 14, 2018).

^{44.} WHO, http://www.who.int/en/ (last visited Feb. 24, 2017).

^{45.} Water Safety and Quality, WHO, http://www.who.int/water_sanitation_health/water-quality/en (last visited Jan. 14, 2018).

^{46.} Id

^{47.} See GUIDELINES FOR DRINKING-WATER QUALITY, WHO (2011), http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151_eng.pdf.

^{48.} *Id.* at 1.

^{49.} See id.

^{50.} Id. at 3.

international standards for drinking water quality because it acknowledges different circumstances, needs, and regulatory capacities across localities.⁵¹ This failure of the Guidelines to adopt universal principles for the maintenance of safe drinking quality may have weakened the human right to water of vulnerable populations in water-stressed countries.⁵² States may adopt their own regulations and policies without considering the specific needs of water to vulnerable populations.⁵³

Both the quality and quantity of water is linked to sanitation, and the WHO is developing Guidelines on Sanitation and Health.⁵⁴ Appropriate sanitation, including proper sanitation facilities, contributes to the prevention of water-borne diseases such as diarrhea, intestinal worms, schistosomiasis, and trachoma.⁵⁵ People living in low-income countries particularly suffer from the deficiencies in sanitation.⁵⁶ The quantity of available water must also be considered and included in the human right to water, especially relating to sanitation. While the quality of water is critical to maintain the health and the life of the public, quantity is sometimes considered more important for hygiene.⁵⁷ No one factor should be determinative, however. Questions of quality, quantity, affordability and access to water should be holistically considered together when claiming the right to water; sacrificing one will unavoidably result in imminent risks to the health and life of the affected populations.

According to the WHO, about 20 liters of water per person per day are needed to satisfy basic hygiene needs, and more water is needed for laundry and bathing. Twenty liters of water per capita per day will only support short-term survival, which is considered a top priority to prevent starvation and disease. For long term survival, people need more water—more than 70 liters per day for personal washing, washing clothes, cleaning, growing food, sanitation and waste disposal, business crops and livestock, gardens, and recreation. Poorer commu-

^{51.} Id. at 2.

^{52.} See Andrew Maddocks, Robert Samuel Young & Paul Reig, Ranking the World's Most Water-Stressed Counties in 2040, World Resources Institute (Aug 26, 2015), http://www.wri.org/blog/2015/08/ranking-world%E2%80%99s-most-water-stressed-countries-2040.

^{53.} General Comment No. 15, supra note 1, ¶ 6.

^{54.} Sanitation Guidelines, WHO, http://www.who.int/water_sanitation_health/sanitation-waste/sanitation/sanitation-guidelines/en (last visited Feb. 15, 2017).

^{55.} Gloria D. Sclar et al., Assessing the Impact of Sanitation on Indicators of Fecal Exposure along Principal Transmission Pathways: A Systematic Review, 219 Int'l J. of Hygiene & Envil. Health 709, 710 (2016).

^{56.} See id.

^{57.} Weiss, *supra* note 14, at 312 (citing Patricia Billig, Diane Bendahmame & Anne Swindale, United States Agency for International Development, Water and Sanitation Indicators Measurement Guide 7 (1999)).

^{58.} What is the Minimum Quantity of Water Needed?, WHO, http://www.who.int/water_sanitation_health/emergencies/qa/emergencies_qa5/en/ (last visited Feb. 15, 2017).

^{59.} General Comment No. 15, supra note 1, ¶ 6.

^{60.} How Much Water Is Needed in Emergencies, WHO 9.1 (July 2013), http://www.who.int/water_sanitation_health/publications/2011/WHO_TN_09_How_much_water_is_needed.pdf?ua=1.

nities use less water because of far lower expectations regarding water availability due to lack of accessibility, including appropriate facilities and infrastructure, lack of resources to buy water, and climate change. 63

When claiming the human right to water from a public health perspective, advocates should also consider other accessibility-related factors, including freedom of access, equality, cost, distance, facilities, and information. ⁶⁴ Access to water should be free from interference, not subject to arbitrary disconnections or contamination, and users should be served by an appropriate system of water supply and management. 65 Physical access to water is "measured by the proportion of population with access to an adequate amount of ... water located within a *convenient distance* from the user's dwelling. . . . 'Access' is interpreted as actual use by the population."66 The notion of access to "improved" water sources also involves consideration of the technology of access. While important improvements have been made in terms of human access to improved water sources, lack of access remains a problem. According to the WHO, between 1990 and 2010, two billion people—about 90 percent of the global population—gained access to drinking water sources; however, as of 2010, 783 million people still did not have access to water.⁶⁷ By 2015, about 33 percent of the global population still did not have access to improved sanitation.⁶⁸

The improved access to water definition also involves the assessment of technology, including household connection, public standpipe, borehole, protected dug well, protected spring, rainwater collection for drinking water sources, connection to a public sewer, connection to a septic system, pour-flush latrine, simple pit latrine, and improved ventilated pit latrine for sanitation.⁶⁹ Additionally, in order to be accessible, water sources should be close to the home or near public facilities. Most of all, the cost of access to water should be affordable. From this point of view, low-income people living in extreme poverty (with incomes of less than \$1.25 a day) typically lack access to water.⁷⁰ Furthermore, access to safe drinking water and sanitation is unequal between urban and rural

^{61.} Id.

^{62.} See WHO & UNICEF, supra note 6, at 45.

^{63.} UNITED NATIONS DEVELOPMENT PROGRAMME, HUMAN DEVELOPMENT REPORT 2015, at 71, http://hdr.undp. org/sites/default/files/2015_human_development_report.pdf.

^{64.} General Comment No. 15, supra note 1, ¶ 12.

^{65.} *Id*. ¶ 10.

^{66.} UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS POPULATION DIVISION, CHARTING THE PROGRESS OF POPULATIONS (2000), http://www.un.org/esa/population/pubsarchive/chart/12.pdf.

^{67.} Fast Facts: WHO/UNICEF Joint Monitoring Report 2012, WHO, http://www.who.int/water_sanitation_health/monitoring/jmp2012/fast_facts/en (last visited Feb. 15, 2017).

^{68.} Id

^{69.} WORLD HEALTH ORGANIZATION, GLOBAL WATER SUPPLY AND SANITATION ASSESSMENT 2000 REPORT 77 (2000), http://www.who.int/water_sanitation_health/monitoring/jmp2000.pdf.

^{70.} Human Development Report 2015, supra note 63, at 61.

areas, with urban areas providing much higher quality access than rural.⁷¹

B. DEFINING THE HUMAN RIGHT TO WATER

Water should be "adequate" for human dignity, and should not be simply treated as an economic good.⁷² In order to be make water adequate for human dignity in terms of quality, quantity, and access, special active efforts are needed. The human right to water approach should focus on the use of water by states vis-à-vis other states, as in the public health and cultural definitions, where the human right to water focuses on the use of water by natural persons, either individually or collectively. The effective implementation of the human right to water will provide natural persons with their right to water in terms of quality, quantity, and access. The Committee on Economic, Social, and Cultural Rights emphasizes this intent by defining the right to water as a right to "sufficient, safe, acceptable, physically accessible and affordable water." 73 Under the right to water, both quantity and quality of affordable water are directly connected to safe drinking water and sanitation, and are ultimately connected to the health and life of people. Low cost or free access to water, for certain vulnerable sections of the population, is also critical to the health and life of those vulnerable populations. However, this definition by the Committee focuses only on the water, not humans. By defining water as a human right, individuals or states will be able to call upon an international human rights regime that has been developed since World War II to seek judicial enforcement at both local and international levels.

Since the end of World War II, international human rights have been codified in declarations and covenants. The international human rights regime covers limitations and responsibilities as well as freedom and liberty in the democratic setting. Human rights include civil, political, economic, social, and cultural rights. In addition, a new third-generation or group rights concept has appeared to protect individuals as a member of a particular group.

^{71.} Id. at 59.

^{72.} General Comment No. 15, supra note 1, ¶ 11.

^{73.} *Id*. ¶ 2.

^{74.} MARY ANN GLENDON, RIGHTS TALK: THE IMPOVERISHMENT OF POLITICAL DISCOURSE 7 (1991); G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948) [hereinafter UDHR].

^{75.} U.N. Charter pmbl.

^{76.} See Glendon, supra note 74, at 7.

^{77.} See International Covenant on Civil and Political Rights, Dec. 16, 1966, 999 U.N.T.S. 1057 [hereinafter ICCPR]; International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 999 U.N.T.S. 3 [hereinafter ICESCR].

^{78.} See Chandra Lekha Sriram et al., War, Conflict and Human Rights; Theory and Practice 39 (2010).

Each state should interpret and implement the human right to water differently depending on their cultural backgrounds and legal systems. ⁷⁹ Just as water can be interpreted differently in terms of quality, quantity, and access, humans enjoying rights and taking responsibilities can be variously interpreted. In order to implement the human right to water internationally, states may need to separately integrate the human right into their legal systems. States may need to promulgate statues and regulations to ratify human rights treaties. While self-executing treaties do not need a domestic implementing legislation, the blurry nature of the human right to water may need at least a clear definition by domestic laws to establish a cause of action for domestic courts. Depending on these laws, natural persons may be able to claim for non-discriminatory practice in their usage of or access to water under the International Covenant on Civil and Political Rights. Sometimes, natural persons may be able to compel states to provide active measures to provide them with water as well as food, heath, and education because their state has ratified the International Covenant on Economic, Social, and Cultural Rights. Depending on the state's definition of the human right to water, natural persons may be able to claim for the protection and preservation of water because it is culturally very important to them. These natural persons may be an indigenous tribe or people who are displaced from their lands that have water or access to water. As such, different states may confer their natural citizens with different rights to water.

The difficulty of finding a universal and uniform nature of a definition is increased by delving deeper into what is water, who are the natural persons, who are the international entities against which individuals are claiming the human right to water, and what are the civil, political, economic, social, and cultural aspects of water. Under the human right to water, natural persons may raise a claim for a certain quality or quantity of water, or certain ways of accessing water. This may include salt water, clear water, or ice.

The human right to water will be claimed by natural persons. This regime will recognize that natural persons are conferred with the human right to water by domestic law or international law, through either treaties or international custom. Although the protection of a human right is a principle developed by public international law, especially after World War II, it has been implemented and incorporated differently by states. While many states implemented civil and political aspects of human rights, they did not implement economic, social, and cultural aspects of human rights. Depending on the state, constituencies of governments including counties and cities were assigned with obligations to protect the water rights of natural persons, not to harm their water rights, or make remedies for the violation of their rights if they are harmed.

^{79.} Relativism and the "Asian values" debate this idea. See id. at 40.

II. HUMAN RIGHTS PRINCIPLES AND STANDARDS REGARDING THE HUMAN RIGHT TO WATER

As mentioned previously, the human rights legal system from which the human right to water originates has been developing since World War II. Despite growing international agreement on the need for recognition of a human right to water, the human rights principles and standards regarding the human right to water have not been comprehensively compiled in an organized way. The intention of this section is to provide comprehensive compilation to facilitate research by practitioners and researchers. Specifically, section A will analyze international human rights principles and standards from which the human right to water originated. Section B will introduce recent global measures in support of water rights. Section C will introduce UN and other international mechanisms to enhance water rights.

A. HISTORICAL HUMAN RIGHTS FOUNDATIONS

The foundational human rights documents, including the International Bill of Rights—the Universal Declaration of Human Rights ("UDHR"), ⁸⁰ the International Covenant on Civil and Political Rights ("ICCPR"), ⁸¹ and the International Covenant on Economic, Social, and Cultural Rights ("ICESCR") ⁸²—did not include specific reference to the human right to water. While multiple UN bodies affirmed the human right to water with resolutions and General Comments in the first decade of this century, it was not until the UN General Assembly adopted Resolution 64/292⁸³ in July 2010 that a high-level UN body formally recognized the human right to water. In September of that year, the Human Rights Council quickly followed suit, declaring that the human right to water is legally binding. ⁸⁴

Although the key foundational documents of the international human rights system did not directly refer to a human right to water, it is argued that water is so implicitly essential for human life that the framers of the UDHR did not think about a need to explicitly include the human right to water. Similarly, ICESCR has been interpreted to include an implied human right to water in Article 11,86

^{80.} UDHR, *supra* note 74. The UDHR includes the right to life under Article 3, which is the most frequently cited source of a right to water. *See* Paula Gerber & Bruce Chen, *Recognition of the Human Right to Water, Has the Tide Turned?*, 36 ALTERNATIVE L.J. 21 (2011); McCaffrey, *supra* note 14, at 223–24. The UDHR also includes the right to an adequate standard of living, specifying health and well-being, including a right to adequate food under Article 25. That has been read to include an implied right to water. *See* Gerber & Chen, *supra* note 80.

^{81.} ICCPR, supra note 77.

^{82.} ICESCR, *supra* note 77.

^{83.} G.A. Res. 64/292, The Human Right to Water and Sanitation (July 28, 2010).

^{84.} Human Rights Council Res. 15/9, U.N. Doc. A/HRC/RES/15/9 (Oct. 6, 2010).

^{85.} See id. at 21 (citing Peter H Gleick, The Human Right to Water, I(5) WATER POLICY 487 (1999)); McCaffrey, supra note 14, at 223.

^{86.} ICESCR, supra note 77, at art. 11.

the right to an adequate standard of living, and Article 12,⁸⁷ the right to the enjoyment of health.⁸⁸ Article 6(1) of ICCPR provides an inherent right to life.⁸⁹ As water is necessary to sustain a life, the right to life referred to in the ICCPR has been thought to include the human right to water.⁹⁰ The first human rights treaty, the International Convention on the Elimination of All Forms of Racial Discrimination ("CERD")⁹¹ prohibits racial discrimination in the exercise of the right to public health.⁹² While all of these instruments can be interpreted to imply a human right to water, the failure to directly address the human right to water and to articulate affirmative and imminent steps to be taken by states have contributed to states' failure to systematically approach water issues from a rights perspective until the early 1990s.

While not general and systematic, there were a few efforts to address the human right to water before the 1990s. The Convention on the Elimination of All Forms of Discrimination against Women ("CEDAW") in 1979⁹³ was the first primary human rights instrument to explicitly reference the human right to water. Under Article 14(2)(h) of CEDAW, in order to truly eliminate discrimination against women in rural areas, the state should "ensure to such women the right . . . [t]o enjoy adequate living conditions, particularly in relation to . . . sanitation, electricity and water supply"⁹⁴ This right has been interpreted not to require equal access to water, but a right to clean water. However, CEDAW Article 14 only applies to rural women, and is not universally applicable.

Another treaty that addresses the human right to water is the Convention on the Rights of the Child ("CRC"), which the UN adopted in 1989. Article 24(1) of the CRC addresses water, recognizing the right of the child to the highest attainable standard of health. Article 24(2) specifically imposes on State Parties a duty to "take appropriate measures [t]o combat disease and malnutrition . . . through the provision of . . . clean drinking water, taking into

^{87.} Id. at art. 12.

^{88.} General Comment No. 15, supra note 1.

^{89.} ICCPR, supra note 77, at art. 6(1).

^{90.} Adele J. Kirschner, *The Human Right to Water and Sanitation*, 15 Max Planck Y.B. U.N. L. 445, 460–61 (2011); Particularly in custodial settings, it is possible to make the argument that the deprivation of water would constitute cruel, inhuman, or degrading treatment. ICCPR, *supra* note 77, art. 7; Riad & Idiab v. Belgium, 29810/03 Eur. Ct. H.R. ¶ 99 (2008); *see* Tadevosyan v. Armenia, 41698/04 Eur. Ct. H.R. (2008).

^{91.} International Convention on the Elimination of All Forms of Racial Discrimination, *opened for signature* Mar. 7, 1966, 660 U.N.T.S. 195 [hereinafter CERD].

^{92.} Id. at art. 5(e)(iv).

^{93.} Convention on the Elimination of All Forms of Discrimination against Women, *opened for signature* Dec. 18, 1979, 1249 U.N.T.S. 13 [hereinafter CEDAW].

^{94.} Id. at art. 14(2)(h).

^{95.} Comm. on the Elimination of Discrimination against Women, *General Recommendation No. 34 on the rights of rural women*, art. IV, ¶ 85, U.N. Doc. CEDAW/C/GC/34 (Mar. 4, 2016).

^{96.} Convention on the Rights of the Child, *opened for signature* Nov. 20, 1989, 1557 U.N.T.S. 3 [hereinafter CRC].

^{97.} Id. at art. 24(1).

consideration the dangers and risks of environmental pollution. . . ."⁹⁸ The CRC directly links safe drinking water to health and includes the human right to water under the right to health.

Global action to press for state recognition of the human tragedy created by lack of water access accelerated in the 1990s. A number of statements and action plans for sustainable development of water resources began being adopted by representatives from governments and international organizations at various environmental conferences, including the New Delhi Statement, 99 the Dublin Statement on Water and Sustainable Development, ¹⁰⁰ and Agenda 21. ¹⁰¹ These provide some important evidence of state practices relating to water, showing opinio juris among the states. The 1992 Dublin Statement, the cumulative statement from the International Conference on Water and the Environment in Dublin, states that the lack and misuse of water harms sustainable development and the environment. 102 While the Dublin Statement limits the definition of water to an economic good, it also recognizes the basic human right to water, particularly affordable water. 103 Despite its economic focus, the Dublin Statement affirms that water itself, as the source of life, merits protection. ¹⁰⁴ Agenda 21, part of the UN Programme of Action, created at the UN Conference on Environment and Development in Rio de Janeiro in 1992 includes *Chapter 18*: Protection of the Quality and Supply of Freshwater Resources: Application of Integrated Approaches to the Development, Management and Use of Water Resources. 105 Agenda 21 recognizes water as being essential to life and an integral part of the ecosystem. 106 It emphasizes that the scarcity of water, requires integrated water resource planning and management, ¹⁰⁷ and sets specific goals to be reached by 2000 and 2025, 108 and to be accomplished by using appropriate activities and means of implementation for drinking-water supply and sanitation, and sustainable development. It also recognizes water as a social and economic good. 109 These goals were reviewed and updated at (1) the UN General Assembly special session—Rio+5 in 1997, (2) the World Summit on Sustain-

^{98.} *Id.* at art. 24(2)(c).

^{99.} New Delhi Statement, supra note 33.

^{100.} *Dublin Statement, supra* note 34. While the Dublin Statement succeeded in raising concerns on water and its vulnerable status, it simply treated water as an economic good under Principle No. 4, and failed to recognize a right to water.

^{101.} Agenda 21, supra note 35. Agenda 21 also failed to recognize water as a right and Section 18.8 simply provides that water is an economic, social, and life-sustaining good.

^{102.} Dublin Statement, supra note 34.

^{103.} Id. at princ. 4.

^{104.} Id.

^{105.} Agenda 21, supra note 35.

^{106.} Id. at ch. 18.1.

^{107.} Id. at ch. 18.3.

^{108.} Id. at ch. 18.11.

^{109.} Id. at ch. 18.15.

able Development—Rio+10 in 2002, (3) the World Public Meeting on Culture—Agenda 21 for Culture in 2002, and finally, (4) the United Nations Conference on Sustainable Development—Rio+20 in 2012.

These various actions by states and international organizations, and efforts by non-governmental activists culminated in the adoption of the General Comment No. 15 by the Committee on Economic, Social, and Cultural Rights in 2002. Recognizing the human right to water is "indispensable for leading a life in human dignity," the General Comment No. 15 interpreted Articles 11 and 12 of the ICESCR to include a human right to water. The General Comment No. 15 states that "including adequate food, clothing and housing" under Article 11(1) of the ICESCR is not exclusive; it identifies water as an essential element for an adequate standard of living, "one of the most fundamental conditions of survival." The General Comment No. 15 also indicates that the human right to water is inextricably connected to the right to health under Art. 12(1) of the ICESCR and the rights to adequate housing and adequate food under Article 11(1) of the ICESCR. This General Comment is certainly the most important precursor of General Assembly Resolution 64/292, formally establishing the human right to water.

B. RECENT GLOBAL MEASURES IN SUPPORT OF WATER RIGHTS

The recognition of water as a human right and states' efforts to treat it as such are relatively recent events. Since the Cold War, scholars in Western countries have actively researched sensitive legal areas that had been ignored previously because of national security concerns. One of these areas is human rights, specifically the human right to water in the context of economic, social, and cultural rights. These rights had been emphasized in the Eastern bloc states, including the Soviet Union, and in the Global South. While economic, social, and cultural rights provide new arguments for social justice, some Western constitutions like the United States Constitution do not even recognize these rights. Many areas such as health, education, labor and employment, food, water, housing and development, which were traditionally considered benefits provided by states are now approached from the perspective of human rights.

There has been growing attention to the right to water and its intersection with other rights, including the right to health and development. This topic has received enough attention that the UN General Assembly declared the period

^{110.} General Comment No. 15, supra note 1, \P 1.

^{111.} *Id*. ¶ 3.

^{112.} Id.

^{113.} Id.

^{114.} G.A. Res. 64/292, The Human Right to Water and Sanitation (July 28, 2010).

^{115.} Christopher N.J. Roberts, *Grasping at Origins: Shifting the Conversation in the History of Human Rights*, 17 Chi. J. Int'l L. 573, 595 (2017).

from 2005 to 2015 as the International Decade for Action, "Water for Life." ¹¹⁶ Most recently, the UN General Assembly declared safe and clean drinking water and sanitation a human right essential to the full enjoyment of life and all other human rights. ¹¹⁷ These and other declarations, resolutions, and plans explored in the following section signal the importance of this issue on the global stage not just in civil society discussions, but among international organizations such as the UN. There are numerous human rights treaty-based bodies leading the movement to protect and enhance the human right to water, including the UN and its affiliated organizations such as the WHO. ¹¹⁸

The following documents arranged chronologically are important recent soft law ¹¹⁹ measures developed by those organizations named *infra* as well as others.

• Ministerial Declaration of the Hague on Water Security in the 21st Century (Mar. 22, 2000)¹²⁰

The World Water Council and the delegates to the Ministerial Conference issued the Ministerial Declaration on March 22, 2000.¹²¹ The goal of this document is to provide water security in the 21st Century and to identify the main challenges including: meeting basic needs for access to safe and sufficient water and sanitation, sharing water resources, valuing water, and governing water wisely.¹²² It proposes integrated water resources management as a solution, with an emphasis on collective action and inclusion.¹²³ This document provides an example of multi-stakeholder, non-governmental efforts to achieve human rights to water for all and shows the building of the human right to water as customary law.

• United Nations Millennium Declaration (Sept. 8, 2000)¹²⁴

^{116.} G.A. Res. 58/217 (Dec. 23, 2003).

^{117.} G.A. Res. 64/292, The Human Right to Water and Sanitation (July 28, 2010).

^{118.} Other organizations include the Food and Agriculture Organization, International Labour Organization, United Nations Environment Programme, United Nations Development Programme, Economic Commission for Europe, United Nations Economic Commission for Latin America and the Caribbean, United Nations Economic and Social Commission for Asia and the Pacific, United Nations Educational, Scientific and Cultural Organization, United Nations Economic and Social Commission for Western Asia, United Nations Industrial Development Organization, and the World Meteorological Organization.

^{119.} Soft law is a term of art meaning legal documents that are neither completely binding in a legal sense nor wholly lacking legal significance. In international law, soft law generally refers to documents such as declarations, guidelines, resolutions or codes of conduct which detail standards for the international community, or further explain binding norms. They are nonetheless not directly enforceable in the way a treaty or domestic law might be.

^{120.} World Water Council, *Ministerial Declaration of The Hague on Water Security in the 21st Century* (Mar. 22, 2000).

^{121.} *Id*.

^{122.} *Id*. ¶ 3.

^{123.} See id. ¶¶ 3-7.

^{124.} UN Millennium Declaration, supra note 4, \P 19.

Heads of states gathered in New York in September 2000 and reaffirmed UN efforts towards a peaceful, prosperous, and just world. This effort culminated in the United Nations Millennium Declaration. In this declaration, they resolved to halve the proportion of the world's people who are unable to access or to afford safe drinking water, and to eliminate the waste and misuse of water resources. This declaration is important as it provides the concrete goals that the international community has committed to achieving.

"We the Peoples," also known as the Millennium Development Report, is former Secretary General of the UN Kofi Annan's report on the status of the world in the year 2000.¹²⁹ Water crises are cited across all five target areas: Globalization and Governance, Freedom from Want, Freedom from Fear, Sustaining our Future, Renewing the UN, each accompanied by an appeal from Annan for state action.¹³⁰ This report culminates in specific recommendations for the Millennium Summit, ¹³¹ which is a useful tool in connecting the human right to water to development. Additionally, former Secretary General Kofi Annan wrote the report, which lends some weight to its analysis and recommendations.

 Plan of Implementation of the World Summit on Sustainable Development, Johannesburg, South Africa (Sept. 4, 2002)¹³²

Recognizing the human right to water as an economic and social right and specifying key obstacles to obtaining a healthy environment and improving poverty. This 2002 UN report launches the implementation plan for sustainable development to achieve the millennium development goal of safe drinking water by halving the proportion of people without access to safe drinking water. 133

• Resolution adopted by the General Assembly [on the report of the Second Committee (A/55/582/Add.8)] 55/196. International Year of Freshwater (Dec. 20, 2000)¹³⁴

^{125.} *Id*. ¶ 1.

^{126.} Id. ¶ 19.

^{127.} *Id*. ¶ 23.

^{128.} U.N. Secretary-General, "We the Peoples" The Role of the United Nations in the 21st Century (Millennium Report of the Secretary-General), The United Nations Department of Public Information, U.N. Doc. A/54/2000 (Mar. 2000).

^{129.} Id.

^{130.} Id.

^{131.} Id. at 77.

^{132.} World Summit on Sustainable Development, *Plan of Implementation of the World Summit on Sustainable Development*, U.N. Doc. A/Conf.199/20 (Sept. 4, 2002).

^{133.} Id. ¶ 7.a.

^{134.} G.A. Res. 55/196 (Dec. 20, 2000).

The UN General Assembly adopted this resolution in 2000, which proclaims that 2003 will be the "International Year of Freshwater." It requests that the Subcommittee on Water Resources of the Administrative Committee on Coordination manage the year-long project and provide the General Assembly with proposals for activities and appropriate sources of funding. This document prioritizes freshwater management, again supporting the idea that a human right to water is on the path to customary international law.

• *Ministerial Declaration: Message from the Lake Biwa and Yodo River Basin* 3rd World Water Forum A/57/785 (Mar. 23, 2003)¹³⁷

This declaration pledges renewed efforts towards the millennium development goals related to water, prioritizing water issues and sustainable action. Specifically, this declaration identifies good governance, capacity building, and financing as the most important areas to focus on in order to create a global, integrated water resources management system. 139

• UN General Assembly Resolution 58/217, the International Decade for Action, "Water for Life" (Dec. 23, 2003)¹⁴⁰

Following its resolution 55/196 in 2000, which proclaimed the year 2003 the International Year of Freshwater, the UN General Assembly proclaimed the period from 2005 to 2015 the International Decade for Action, "Water for Life." This resolution is important because it demonstrates that the international community has continued to make water rights a priority, even after the culmination of the "International Year of Freshwater."

 Human Rights Council Resolution 7/22: Human Rights and Access to Safe Drinking Water and Sanitation (Mar. 28, 2008)¹⁴²

The Human Rights Council passed this resolution in 2008.¹⁴³ Most significantly, this resolution appointed an independent expert on the issue of "human rights obligations related to access to safe drinking water and sanitation."¹⁴⁴ The Human Rights Council tasked this expert with developing a dialogue between agencies, governments, NGOs, and other parties concerned with the human right

^{135.} *Id*. ¶ 1.

^{136.} *Id*. ¶ 2.

^{137.} World Water Council, Ministerial Declaration: Message from the Lake Biwa and Yodo River Basin 3rd World Water, Forum, A/57/785 (Mar. 23, 2003).

^{138.} Id.

^{139.} *Id.* at pmbl., ¶¶ 2, 8.

^{140.} G.A. Res. 58/217 (Dec. 23, 2003).

^{141.} Id. ¶ 1.

^{142.} Human Rights Council Res. 15/9, U.N. Doc. A/HRC/RES/15/9 (Oct. 6, 2010).

^{143.} Id.

^{144.} *Id*. ¶ 2.

to water. Additionally, the expert was in charge of researching and creating a report on human rights obligations under the human right to water, entitled the *Report of the Independent Expert on the Issue of Human Rights Obligations related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque* A/HRC/12/24. Eventually this expert became the special rapporteur on the human rights to water and sanitation, ¹⁴⁷ a position that demonstrates the human right to water's status as a concrete international human rights obligation.

• UN General Assembly Resolution 64/292, The Human Right to Water and Sanitation (July 28, 2010)¹⁴⁸

In 2010, the UN General Assembly, for the first time, adopted a resolution explicitly recognizing a human right to safe and clean drinking water and sanitation. This resolution further calls upon states to support the realization of this right. It proclaims that this is a most vital right for the enjoyment of life and all other human rights. Is 151

 Human Rights Council Resolution 15/9: Human Rights and Access to Safe Drinking Water and Sanitation (Sept. 30, 2010)¹⁵²

This Human Rights Council resolution, put forth in 2010, is a follow-up to General Assembly Resolution 64/292. It elaborates on state obligations to work toward the realization of the human right to water, both in practice and in law. 153 It emphasizes the link between discrimination against disadvantaged groups and lack of access to water, and further identifies the right to health, life, and human dignity as sources for the human right to water. 154 This resolution situates the human right to water as deriving from the right to an adequate standard of living. 155 As the human right to water is derived from various human rights law instruments, including the ICESCR, CEDAW, and CRC, the resolution reaffirms that the human right to safe drinking water and sanitation is a human right that is essential for the full enjoyment of life and all human rights. 156

^{145.} Id. ¶ 2.

^{146.} U.N. Human Rights Council, Report of the Independent Expert on the Issue of Human Rights Obligations related to Access to Safe Drinking Water and Sanitation: Catarina de Albuquerque, U.N. Doc. A/HRC/12/24, ¶ 1 (July 1, 2009).

^{147.} Id.

^{148.} G.A. Res. 64/292, The Human Right to Water and Sanitation (July 28, 2010).

^{149.} *Id*. ¶ 1.

^{150.} *Id*. ¶ 2.

^{151.} *Id*. ¶ 1.

^{152.} H.R.C. Res. 15/9, supra note 84.

^{153.} Id.

^{154.} See id. ¶¶ 2-4, 7, 8.

^{155.} *Id*. ¶ 3.

^{156.} *Id*. ¶ 2.

 Human Rights Council Resolution 16/2: The Human Right to Safe Drinking Water and Sanitation (Mar. 24, 2011)¹⁵⁷

This 2011 Human Rights Council resolution notes that the right to sanitation is a complement to the Committee on Economic, Social, and Cultural Rights' Comment 15, 158 thereby providing scholars another source to cite for the human right to water. It also encourages the Independent Expert on the issue of human rights to promote the full realization of the human right to safe drinking water and sanitation. 159

• World Health Assembly Resolution 64/24: Drinking-Water, Sanitation and Health (May 24, 2011)¹⁶⁰

The WHO's primary decision-making organ proclaimed, in this 2011 resolution, its adoption of General Assembly Resolution 64/292 and Human Rights Committee Resolution 15/19. It further urged states to make sure that their national health strategies contribute to the fulfilment of the water-and-sanitation-related Millennium Development Goals. This gesture makes the WHO another organ that recognizes the human right to water and sanitation, including it under the penumbra of rights guaranteed by the right to health.

• UN Human Rights Council Resolution 24/18 (Sept. 27, 2013)¹⁶³

The UN Human Rights Council put forth resolution 24/18 in 2013.¹⁶⁴ This resolution reaffirms that "the right to safe drinking water and sanitation is derived from the right to an adequate standard of living." Additionally, the accessible and affordable water and sanitation should be delivered for personal and domestic use, without discrimination. ¹⁶⁶

• UN Human Rights Council Resolution 27/7: The Human Right to Safe Drinking Water and Sanitation (Sept. 25, 2014)¹⁶⁷

A year after passing Resolution 24/18, in 2014, the Human Rights Council put forward another resolution on the human right to water and sanitation. This resolution adds the right to "sanitation in all spheres of life, that is safe, hygienic,

^{157.} Human Rights Council Res. 16/2, U.N. Doc. A/HRC/16/2 (Mar. 24, 2011).

^{158.} *Id*. ¶ 3.

^{159.} Id. ¶ 5(a).

^{160.} World Health Organization Res. 64/24 (May 24, 2011).

^{161.} *Id.* at pmbl., ¶ 2.

^{162.} *Id*. ¶ 3.

^{163.} Human Rights Council Res. 24/18, U.N. Doc. A/HRC/24/2 (Sept. 27, 2013).

^{164.} Id.

^{165.} *Id*. ¶ 1.

^{166.} *Id.* at pmbl., \P 3.

^{167.} Human Rights Council Res. 27/7, U.N. Doc. A/HRC/27/7 (Sept. 25, 2014).

^{168.} Id

secure, socially and culturally acceptable and that provides privacy and ensures dignity,"¹⁶⁹ to the states obligations under the rights to water and sanitation.

• UN General Assembly Resolution 70/1, Transforming Our World: the 2030 Agenda for Sustainable Development (Sept. 25, 2015)¹⁷⁰

This 2015 General Assembly resolution announced and detailed the new Sustainable Development Goals, to be completed by 2030. ¹⁷¹ It provides mechanisms for the implementation, monitoring, and reassessment of the goals. ¹⁷² These 17 lofty aspirations include: ensuring the availability and sustainable management of water and sanitation for all; combatting climate change and its impacts; providing for the conservation and sustainable use of the oceans, seas, and marine resources and protecting, restoring and promoting the sustainable use of terrestrial ecosystems, and ending and reversing desertification, land degradation, and biodiversity loss. ¹⁷³

• UN General Assembly Resolution 70/169, The Human Rights to Safe Drinking Water and Sanitation (Dec. 17, 2015)¹⁷⁴

This 2015 UN General Assembly resolution reaffirms all previous commitments to the human right to water, and renews the call for states to progressively realize the human right to water, to monitor water systems and report their failures, ensure the human right to water is realized free from discrimination, and recognize the special challenges women face in water and sanitation programs. This resolution is important because the General Assembly passed it and it outlines in detail member states' agreed upon aspirations and obligations.

• UN General Assembly Resolution 71/222, International Decade for Action, "Water for Sustainable Development," 2018-2028 (Dec. 21, 2016)¹⁷⁶

This resolution, passed by the UN General Assembly in 2016, proclaims 2018 to 2028 the "International Decade for Action, 'Water for Sustainable Development,'" commencing on World Water Day 2018.¹⁷⁷ This decade will focus on the development of inclusive systems for water resource management.¹⁷⁸ Its emphasis is on cooperation, participation, and integration.¹⁷⁹ Again, such continued

^{169.} *Id.* at pmbl., ¶ 3.

^{170.} G.A. Res. 70/1, at 1 (Sept. 25, 2015).

^{171.} *Id*. ¶ 2.

^{172.} Id. at 15, ¶¶ 70, 72.

^{173.} Id. at 14.

^{174.} G.A. Res. 70/169, at 1 (Dec. 17, 2015).

^{175.} *Id.* at 1, 3, ¶¶ 5(a), 5(c), 9.

^{176.} G.A. Res. 71/222, at 1 (Dec. 21, 2016).

^{177.} *Id*. ¶ 3.

^{178.} *Id*. ¶ 4.

^{179.} See id. ¶¶ 4, 6, 9, 11, 12.

prioritization of the human right to water is indicative of water's growing status as an affirmative right.

C. UN AND OTHER INTERNATIONAL MECHANISMS

Various intergovernmental organizations ("IGOs") and nongovernmental organizations ("NGOs") have been working together to protect and promote the human right to water. This section details the primary organizations engaging in such efforts. IGOs are organizations composed primarily of sovereign states, which includes the UN and its organs. IGOs working on the human right to water include the UN Human Rights Committee, the Committee on Economic, Social and Cultural Rights, the Commission on Sustainable Development, the World Health Organization, the Inter-American Court of Human Rights, the European Court of Human Rights, and the African Court on Human and Peoples' Rights. NGOs may also be international in nature; however, they exist independently from sovereign states and are thus not a direct proxy for state interests. They often take the form of organizations dedicated to particularized subject areas and are composed of persons or organizations interested in said subject matter. NGOs include Water Lex, World Water Council, and Water for People.

Intergovernmental Organizations

• UN Water¹⁸⁰

UN Water is an interagency mechanism supporting efforts to resolve freshwater and sanitation related issues. ¹⁸¹ Its purpose is to coordinate all UN (and related) efforts concerning water. ¹⁸² Pursuant to this mission, its website provides information on the various water related topics, chronicles water related news, events, and campaigns, offers access to UN reports and fact sheets, and serves as a database from which to search for water related publications. ¹⁸³

• UN Human Rights Committee¹⁸⁴

The UN Human Rights Committee is a body of independent experts in charge of overseeing the implementation of the International Covenant on Civil and Political Rights. ¹⁸⁵ Under its Optional Protocol, complaints of violations of the International Covenant on Civil and Political Rights are to be brought to the UN Human Rights Committee, which has implied a Human Right to Water under

^{180.} U.N. WATER, http://www.unwater.org/ (last visited May 8, 2017).

^{181.} About United Nations Water, U.N. WATER, http://www.unwater.org/about-unwater/ (last visited Nov. 5, 2017).

^{182.} Id.

^{183.} U.N. WATER, *supra* note 181.

^{184.} *Human Rights Committee*, UNITED NATIONS HUMAN RIGHTS, http://www.ohchr.org/EN/HRBodies/CCPR/Pages/CCPRIndex.aspx (last visited May 8, 2017).

^{185.} Id.

various other cultural and political rights.¹⁸⁶ State party reports, concluding observations, general comments, jurisprudence, instructions on how to file a complaint, as well as information about the Human Rights Committee's mandate are all available on its website.¹⁸⁷

• United Nations Committee on Economic, Social and Cultural Rights ¹⁸⁸

The UN Committee on Economic, Social and Cultural Rights ("CESCR") monitors the implementation of rights put forth in the International Covenant on Economic, Social and Cultural Rights ("ICESCR"), ¹⁸⁹ and is also in charge of the General Comments on the Covenant. ¹⁹⁰ Pursuant to its Optional Protocol, individuals may bring complaints of violations of the International Covenant on Civil and Political Rights to the CESCR. ¹⁹¹ This newer mechanism has yet to adjudicate a complaint on the Human Right to Water. ¹⁹² The ICESCR website provides links to basic documents, the work of the committee, latest news, and recent events and developments. ¹⁹³

• Commission on Sustainable Development 194

The Commission on Sustainable Development was established by the General Assembly to oversee the efforts to achieve sustainable development following the Earth Summit, Agenda 21, the Rio Declaration, and the Johannesburg Plan of Action. This commission takes the important step of framing the human right to water under the right to development.

• The Inter-American Court of Human Rights 197

^{186.} *See* Naidenova v. Bulgaria, CCPR/C/106/D/2073/2011, Views of the United Nations Human Rights Committee, ¶¶ 14.2, 15 (Nov. 14, 2012); Ángela Poma Poma v. Peru, Communication No. 1457/2006, Human Rights Committee (Mar. 27, 2009).

^{187.} Human Rights Committee, supra note 184.

^{188.} About Us, United Nations Committee on Economic, Social and Cultural Rights, http://www.ohchr.org/EN/HRBodies/CESCR/Pages/CESCRIndex.aspx (last visited May 8, 2017).

^{189.} Id

^{190.} See discussion of the right to water and the ICESCR.

^{191.} Optional Protocol to the International Covenant on Economic, Social and Cultural Rights, *opened for signature* Sept. 24, 2009, *resolution adopted by the General Assembly* Mar. 5, 2009, A/RES/63/117.

^{192.} *Jurisprudence*, United Nations Committee on Economic, Social and Cultural Rights, http://juris.ohchr.org/en/search/results?Bodies=9&sortOrder=Date (last visited Nov. 5, 2017).

^{193.} UNITED NATIONS COMMITTEE ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS, supra note 188.

^{194.} *Timeline*, Commission on Sustainable Development, https://sustainabledevelopment.un.org/csd.html (last visited May 8, 2017).

^{195.} Id.

^{196.} Water and Sanitation, COMMISSION ON SUSTAINABLE DEVELOPMENT, https://sustainabledevelopment.un. org/topics/waterandsanitation (last visited Jan. 27, 2018).

^{197.} THE INTER-AMERICAN COURT OF HUMAN RIGHTS, http://www.corteidh.or.cr/index.php/en (last visited May 8, 2017).

The Inter-American Court of Human Rights is an autonomous judicial body tasked with resolving regional disputes and upholding the American Convention on Human Rights. The Court has proven to be a receptive forum for the adjudication of regional disputes concerning the human right to water. ¹⁹⁹ Information on the structure of the court, its processes and procedures, provisional measures, decisions, and judgements, as well as publications and press releases are available on the Court's website. ²⁰⁰

• The Inter-American Commission on Human Rights²⁰¹

The Inter-American Commission on Human Rights is the body that hears petitions by individuals of state violations of rights under Inter-American Human Rights treaties.²⁰² It both renders decisions and decides if cases should be admitted to the Inter-American Court of Human Rights.²⁰³ Through its mechanism on Precautionary Measures, the commission may provide injunctive relief to halt state action until the commission is able to render a decision.²⁰⁴ In addition to its judicial function the Commission may conduct investigations on country compliance with Inter-American Human Rights treaties.²⁰⁵ These investigations often culminate in reports, which may be either country specific or thematic.²⁰⁶ While there has been no report on the Right to Water, the Commission has reported on natural resources more generally as they pertain to indigenous rights.²⁰⁷ Reports, decisions, facts sheets, and forms for filing petitions as well as other information about the Commission are available on the Commission's website.²⁰⁸

• The European Court of Human Rights²⁰⁹

The European Court of Human Rights is an international court tasked with adjudicating allegations of violations of the rights set forth by the European

^{198.} THE INTER-AMERICAN COURT OF HUMAN RIGHTS, About-Us, http://www.corteidh.or.cr/index.php/en/about-us/historia-de-la-corteidh (last visited Nov. 5, 2017).

^{199.} See infra Part III.C on "Selected Cases from International And Regional Tribunals."

^{200.} Id. Note that some of the information may be only available in English or Spanish.

^{201.} INTER-AMERICAN COMMISSION ON HUMAN RIGHTS, http://www.oas.org/en/iachr/ (last visited Jan. 13, 2018) [hereinafter Inter-AM. Comm'n H.R.].

 $^{202. \ \}textit{Mandates and Functions of the Inter-American Commission on Human Rights}, \ \mathsf{ORG.} \ \mathsf{OF} \ \mathsf{AM.} \ \mathsf{STATES}, \\ \mathsf{http://www.oas.org/en/iachr/mandate/functions.asp} \ (last visited Jan. 13, 2017).$

^{203.} Id.

^{204.} *Id*.

^{205.} Id.

^{206.} Id.

^{207.} See Thematic Reports of the Inter-American Commission on Human Rights, Org. OF Am. STATES, http://www.oas.org/en/iachr/reports/thematic.asp (last visited Jan. 13, 2018).

^{208.} INTER-AM. COMM'N H.R., supra note 201.

^{209.} EUROPEAN COURT OF HUMAN RIGHTS [Eur. Ct. H.R.], http://www.echr.coe.int/Pages/home.aspx?p=home (last visited Feb. 24, 2017).

Convention on Human Rights.²¹⁰ The European Court of Human Rights has mainly addressed a right to water in its provisions on the prevention of inhumane treatment.²¹¹ However, if a larger right were to be read into the European Convention on Human Rights, this would be the forum within which to assert it. The website of the European Court of Human Rights provides an abundance of information regarding human rights in Europe including jurisprudence, country information, statistics, press releases, and a comprehensive overview of the court, its functions, and structure.²¹²

• The African Court on Human and Peoples' Rights²¹³

The African Court on Human and Peoples' Rights is tasked with interpreting and upholding the African Charter on Human and Peoples' Rights.²¹⁴ It does so by hearing cases and disputes pertaining to the interpretation and application of the African Charter on Human and Peoples' Rights, the Protocol, and any other international human rights instrument ratified by the States party to the dispute.²¹⁵ The right to water may be inferred under the charter's provisions on the right to health, development, and life.²¹⁶ The Court's website provides information about the court and its cases.²¹⁷

• The African Commission on Human and Peoples' Rights²¹⁸

The African Commission on Human and Peoples' Rights is an IGO entrusted with protecting, promoting, and interpreting human rights as given by the African Charter.²¹⁹ Its two primary functions are (1) adjudicating complaints filed through its individual communication procedure on violations of the African Charter on Human and Peoples Rights, and (2) supporting and collecting research on the human rights situations in its member states.²²⁰ These inquiries are conducted both through independent investigations as well as through collabora-

 $^{210.\,}$ Eur. Ct. H.R., The Court in Brief, http://www.echr.coe.int/Documents/Court_in_brief_ENG.pdf (last visited Jan. 13, 2018).

^{211.} See infra Part III.C on "Selected Cases from International And Regional Tribunals."

^{212.} Eur. Ct. H.R., supra note 210.

^{213.} AFRICAN COURT ON HUMAN AND PEOPLES' RIGHTS, http://en.african-court.org/ (last visited Jan. 13, 2018).

^{214.} Id.

^{215.} Id.

^{216.} African Charter on Human and Peoples' Rights ("Banjul Charter"), adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (entered into force Oct. 21, 1986).

^{217.} AFRICAN COURT ON HUMAN AND PEOPLES' RIGHTS, supra note 214.

^{218.} THE AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS, http://www.achpr.org/ (last visited May 11, 2017).

^{219.} About, The African Commission on Human and Peoples' Rights, http://www.achpr.org/about/ (last visited Nov. 5, 2017).

^{220.} Mandate of the Commission, The African Commission on Human and Peoples' Rights, http://www.achpr.org/about/mandate/ (last visited Nov. 5, 2017).

tions with NGOs and educational institutions.²²¹ Decisions on communications, how to file communications, reports on its investigations, and general information about the African system are available on the Commission's website.²²²

• The World Health Organization ("WHO")²²³

The WHO is a specialized agency of the UN dedicated to solving health crises worldwide. Amongst its self-ascribed functions is ensuring the safety of the water people drink. The WHO Program on Water, Sanitation, and Hygiene monitors, assesses, and reports on water safety, quality, and availability, as it impacts health conditions around the world. They produce a plethora of publications each year on a wide range of topics relating to water and are a great source of facts and figures. All of this information can be found on the WHO's website.

Nongovernmental Organizations

World Water Council²²⁹

The World Water Council is a network of multilevel stakeholders including water specialists, politicians, leading experts, and top officials, dedicated to hydro-diplomacy. It hosts the World Water Forum—a summit dedicated to discussions of global water issues and solutions. Its mission is to promote awareness, build political commitment and trigger action on critical water issues at all levels, including the highest decision-making level It emphasizes values of transparency, democracy, dignity of discussion, independence of water issues not interfered by special interests, and participation of all relevant stakeholders. The World Water Council also puts forth materials (available online) on the right to water such as reports, media releases, and resolutions.

^{221.} Id.

^{222.} THE AFRICAN COMMISSION ON HUMAN AND PEOPLES' RIGHTS, supra note 219.

^{223.} WHO, http://www.who.int/en/ (last visited Feb. 24, 2017).

^{224.} About WHO, WHO, http://www.who.int/about/en/ (last visited Nov. 5, 2017).

^{225.} Health Topics: Water, WHO, http://www.who.int/topics/water/en/ (last visited Nov. 5, 2017).

^{226.} Programme on Water Sanitation and Hygiene, WHO, http://www.who.int/water_sanitation_health/en/(last visited Nov. 5, 2017).

^{227.} Id.

^{228.} WHO, supra note 223.

^{229.} WORLD WATER COUNCIL, http://www.worldwatercouncil.org (last visited Feb. 24, 2017).

^{230.} About Us, World Water Council, http://www.worldwatercouncil.org/en/about-us (last visited Feb. 24, 2017).

^{231.} Id.

^{232.} Vision & Mission, WORLD WATER COUNCIL, http://www.worldwatercouncil.org/en/vision-mission (last visited May 11, 2017).

^{233.} Id.

^{234.} WORLD WATER COUNCIL, supra note 229.

World Water Forum²³⁵

The World Water Forum is a conference that convenes every three years to facilitate multi-sectoral discussions and awareness of pressing global water issues and showcases the work of the World Water Council.²³⁶ A democratic dialogue, the World Water Forum seeks to promote global cooperation to ultimately achieve rational and sustainable use of water resources.²³⁷ The Forum has convened seven times on four different continents.²³⁸ The 8th World Water Forum, slated for 2018, has been scheduled to be held in Brazillia, Brazil, the Forum's first foray into the Southern Hemisphere.²³⁹

• Latin American Water Tribunal ("TLA"—Tribunal Latinoamericano del Agua)²⁴⁰

This court seeks to provide alternative dispute resolution of water conflicts.²⁴¹ Rather than issuing legally binding judgments, it functions as an autonomous ethical tribunal.²⁴² Since its inception the TLA has held seven hearings.²⁴³ Its website provides information about its processes and tracks current events relating to international water law.²⁴⁴ Most of its resources are in Spanish.²⁴⁵

• WaterLex²⁴⁶

WaterLex is an international development NGO and UN Water Partner dedicated to promoting water rights through policy initiatives. ²⁴⁷ It seeks to be a "catalyzing link" for those interested in the Human Right to Water. ²⁴⁸ WaterLex is a valuable resource for legal research on the right to water and has developed a database for legal research relating to water. ²⁴⁹

^{235.} Id.

^{236.} About Us. WORLD WATER COUNCIL, supra note 229.

²³⁷ Id

^{238.} World Water Forum, WORLD WATER COUNCIL, http://www.worldwatercouncil.org/en/world-waterforum (last visited Feb. 24, 2017).

^{239.} Brasilia 2018, WORLD WATER COUNCIL, http://www.worldwatercouncil.org/en/brasilia-2018 (last visited Nov. 5, 2017).

^{240.} LATIN AMERICAN WATER TRIBUNAL (TLA—Tribunal Latinoamericano del Agua), http://tragua.com/ (last visited Feb. 24, 2017).

^{241.} About us, LATIN AMERICAN WATER TRIBUNAL (TLA—Tribunal Latinoamericano del Agua), http://tragua.com/quienes-somos/ (last visited Nov. 5, 2017).

^{242.} Id.

^{243.} Id.

^{244.} LATIN AMERICAN WATER TRIBUNAL, supra note 240.

^{245.} Id.

^{246.} WATERLEX, http://www.waterlex.org/ (last visited Feb. 24, 2017).

^{247.} Our Origins, WATERLEX, https://www.waterlex.org/our-origins/ (last visited Nov. 5, 2017).

^{248.} Id.

^{249.} WATERLEX, supra note 246.

III. ANNOTATED BIBLIOGRAPHY: SELECTED TREATISES, ARTICLES, REPORTS, AND DOMESTIC LAWS

A. BOOKS AND JOURNAL ARTICLES

The following books and journal articles were selected for their creative approaches to the right to water. As this right is somewhat amorphous and not always recognized as an independent right, these journal articles explore some of the ways that practitioners and policy makers may approach this right and make it enforceable. Additionally, all the resources detailed below are contemporary and represent up to date views on the right to water. While they take varying approaches, some surveying a wide swath of national and international law, some focusing on specific case studies, all provide comprehensive bibliographies that can assist researchers in continuing to explore the right to water.

A New Constitutive Commitment to Water²⁵⁰

This article, using an empirical example of the Detroit water shutoffs in 2013 and Detroit's Bankruptcy Court decision in the *Lyda* case, ²⁵¹ suggests that, while no constitutional right to water exists, access to water has attained near-constitutional status. ²⁵² This article describes how international human rights law provides normative guidance to this "new constitutive commitment," ²⁵³ as represented by California Assembly Bill 685. ²⁵⁴

Let Justice Roll Down: A Case Study of the Legal Infrastructure for Water Equality and Affordability²⁵⁵

This article discusses possible mechanisms to protect the right to water in the U.S., a nation that does not recognize water access as an affirmative human right. ²⁵⁶ It reviews a hypothetical analysis of the right using anti-discrimination laws and constitutional protections as well as the unique provisions cities are adopting to hold local policy to human rights standards. ²⁵⁷ Unfortunately, as described in the article, the burden of proof in such mechanisms is high, and there exists a tension between remedial measures that rely on the proof of discrimination against a specific class and creating an affirmative right for all. ²⁵⁸ This article

^{250.} See WATERLEX LEGAL DATABASE, https://www.waterlex.org/waterlex-legal-database/ (last visited Nov. 5, 2017); Sharmila L. Murthy, A New Constitutive Commitment to Water, 36 B.C.J.L. & Soc. Just. 159 (2016).

^{251.} Lyda v. City of Detroit (*In re* City of Detroit), No. 15-CV-10038, 2015 WL 5461463 (E.D. Mich. Sept. 16, 2015), *aff'd in part, vacated in part*, 841 F.3d 684 (6th Cir. 2016).

^{252.} Murthy, supra note 250, at 161-62.

^{253.} Id. at 164, 204-06.

^{254.} Id. at 218-19

^{255.} Martha F. Davis, Let Justice Roll Down: A Case Study of the Legal Infrastructure for Water Equality and Affordability, 23 Geo. J. on Poverty L. & Pol'y 355 (2016).

^{256.} Id. at 357-58.

^{257.} Id. at 357-59.

^{258.} Id. at 390-91.

relies on a wide range of materials: legal texts, regulations, codes, constitutions, news articles, UN resolutions and reports, city resolutions and reports, case law, scholarly articles, and statistical reports, and provides a technical legal analysis of tackling water issues within a nation.

Stick to the Rivers and the Lakes That You're Used To: A Lacey Act Amendment for Water Rights²⁵⁹

The article examines an amendment to the "Lacey Act," ²⁶⁰ a federal law, as a vehicle for a solution to international violations of water rights. ²⁶¹ If applied—principally in the U.S. but potentially by other nations as well under reciprocity—the article argues that the amendment would make all importation of water a violation of the laws of the home state and subject to prosecution, but also subject to good faith and *de minimus* limitations. ²⁶² The article makes clear that while the current political climate would make passage of such a law unlikely, it would effectively sanction some violations of the right to water that currently escape legal consequences due to jurisdictional limitations. ²⁶³ The article relies almost entirely on the Lacey Act and its history and political reception, but also draws from a similar act instituted to block illegal lumber practices in the EU, and explores some of the larger international violations of water rights relying on scholarly articles, news articles, and some foreign law.

GLOBAL URBAN JUSTICE: THE RISE OF HUMAN RIGHTS CITIES²⁶⁴

This book deals with "human rights cities," which base their local policies on human rights, implementing the international human rights principles to its action plans and programs. The term "human rights city" originated in Qwangju, Korea, which called itself a human rights city to commemorate the 1980 massacre of 200,000 striking workers and protesting students. Owangju aspires to be "the model city, which succeeds, develops, and realizes the historicity and spirit of democracy and human rights in the local community, and spreads them widely." The book focuses on the potential for cities to deliver where nation states have failed. The book also includes articles analyzing experiences in the U.S., the Netherlands, Ghana, UK, and Mexico, and highlights both the challenges and the opportunities before the human rights cities"

^{259.} Schuyler Lystad, Stick to the Rivers and Lakes That You're Used To: A Lacey Act Amendment for Water Rights, 28 Geo. Envtl. L. Rev. 335 (2016).

^{260.} Lacey Act, 16 U.S.C. §§ 3371–3378 (2012); see, e.g., 50 C.F.R. § 14 (2017).

^{261.} Lystad, supra note 259, at 344-53.

^{262.} Id. at 348, 353-54, 356-57.

^{263.} Id. at 357-58.

^{264.} GLOBAL URBAN JUSTICE: THE RISE OF HUMAN RIGHTS CITIES (Barbara Oomen, Martha F. Davis & Michele Grigolo eds., 2016).

^{265.} See id. at 1.

^{266.} Id.

^{267.} Id. at 2.

movement. There are many citations to human rights-inspired local regulations and ordinances.

The Human Right to Water: A False Promise? 268

This article discusses the emergence of a global human right to water.²⁶⁹ It claims that the right has emerged out of a series of non-binding legal instruments including UN resolutions and the international covenant on Economic, Social and Cultural Rights.²⁷⁰ The author describes the human right to water as a progressive right, meaning that it becomes implemented over time under good faith, but with certain obligations that are intended to be effective immediately.²⁷¹ The article concludes that the human right to water has not reached the level of customary international law because many states, including key donors, have abstained from its formal recognition.²⁷² Its primary sources are UN documents and national laws with their accompanying commentaries, as well as other scholarly articles addressing the topic. The article is a more traditional international law view of social and cultural rights.

The Human Right to Water: Significance, Legal Status and Implications for Water Allocation $^{\rm 273}$

This volume comprehensively deals with human right to water issues both practically and in legal theory. The work traces the origins of the human right to water, its emergence on the international stage, the right's component parts, and the possible benefits to society of its implementation. The author suggests that a human rights approach encourages people to play a proactive role in demanding their rights, and makes available judicial remedies at the local and international levels. The author relies upon human rights treaties, UN documents, and case law from national, regional, and international courts as well as technical studies on water availability. The author relies upon human rights treaties, UN documents, and case

The Impact of Law on the Right to Water and Adding Normative Change to the Global Agenda. 277

This article examines the impact of the international norm that specifies "progressive realization" rather than immediate implementation as the framework of expectations for the enforcement of economic, social, and cultural rights

^{268.} See McCaffrey, supra note 14.

^{269.} Id.

^{270.} Id. at 224-28.

^{271.} *Id.* at 228–29.

^{272.} Id. at 231–32.

^{273.} WINKLER, supra note 17.

^{274.} Id.

^{275.} Id.

^{276.} See id.

^{277.} See Michael R. Ulrich, The Impact of Law on the Right to Water and Adding Normative Change to the Global Agenda, 48 Geo. Wash. Int'l L. Rev. 43, 48 (2015).

protections.²⁷⁸ In the case of water, the author argues that the "progressivist regime" is essentially a license for states to completely ignore this most fundamental right.²⁷⁹ According to this argument, the South African case, *Mazibuko & Others v. The City of Johannesburg*,²⁸⁰ ultimately allowed for discrimination in water rights under the guise of non-action due to limited resources.²⁸¹ Instead, because water access is quantifiable, according to the author, the minimum amount of water necessary for life, as established by the WHO, should be the legal standard to which states are held.²⁸² If states fail, they can be publicly named and shamed, and if they truly lack the resources to provide this base, the international community can then step in.²⁸³

The Right(s) to Water: The Multi-Level Governance of a Unique Human Right. $^{\rm 284}$

This book takes a comprehensive look at the fundamental question of whether a human right to water exists. It explores domestic, regional, and international law, evaluating a mix of hard and soft law. The book organizes its conclusions into three overarching sections: (1) the development and current legal status of the human right to water, (2) philosophical and conceptual approaches to water as a human right, and (3) mechanisms for the enforcement, protection, and monitoring of the right. 285 The author concludes that while awareness of and excitement about promoting a human right to water has increased in recent years, there is no cohesive, inclusive, and independent legal approach that actually creates, maintains, and binds states to this right.²⁸⁶ The book does, nevertheless, see potential for progress and ends with three questions that if answered might enable the human rights framework to be used to ameliorate the global water crises: "Firstly, how do we effectively identify violations of a human right to water? Secondly, how do we develop policies to improve compliance with a human right to water? And thirdly, what mechanisms can be put in place to counter those that still do not comply with the obligations under such a human right?" 287 Perhaps the most important contribution of this book is its comprehensive list of documents and sources including: UN documents, jurisprudence/case law from both national and international courts, directives/regulations/resolutions of the European Union, international treaties/conventions, scholarly articles, and communiques.

^{278.} Id. at 44, 46.

^{279.} Id. at 47, 52, 66.

^{280.} Mazibuko & Others v. City of Johannesburg 2010 (3) BCLR 239 (CC) \P 6 (S. Afr.).

^{281.} Id. ¶ 57.

^{282.} *Id*. ¶¶ 66, 71–73.

^{283.} Id. ¶¶ 75-77.

^{284.} PIERRE THIELBÖRGER, THE RIGHT(S) TO WATER: THE MULTI-LEVEL GOVERNANCE OF A UNIQUE HUMAN RIGHT (2014).

^{285.} Id. at 3.

^{286.} Id. at 195-201.

^{287.} Id. at 201.

B. HUMAN RIGHTS REPORTS

Reports on the human right to water are useful because they provide a collection of data on a specific topic within the larger theme of the human right to water. The reports selected each focus on a different issue within the human right to water. For example, *The Human Rights to Water and Sanitation in Courts Worldwide*²⁸⁸ provides readers with information on international and national precedent, while *The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene* analyzes the actual costs meeting the Sustainable Development Goals on water. All reports are thoroughly researched and published by legitimate academic, governmental, or non-profit groups and provide excellent bibliographies for researchers to utilize.

Recognition of the Human Rights to Water and Sanitation by UN Member States at the International Level²⁸⁹

This 118-page report examines the inconsistent support in the UN for the Right to Water, through General Assembly and regional actions.²⁹⁰ It analyzes the content of the full range of UN and other multilateral declarations regarding water, as well as the positions of individual countries on those statements.²⁹¹ In addition to clarifying changes over time in individual country positioning, the report enables readers to put together an informed analysis of whether there is sufficient support for the right among member states to be considered customary, in legal terms.

Realising the Human Rights to Water and Sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque²⁹²

This nine-volume handbook extensively covers the UN involvement with the human right to water and offers guidance for stakeholders seeking its realization. The volumes are: introduction, frameworks, financing, services, monitoring, justice, principles, checklists, and sources. For lawyers and policy makers, the two most relevant manuals are those concerning justice and sources. The volume discussing justice is especially helpful for finding cases and precedents from around the world, as well as all relevant legal mechanisms, and the

^{288.} WATERLEX & WASH UNITED, THE HUMAN RIGHTS TO WATER AND SANITATION IN COURTS WORLDWIDE (2014).

^{289.} AMNESTY INT'L & WASH UNITED, RECOGNITION OF THE HUMAN RIGHTS TO WATER AND SANITATION BY UN MEMBER STATES AT THE INTERNATIONAL LEVEL (2015).

^{290.} Id at 4.

^{291.} Id.

^{292.} Catarina De Albuquerque, UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Realising the human rights to water and sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque: Introduction 15 (2014).

^{293.} Id.

^{294.} Id at 21-22

^{295.} For example, national and regional courts, human rights institutes and other international bodies.

sources volume offers a basic bibliography for the report, providing many other key primary and secondary sources. ²⁹⁶

Shutting the Spigot on Private Water: The Case for the World Bank to Divest²⁹⁷

This report discusses the current state of water privatization, and the involvement of the World Bank and corporations in this privatization, through case studies, theoretical discussion, and technical financial analysis.²⁹⁸ It then calls for divestment and a recommitment to public water as a way of ensuring protection of the human right to water, again using case studies to show practically how divestment could be accomplished, as well as illustrate how public opinion supports this initiative.²⁹⁹

The Human Right to Safe Drinking Water and Sanitation in Law and Policy—A Sourcebook³⁰⁰

This 282-page report examines possible sources, specifically in law and policy, of the human right to water at the national, regional, and global level.³⁰¹ It is an overview of the status of the acceptance of the human right to water and sanitation in international, national law, and policy spheres.³⁰² This sourcebook is structured into three sections: an overview of international law, an examination of regional mechanisms, and finally a sample of national sources on the human right to water.³⁰³ While not exhaustive, this sourcebook provides a comprehensive guide to various sources of water law.

The Human Right to Water and Sanitation Milestones³⁰⁴

This brief UN report (4 pages in total) created for the UN Water for Life Decade program provides an annotated timeline of the significant UN milestones for the human right to water from 1992-2010.³⁰⁵ These milestones include conferences, conventions, resolutions, reports, and decisions.³⁰⁶ Its annotations are clear and concise, providing a compact description of the evolution of the human right to water.

^{296.} See Catarina De Albuquerque, UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Realising the human rights to water and Sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque: Sources (2014).

^{297.} CORPORATE ACCOUNTABILITY INTERNATIONAL, SHUTTING THE SPIGOT ON PRIVATE WATER: THE CASE FOR THE WORLD BANK TO DIVEST (2012).

^{298.} Id.

^{299.} Id. at 32-47.

^{300.} WASH UNITED, FRESHWATER ACTION NETWORK & WATERLEX, THE HUMAN RIGHT TO SAFE DRINKING WATER AND SANITATION IN LAW AND POLICY—A SOURCEBOOK (2012).

^{301.} Id at 22.

^{302.} *Id*.

^{303.} Id.

^{304.} United Nations Office to support the International Decade for Action 'Water for Life' 2005-2015/ UN-Water Decade, The Human Right to Water and Sanitation Milestones (2011), http://www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_milestones.pdf.

^{305.} Id.

^{306.} Id.

The Human Rights to Water and Sanitation in Courts Worldwide³⁰⁷

Because the human right to water has yet to be addressed comprehensively at the international level, this report collects various regional and national court cases that have involved legal examination of the human right to water. Starting with an overview of the thematic principles most related to the human right to water, the report then goes on to list a sample of cases relating to the human right to water by country, providing the facts, procedure, and rationale for each case. It is an important tool in the effort to determine whether there exists enough consensus worldwide to assign the human right to water the status of custom.

Manual on the Right to Water and Sanitation³¹⁰

This manual is intended to serve as a tool for developing policies for practically realizing the human right to water. It begins by situating the human right to water in the context of health, poverty, and human development. It then provides readers with an overview of the rights to water and sanitation and the international, regional, and national mechanisms available to ensure its realization. Then, the manual outlines the core actors that might come into play when developing and implementing a strategy for a human right to water based policy. These actors, who are enumerated and whose roles are discussed include: governments, service providers, independent monitors, civil society organizations, international organizations, industry stakeholders, and marginalized communities. The last portion of this report is dedicated to outlining how to create potential standards for water quality, quantity, accessibility, and affordability. Finally, it concludes by proposing strategies for international cooperation. For researchers, this report's select bibliography provides citations to fundamental documents and articles on the human right to water.

The Costs of Meeting the 2030 Sustainable Development Goal Targets on Drinking Water, Sanitation, and Hygiene³¹⁷

This dense study estimates and analyzes the various costs associated with meeting the targets of Sustainable Development Goals Six, including the goal of

³⁰⁷. WaterLex & WASH United, The Human Rights to Water and Sanitation in Courts Worldwide (2014).

^{308.} Id.

^{309.} Id. at 7-8.

^{310.} Ctr. on Hous. Rights & Evictions et al., Manual on the Right to Water and Sanitation (2007).

^{311.} Id. at 2-18.

^{312.} Id. at 19-26.

^{313.} Id. at 27-78.

^{314.} Id.

^{315.} Id. at 147-59.

^{316.} Id. at 161-62.

^{317.} GUY HUTTON & MILI VARUGHESE, WATER & SANITATION PROGRAM, THE COSTS OF MEETING THE 2030 SUSTAINABLE DEVELOPMENT GOAL TARGETS ON DRINKING WATER, SANITATION, AND HYGIENE (2016).

"achieving universal and equitable access to safe and affordable drinking water for all." Using statistics, this goal sets forth a detailed assessment to determine the practicalities of reaching this goal, which would be a useful tool for policy-makers. Interestingly, this study found that given a targeted plan of action "current levels of financing can cover the capital costs of achieving universal basic service for drinking water, sanitation, and hygiene by 2030." 320

Thirsting for Justice: Europe's Roma Denied Access to Clean Water & Sanitation³²¹

This 43-page report begins by describing the international and European legal frameworks that guarantee the human right to water. After detailing two years of research on the water and sanitation situations faced by Roma communities across Europe, the report applies those frameworks. It concludes by finding that the Roma are being unequally denied their rights to water and sanitation in violation of regional and international human rights standards. This report provides a good case study for how to, in the context of the human right to water, research and apply human rights frameworks to real world situations.

C. SELECTED CASES FROM INTERNATIONAL AND REGIONAL TRIBUNALS

The following section includes one or more cases from regional and international bodies, beginning with the Human Rights Committee, continuing on to the Inter-American Court of Human Rights and the European Court of Human Rights, and concluding with the African Commission on Human and Peoples' Rights. The selected cases represent the primary way the international community has approached the human right to water in judicial contexts. They were chosen for their approach to international human rights law as well as their precedential impact as some of the first cases to consider the human right to water, even in the context of other rights.

Liliana Assenova Naidenova et al. v. Bulgaria³²⁶

In this case, the Human Rights Committee considered the human right to water under the right to life, the right to housing, and the prohibition against discrimina-

^{318.} Id. at ix.

^{319.} Id.

^{320.} Id. at 7.

^{321.} Eur. Roma Rights Ctr., Thirsting for Justice: Europe's Roma Denied Access to Clean Water & Sanitation (2017).

^{322.} Id. at 11-16.

^{323. &}quot;Roma communities" refers to the Roma or Romani people, a typically nomadic ethnic group that lives throughout Europe.

^{324.} EUR. ROMA RIGHTS CTR., supra note 321, at 17–35.

^{325.} Id. at 37.

^{326.} Naidenova v. Bulgaria, CCPR/C/106/D/2073/2011, Views of the United Nations Human Rights Committee, ¶ 1 (Nov. 14, 2012).

tion as given by the ICCPR.³²⁷ It found a violation of said rights and denounced the Republic of Bulgaria for allowing the Municipality of Sofia to cut off a Roma community's access to water.³²⁸ Ruling that cutting off the water was effectively an eviction, the Committee issued interim measures ordering the water supply to be reconnected.³²⁹ Importantly, this case involves a contemporary situation that occurs in many urban areas and did not allow commercial or economic rationalization to trump personal needs.

Ángela Poma Poma v. Peru³³⁰

The case concerned the diversion of water away from an indigenous community, the Aymara, residing on their traditional lands.³³¹ The Aymara argued that they relied on this water to practice traditional cultural activities and that it was essential for maintaining their livelihood and subsistence.³³² The Human Rights Committee held that the diversion of water away from the Aymara people effectively ruined their ecosystem and infringed upon their rights to cultural enjoyment under article 27 of the ICCPR.³³³ For the first time, the Committee espoused the idea of prior informed consent when dealing with indigenous communities and resource allocation.

The Indigenous Community of Yakye Axa vs. Paraguay³³⁴

This case involved an indigenous land dispute brought before the Inter-American Court on Human Rights.³³⁵ A Paraguayan indigenous community brought a claim to re-establish ownership over part of their traditional lands.³³⁶ The plaintiffs argued their right to life (as defined by the American Convention on Human Rights) was violated by poor living conditions, including a lack of access to safe-drinking water (and water, in general), forced upon them by limiting them to a small portion of their traditional lands.³³⁷ The court, in ruling in favor of the plaintiffs, stipulated that as long as the Yakye Axa People remained landless, the state must provide for them the basic goods and services required for survival (which presumably included water). The court reasoned that a deprivation of land and its resources is tantamount to a deprivation of cultural and economic

^{327.} *Id*. ¶ 9.

^{328.} Id. ¶¶ 9, 10.

^{329.} *Id*. ¶ 10.

^{330.} Ángela Poma Poma v. Peru, Communication No. 1457/2006, Human Rights Committee (Mar. 27, 2009).

^{331.} *Id*. ¶ 2.2.

 $^{332. \ \}textit{Id}. \P\P\ 2.1 - 3.4.$

^{333.} Id. ¶ 8.

^{334.} Yakye Axa Indigenous Community v. Paraguay, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 125, (June 17, 2005).

^{335.} *Id*. ¶¶ 1−3.

^{336.} Id. ¶ 2.

^{337.} See id. ¶ 121.

development under the American Convention on Human Rights.³³⁸ Notably, the court used, as part of its argument, the concept that the human right to water is implicitly provided by the ICESCR.³³⁹

The Xakmok Kasek Indigenous Community v. Paraguay³⁴⁰

This case involved a similar dispute as The Indigenous Community of Yakye Axa vs. Paraguay. 341 The Xakmok Kasek community, indigenous to the Paraguayan Chaco area, filed a petition before the Inter-American Court seeking acknowledgement of their traditional territory, which had been sold by the government without their consent.³⁴² The court found that this deprivation left them without access to water and without means of subsistence. 343 Relying on the American Convention on Human Rights and prior regional case law, the court recognized a relationship between the right to life and the human right to water. Focusing on rights to property, non-discrimination, and development, the court ruled that the state had failed in its obligations.³⁴⁴ Specifically, the court found that the state failed in its obligation to provide the community access to potable water.³⁴⁵ Importantly, for the first time, the court actually defined the minimum necessary amount of water needed for true fulfillment of the right to a decent existence: while the state was providing the community 2.17 liters of water per person per day, the court determined that most people require 7.5 liters per person per day. 346 While both this case and *The Indigenous Community of Yakye Axa vs.* Paraguay ultimately derive their power from the special obligation of the state to ensure non-discriminatory treatment of indigenous peoples, both invoke the right of these peoples to clean water, and the duty of the state to provide it, whether through access or direct provision.

Riad and Idiab v. Belgium³⁴⁷

This case considered whether the holding of two asylum seekers from Lebanon without adequate water for consumption and hygiene was in violation of the European Convention on Human Rights' provisions on inhumane treatment.³⁴⁸ The European Court of Human Rights held that denying persons detained for

^{338.} See id. ¶ 221.

^{339.} *Id*. ¶¶ 167–69.

^{340.} The Xákmok Kásek Indigenous Community v. Paraguay, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 214 (Aug. 24, 2010).

^{341.} Compare id. ¶¶ 1–6 (alleging State failed international responsibility to ensure rights of Xákmok Kásek Indigenous Community to ancestral property), with Yakye Axa, Ct. H.R. (ser. C) No. 125 (discussing State's failure to ensure ancestral property rights of the Yakye Axa Indigenous Community).

^{342.} Xákmok Kásek Indigenous Community, Inter-Am. Ct. H.R. (ser. C) No. 214 ¶¶ 1-5.

^{343.} Id. ¶ 273.

^{344.} Id. ¶ 337.

^{345.} Id. ¶¶ 194-96.

^{346.} *Id*. ¶ 195.

^{347.} Riad and Idiab v Belgium, 29810/03 Eur. Ct. H.R. (2008).

^{348.} Id.

more than ten days water for consumption and cleaning constituted inhumane and degrading treatment under the European Convention on Human Rights.³⁴⁹ This case is the guidepost for the human right to water in custodial situations.

Tadevosyan v. Armenia³⁵⁰

In this case an Armenian national was arrested and incarcerated.³⁵¹ During his incarceration his access to water was limited to twice a day.³⁵² The European Court of Human Rights ruled that failing to provide a detainee adequate access to water and sanitation violates article 3 of the European Convention on Human Rights on inhumane treatment and punishment.³⁵³ Although only in the context of detention, similarly to *Riad and Idiab v Belgium*, this case opens the door to discussing deprivations of water and sanitation as akin to inhumane treatment.

Sudan Human Rights Organisation and Centre on Housing Rights and Evictions v. Sudan³⁵⁴

This case involved a series of allegations arising from the conflict in the Darfur region. Amongst many other abuses, the African Commission on Human and Peoples' Rights found that the poisoning of wells and denial of access to water was a violation of the right to health as given by the African Charter on Human and People's Rights as well as CESCR General Comment 14. While not the primary focus of the case, the Commission's holding on the poisoning of the wells is the first precedent on which practitioners in the African region may rely when bringing complaints on the right to water to the African Commission. Additionally, it shows the growing inclusion of the right to water under ICESCR rights.

D. NATIONAL LAWS

This sample of national laws was created to help policy makers looking for approaches to the construction of binding legislation guaranteeing aspects of the human right to water, and in some cases, proclaiming it outright. This section, with laws chosen from different nations around the world and different levels of government may be helpful in arguing that the human right to water has achieved the status of a binding norm or is in the process of becoming customary international law.

^{349.} *Id*.

^{350.} Tadevosyan v. Armenia, App. No. 41698/04, Eur. Ct. H.R. (2008).

^{351.} Id. ¶¶ 7–26.

^{352.} Id. ¶ 25.

^{353.} *Id*. ¶ 22.

^{354.} Sudan Human Rights Organisation and Centre on Housing Rights and Evictions v. Sudan, 279/03-296/05, African Commission on Human and Peoples' Rights (May 27, 2009).

^{355.} Id. ¶¶ 2-14.

^{356.} See id. ¶ 212.

The following nations include an explicit reference to the human right to water in their constitutions: Bolivia, ³⁵⁷ DRC, ³⁵⁸ Ecuador, ³⁵⁹ Kenya, ³⁶⁰ Niger, ³⁶¹ Nicaragua, ³⁶² South Africa, ³⁶³ Slovenia, ³⁶⁴ Uganda, ³⁶⁵ and Uruguay. ³⁶⁶ The following selection of national laws, which exemplify the wide range of approaches to protecting water rights, are arranged alphabetically.

Argentina Environmental Water Management Law of The Autonomous City of Buenos Aires³⁶⁷

Passed by the legislature of Buenos Aires in 2009, and promulgated in 2010, this city water law codifies water as a human right for its citizens, guaranteeing them access to water of sufficient quality and in sufficient quantity.³⁶⁸ The rest of the law is devoted to outlining the nuts and bolts of managing the city's water resources and ensuring their quality.³⁶⁹

Brazil 1997 Law on Water Resources³⁷⁰

This 1997 national water law provides that water is a public good, as well as a resource with economic value.³⁷¹ Therefore, providing an adequate water supply for personal use is of primary importance.³⁷² The law also states that the national management system should include participation from the government, water users, and communities as well.³⁷³ It includes a plan to preserve quantity and quality for citizens.³⁷⁴

^{357.} Constitution of 2009 of the Plurinational State of Bolivia, art. 16.

^{358.} Constitution of the Democratic Republic of the Congo, Feb. 18, 2005, art. 48.

^{359.} Constitution of the Republic of Ecuador, Sept. 28, 2008, art. 3(1), 12, 15, 32.

^{360.} The Constitution of Kenya, 2010, art. 43, 56.

^{361.} Constitution of the Seventh Republic, 2010, art. 12 (Niger).

^{362.} POLITICAL CONSTITUTION OF THE REPUBLIC OF NICARAGUA, 1987 (with amendments through 2014), art.

^{363.} S. Afr. Const., 1996, Ch. 2 § 27.

^{364.} Slovenia Adds Water to Constitution as Fundamental Right for All, THE GUARDIAN (Nov. 17, 2016), https://www.theguardian.com/environment/2016/nov/18/slovenia-adds-water-to-constitution-asfundamental-right-for-all.

^{365.} Constitution of the Republic of Uganda, 1995 Oct. 8, 1995, Objective XIV, XXI.

^{366.} THE URUGUAYAN CONSTITUTION, Feb. 15, 1967 (with 1989, 1994, 1996, and 2004 amendments), art. 47.

^{367.} Argentina Environmental Water Management Law of The Autonomous City of Buenos Aires, General Documentation Center of Information and Legislative Archive (CEDOM), http://www2.cedom.gob.ar/es/legislacion/normas/leyes/ley3295.html (last visited May 11, 2017).

^{368.} Id. at art. 3.

^{369.} See generally id.

^{370. &}quot;National Water Resources Policy and the National Water Resources Management System," 9.433, de Jan. 8, 1997, Diário Oficial [D.O.U.], § 1: 470, 8.1.1997 (Braz.).

^{371.} Id. at art 1.

^{372.} Id. at art 2.

^{373.} Id. at art 1 & title IV.

^{374.} *Id.* at art 1–3.

Law on Water Resources Management of The Kingdom of Cambodia³⁷⁵

With an emphasis on sustainable development, this law, which entered into force in 2007, details the rights and obligations of water users in Cambodia, and outlines the system of water resources management.³⁷⁶ Most pertinently, in article 11 this law gives every person a human right to water resources for personal and domestic uses.³⁷⁷

The Ghana Water Resources Commission Act 1996³⁷⁸

The Ghana Water Resources Commission Act of 1996 is a national law that vests water resource management in the President, on behalf of the people, who are the true property owners of water as a public good.³⁷⁹ It created a Water Resources Commission, which deals with policy related to water and delegates grants of water rights.³⁸⁰

Ghana National Water Policy³⁸¹

Created by the Ghana Ministry of Water Resources, Works and Housing in June 2007, this progressive policy is based on the Ghana Poverty Reduction Strategy (GPRS), the Millennium Development Goals (MDGs) and the "Africa water Vision" of the New Partnership for Africa's Development (NEPAD). ³⁸² This policy takes a human rights perspective declaring safe and adequate water to be a fundamental right. ³⁸³

Namibia No. 24 of 2004: Water Resources Management Act, 2004³⁸⁴

This 2004 law sets forth a list of fundamental principles through which its articles are to be construed.³⁸⁵ Among them are the principles that water is essential for life and a basic human right, that water is essential for health, and that equitable and reasonable access to water should be a right of all citizens.³⁸⁶

U.S. California Assembly Bill No. 685³⁸⁷

^{375.} Law on Water Resources Management of the Kingdom of Cambodia (June 2007), https://www.ecolex.org/details/legislation/law-on-water-resources-management-of-the-kingdom-of-cambodia-lex-faoc075723/.

^{376.} *Id*.

^{377.} Id. at art. 11.

^{378.} Water Resources Commission Act (Act No. 552/1996) (Ghana).

^{379.} Id. at 12.

^{380.} See Water Resources Commission of Ghana, http://www.wrc-gh.org/ (last visited Feb. 25, 2017).

^{381.} National Water Policy, Government of Ghana Ministry of Water Resources, Works and Housing, 2007, Public Utilities Regulatory Commission, http://www.purc.com.gh/purc/sites/default/files/WATERPOL ICY.pdf (last visited May 11, 2017).

^{382.} Id.

^{383.} See id. § 2.2.2 ("Focus Area 2- Access to Water Principles and Challenges").

^{384.} Namibia No. 24 of 2004: Water Resources Management Act, 2004, Government Gazette of Namibia No. 3357 of 23 December 2004.

^{385.} *Id*. ¶¶ 3–4.

^{386.} *Id*. ¶ 3.

^{387.} CAL. WATER CODE § 106.3 (West 2017).

In 2012, California became the first state in the U.S. to explicitly recognize a human right to water in State Assembly Bill 685. This bill resulted in a law that made it the established policy of California that every human being has the right to safe, clean, affordable, and accessible water. It prioritizes water for personal and domestic use over commercial and other uses, and sets water rights as a priority for California's relevant agencies and officials. Those officials are required to consider the human right to water in all policy, programming, and budgetary activities. This bill received special accolades from the UN Special Rapporteur on the human right to safe drinking water and sanitation.

The Constitution of the State of Hawaii³⁹³

Adopted by the people in 1950, this state constitution in Section 7 vests in the state the powers to "protect, control and regulate" Hawaii's waters so long as it is for the benefit of the people.³⁹⁴

U.S. Safe Drinking Water Act and its 1996 Amendments³⁹⁵

This law sets minimums for drinking water quality in the U.S., across all states, and requires yearly reports, directly to consumers, on contaminants and water-related health risks.³⁹⁶ It also puts in place mechanisms to ensure state responsibility for water quality as well as state accountability for violations of standards.³⁹⁷ All state reports are required to be made available to the public and the EPA.³⁹⁸

U.S. Senator Paul Simon Water for the World Act of 2014³⁹⁹

The 2014 Water for the World Act is an improvement upon the 2005 Water for the Poor Act, which was created to make water, sanitation, and hygiene a foreign policy priority for the U.S. 400 The 2014 version of this federal law refocuses resources and designates priority countries. 401 It emphasizes creating efficiency through inter-departmental coordination. 402

^{388.} INTERNATIONAL HUMAN RIGHTS LAW CLINIC UNIVERSITY OF CALIFORNIA, BERKELEY, SCHOOL OF LAW, THE HUMAN RIGHT TO WATER BILL IN CALIFORNIA, AN IMPLEMENTATION FRAMEWORK FOR STATE AGENCIES 1 (2013).

^{389.} CAL. WATER CODE § 106.3 (West 2017).

^{390.} Id.

^{391.} Id.

^{392.} International Human Rights Law Clinic University of California, Berkeley, School of Law, The Human Right to Water Bill in California, An Implementation Framework For State Agencies 1 (2013).

^{393.} HAW. CONST., art. XI, § 7.

^{394.} Id.

^{395.} Safe Drinking Water Act of 1974, 42 U.S.C.A. §§ 300f-300j (Westlaw through Pub. L. No. 115-90).

^{396.} Id.

^{397.} See id. § 300g.

^{398.} Id.

^{399.} Senator Paul Simon Water for the World Act of 2014, Pub. L. No. 113-289, 128 Stat 3283 (2014).

^{400.} Id.

^{401.} Id. at 3287.

^{402.} Id.

E. NATIONAL RIGHT TO WATER LITIGATION

Similar to the section III.D *supra* on national laws recognizing the human right to water, this section containing national litigation on the human right to water serves to show the pervasiveness of the acceptance of this right. Additionally, this section may provide a guide as to the different litigation strategies that may be employed to sue for the human right to water in varying contexts with varying laws. For example, in some cases, claiming a constitutional human right to water or life may be successful, while in others, arguing for a violation of environmental regulations or equal protection may be the better strategy. All the cases included in this section occurred relatively recently, making the approaches taken in each case viable, if not precedential.

Matsipane Mosetlhanyane & Ors v. The Attorney General (Botswana)⁴⁰³

The applicants, a community lawfully residing on the CKGR, argued that they had the human right to water from boreholes on the CKGR. 404 The Botswana Court of Appeals ruled the government's sealing of a water source violated the CKGR community's right to access water for domestic purposes. 405 The court relied on three sources: (1) the Water Act (specifically section 9); (2) the UN Declaration of the Rights of Indigenous Peoples, and the recognition, by the UN General Assembly and Economic and Social Council, that the right to safe drinking water is vital for securing the enjoyment of the right to life and all human rights (as well as the right to development); and (3) the Botswanan Constitution, from which it inferred the human right to water from the provision protecting individuals from inhumane and degrading treatment. 406 Further, the court provided that this judgment applied to all members of the affected community, not just those who brought the original suit.⁴⁰⁷ While only a national case, the use of international law and direct implication of the human right to water makes this case an important step in the development of precedent regarding the right's enforcement.

Flor Enid Jimenez de Correa v. Empresas Públicas de Medellin (Colombia)⁴⁰⁸
This case considered whether the disconnecting of a vulnerable person's water due to her failure to pay constituted a violation of the human right to water.⁴⁰⁹
The Colombian Constitutional Court applied the Colombian Constitution as well as the ICESR. Importantly, General Comment No. 15 to the ICESR, which is not

^{403.} Mosetlhanyane & Matsipane v. Att'y Gen., (2011) Civil Appeal No. CACLB-074-10 (Bots.), https://www.escr-net.org/sites/default/files/bushmen-water-appeal-judgement-jan-2011.pdf.

^{404.} Id.

^{405.} Id.

^{406.} Id. ¶¶ 16-18.

^{407.} Id.

^{408.} Jimenez de Correa v. Empresas Públicas de Medellin, Judgment, (2007) C.C. T-270/07 (Colom.).

^{409.} Id.

normally binding, 410 was used as a legal basis for the prevention of discrimination in the delivery of water services. 411

Jorge Hernán Gómez Ángel v. Alcalde Municipal de Versalles—Valle del Cauca y el Gerente de la Empresa de Servicios Públicos de Versalles (Colombia)⁴¹²

In another Colombian water case, a community complained that the municipality was not providing water fit for human consumption. The Colombian Constitutional Court upheld this claim, and proclaimed that the constitution implied a right to safe and sufficient water under its recognition of the rights to life, human dignity, health, and a healthy environment. This court relied primarily on the Colombian Constitution as well as prior case law dealing with "human dignity." This case is an example of using rights such as the right to health and human dignity to ensure water quality.

Delhi Water Supply v. State of Haryana (India)⁴¹⁶

Residents of Delhi suffering from a dearth of drinking water filed a "public interest petition" to the Supreme Court of India. In this case, it was determined that in the case of the joint use of a river in Delhi, India, consumption and domestic use outweigh commercial water use. ⁴¹⁷ In its discussion, the court went to great lengths to discuss the sanctity of the human right to water. ⁴¹⁸ Additionally, the court discussed water under the framework of the Constitution of India as well as briefly discussing decisions of American courts prioritizing domestic use. ⁴¹⁹ This case serves as an example of litigating for at minimum, prioritization of domestic water use over commercial interests.

Perumatty Grama Panchayat v. State of Kerala (India)⁴²⁰

The petitioners, the Panchayat community, argued for their right to terminate the license of a Coca-Cola subsidiary based on its exploitative use of ground water. The Kerala High Court ruled that while the Panchayat might not have the authority to end Coca-Cola's operations, the excessive use of groundwater

^{410.} Under general principles of international law, General Comments explain treaty obligations but are not considered binding law.

^{411.} Flor Enid Jimenez de Correa v. Empresas Públicas de Medellin, Judgement, (2007) C.C. T-270/07 (Colom.) § 2 ¶ 4.

^{412.} Jorge Hernán Gómez Ángel v. Alcalde Municipal de Versalles—Valle del Cauca y el Gerente de la Empresa de Servicios Públicos de Versalles, Judgement, (2003) C.C. T-410/03 (Colom.).

^{413.} Id. § I.

^{414.} Id. at passim.

^{415.} *Id.* § II.

^{416.} Delhi Water Supply & Sewage Disposal Undertaking &. v. State of Haryana, Judgment, (1996) SCC (2) 572 (India).

^{417.} Id.

^{418.} *Id*. ¶¶ 1−3.

^{419.} Id. ¶¶ 3-4.

^{420.} Perumatty Grama Panchayat v. State of Kerala, (2004) 1 KLT 731 (2003) (India).

resources by a Coca-Cola subsidiary in India violated the constitutional right to life when it caused a region-wide water shortage. As authority for this decision the court relied on the Constitution of India, the Stockholm Declaration, prior case law dealing with natural resources, as well as normative principles such as the "doctrine of public trust." Using a mix of foreign law and national law, this case demonstrates how the human right to water may be subsumed under the right to life.

City of Cape Town v. Strümpher (South Africa)423

This South African case arose from a dispute regarding the city of Cape Town shutting off a resident's water when he failed to make payments. The Supreme Court of Appeal of South Africa held that there was a constitutional human right to water, as well as a duty to comply with the National Water Act. As guaranteed by the National Water Act, the court found that any limitation or termination of water services must meet the minimum threshold of "fair and equitable" action on the part of the city government. This case, while relying fundamentally on federal law, relevantly provides a threshold of reasonableness when it comes to water rights.

Mazibuko v. City of Johannesburg (South Africa)⁴²⁷

The South African Constitutional Court held that the system of pre-paid meters and supplying of a minimum amount of water to customers was constitutional. 428 It deferred to the legislature, claiming that despite the constitutional provision of a human right to water, it is not the court's job to question a policy that legitimately came into place through the democratic process. 429 The court used national law and constitutional principles in its analysis and emphasized practical concerns such as the limited resources available to realize this right. 430 This case was a blow to advocates of a human right to water, especially those using discrimination as a basis for a claim against government. 431 It is an example of the challenges of litigating "progressive rights."

^{421.} *Id*. ¶ 13.

^{422.} Id.

^{423.} City of Cape Town v. Strümpher (2012) 104/2011 ZASCA 54 (S. Afr.).

^{424.} Id.

^{425.} The National Water Act, is a national water law in South Africa, which effectively give South African citizens certain rights to water.

^{426.} Strümpher, 104/2011 ZASCA 54.

^{427.} Mazibuko & Others v. City of Johannesburg 2010 (3) BCLR 239 (CC) at para. 169 (S. Afr.).

^{428.} Id.

^{429.} Id. ¶ 61

^{430.} Id. ¶¶ 50, 51.

^{431.} Ulrich, supra note 277, at 47.

^{432.} Id.

Pilchen v. City of Auburn, N.Y. (United States)⁴³³

A tenant brought an action arising from the termination of her water services. Among other judgments, the U.S. District Court for the Northern District of New York held that requiring a tenant to assume her delinquent landlord's obligations was an undue burden, according to the Constitution. While the court refused to address whether there was a constitutionally protected human right to water supply, it did state that the human right to water service could be subsumed under rights to property interests under state law. The court relied primarily on the U.S. Constitution, state law, and domestic case law. The case provides an example of how water rights may be litigated in domestic forums using laws against discrimination and property law.

IV. RECOMMENDATIONS

Among the many definitions provided by the human rights organizations and scholars, *General Comment No 15: The Right to Water (Arts. 11 and 12 of the Covenant)* provides the most comprehensive one. It provides advantages of using the human right to water which allows individuals "sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses." It also added the import of providing an "adequate amount of safe water." However, I believe this does not go far enough in creating a fully comprehensive definition of the human right to water.

Considering all of the examples I have provided so far, I believe "the human right to water" should be defined as the right of natural persons either individual or collective against international entities—including states, international organizations, and multi-national corporations—to the civil and political, economic, social, or cultural aspects of water in terms of quality, quantity, or access. I believe that this clear, concise, and universal definition of the human right to water will provide human rights researchers and activists with a solid ground to begin with. This definition should be incorporated in a uniform manner into domestic law either as a statutory or regulatory provision. Repetitive usage and practice by states to follow one definition of the human right to water with *opinio juris* will contribute to the creation of customary international law and ultimately bind the states which did not adopt the definition. This will also prevent researchers and activists from being confused when they consider whether the human right to water should be progressive or immediate, core or peripheral.

To support effective advocacy and litigation for the human right to water,

^{433.} Pilchen v. City of Auburn, N.Y., 728 F. Supp. 2d 192, 197 (N.D.N.Y. 2010).

^{434.} Id.

^{435.} Id.

^{436.} Id. at 196.

^{437.} General Comment No. 15, supra note 1, ¶ 2.

^{438.} *Id.*

researchers should pay special attention to recent developments in the UN. Rather than focusing exclusively on the human right to water and providing access to water and sanitation to vulnerable countries and populations, the UN now seems to have shifted its attention to environmentally-sound water management systems and sustainable development. Though admitting that eradicating poverty is an indispensable requirement for sustainable development, the UN has begun focusing on integrating "the three dimensions of sustainable development: the economic, social, and environment."

Researchers should also look at the recent trend of scholarship focusing narrowly on the experiences and strategies of communities and cities. This focus on the local level may be because water and other utilities are most often handled by administrative districts. Municipal ordinances and state and district laws are what truly implement the many vague and abstract federal rules, constitutions, and international principles. As introduced *supra* in the annotated bibliography, *A New Constitutive Commitment to Water* ⁴⁴⁰ uses the Detroit water shutoffs in 2013 and Detroit's Bankruptcy Court decision in the *Lyda* case as an empirical model. Global Urban Justice: The Rise of Human Rights Cities ⁴⁴¹ deals with human rights cities in the U.S, the Netherlands, Ghana, UK, and Mexico, which base their local policies on human rights, implementing the international human rights principles to local programs and plans of action. Considering the multitude of cities and local communities dealing with these issues, it is recommended that researchers devote attention to studying the experiences of cities and local communities and the solutions they have crafted to deal with water issues.

Other areas which lack in-depth research on the right to water are those dealing with intersectionalities. The General Assembly Resolution 71/222 emphasizes the "importance of the participation and full involvement of all relevant stakeholders," and therefore it is important to look at vulnerable populations such as women, children, persons with disabilities, indigenous people, and LGBTQ populations. For example, while the UN emphasized the importance of women's leadership and participation in decision-making on water and sanitation management and a gender-based approach, there is a lack of literature and empirical evidence to show how women can fully, equally, and effectively participate in resolving water issues. There is a need for more empirical evidence of local activities, initiatives, and strategies to combat "the negative impact of inadequate water and sanitation services on the access of girls to education and to protect women and girls from being physically threatened or assaulted." Such harms

^{439.} G.A. Res. 70/1, supra note 170, at 1.

^{440.} Murthy, supra note 250.

^{441.} GLOBAL URBAN JUSTICE, supra note 264.

^{442.} G.A. Res. 71/222, *supra* note 176, ¶ 7.

^{443.} G.A. Res. 70/169, supra note 174, ¶ 5(e).

^{444.} Id.

caused by local water issues, might also be studied and resolved by adopting the restorative justice model.⁴⁴⁵

Researchers should also look at intersectionalities between water and land issues because water is closely connected with land. Contemporary land grabbing issues⁴⁴⁶ created by multinational enterprises, funds, and foreign states also involve water issues in local and indigenous communities. Investors are not simply looking for land, but also for water and energy. 447 International agrarian movements such as La Vía Campesina, International Land Coalition, GRAIN, and FIAN, are striving to protect the access to water by local and rural communities as well as land. GRAIN in Squeezing Africa Dry: Behind Every Land Grab Is a Water Grab 448 produced a report dealing with the destruction of Africa's sophisticated water management systems by contemporary land grabbing. This report indicates that countries such as Saudi Arabia and India, which lack water for food production, are targeting African lands to satisfy their needs. 449 In addition, large-scale land deals are consuming massive amounts of water, threatening the life of local farmers, pastoralists, and other rural communities. 450 The academic community is dealing with similar themes. For example, Martin Mowforth's The Violence of Development: Resource Depletion, Environmental Crises and Human Rights Abuses in Central America explores the difference between theory and practice in development, mainly in Central America, and discusses water in depth as it relates to food, energy, mining, deforestation and reforestation, industrialization, indigenous groups, and the overall violence of development. 451

CONCLUSION

Research in economic, social, and cultural rights, especially the human right to water, has increased dramatically over the twenty-five years since the Cold War ended. The development of new international bodies concerned with water, such as the Human Rights Council, the United Nations High Commissioner for Human Rights, and United Nations Women have accentuated this trend. Addition-

^{445.} See John Braithwaite, Restorative Justice: Assessing Optimistic and Pessimistic Accounts, 25 CRIME & JUST. 1, 5 (1999); Joan W. Howarth, Toward the Restorative Constitution: A Restorative Justice Critique of Anti-Gang Public Nuisance Injunctions, 27 HASTINGS CONST. L. Q. 717 (2000).

^{446.} See Jootaek Lee, Contemporary Land Grabbing: Research, Sources and Bibliography, 107 L. Lib. J. 259 (2015).

^{447.} Julia Behrman et al., *The Gender Implications of Large-Scale Land Deals*, 39 J. PEASANT STUD. 49, 50 (2012).

^{448.} Squeezing Africa Dry: Behind Every Land Grab Is a Water Grab, GRAIN, (June 11, 2012), http://www.grain.org/article/entries/4516-squeezing-africa-dry-behind-every-land-grab-is-a-water-grab.

^{449.} See id.

^{450.} See id.

^{451.} See Martin Mowforth, The Violence of Development: Resource Depletion, Environmental Crises and Human Rights Abuses in Central America (Pluto Press, 2014).

ally, many international bodies, such as the UN, which have avoided mentioning economic, social, and cultural rights in the past, have begun to address these rights, and recognize the human right to water as an independent human right, closely connected to the rights to an adequate standard of living, food, health, and life.

Comprehensive research with a holistic approach based on both quantitative and qualitative empirical evidence, considering various domestic policies and reflecting various international legal principles and mechanisms, provides an important context to contemporary water issues. This research can help all relevant parties, including scholars and practitioners, better understand issues related to water access, quality and affordability, whether they imply a progressive or imminent realization of the human right to water.