

FROM ENVIRONMENTAL RIGHTS TO ENVIRONMENTAL RULE OF LAW: A PROPOSAL FOR BETTER ENVIRONMENTAL OUTCOMES

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“[L]egal recognition of a right is useless if it cannot be translated into a victory in the field.”¹

ABSTRACT

With the recent lead contamination crisis in Flint, Michigan, the unfavorable United States country report of the former United Nations Special Rapporteur on the human right to safe drinking water and sanitation seems prescient. The Special Rapporteur’s report highlighted the problem of drinking water contaminated from lead pipes and the disproportionate burdens Black Americans face in accessing safe drinking water. The report argues that the U.S. should address these issues by explicitly recognizing a human right to safe drinking water and sanitation under U.S. law.

Like the Special Rapporteur, much of the literature and some environmental advocates call for environmental rights as a critical approach to improving environmental outcomes. Existing literature indicates that constitutional recognition of environmental rights is indeed correlated with superior environmental performance at the national level. However, there are numerous examples of countries with constitutional environmental provisions that have poor environmental performance, and there are notable examples of countries without environmental rights, like the United States, that have relatively strong environmental performance. With certain tragic exceptions like Flint, Americans enjoy near-universal access to safe and reliable drinking water and sanitation services (by the Special Rapporteur’s own admission). On the other hand, countries like Egypt, Bangladesh, and Senegal have constitutionally recognized environmental rights, but have inferior environmental performance.

* Assistant Professor, Vermont Law School. The author would like to thank Robin Kundis Craig, Patrick Parenteau, and Michael Dworkin, as well as the participants at Vermont Law School’s Colloquium on Environmental Scholarship, for their comments on early drafts of this article. She thanks Noura Eltabbakh and Renee Valerie Fajardo for their excellent research assistance. She is also grateful to Tseming Yang, Timothy Epp, Stephanie Fariior, and Christine Cimini for insightful and informative conversations. Any errors are the author’s own. Finally, she thanks her husband, Abel Russ, for his support and encouragement.

1. Antonio G. M. La Viña, *Right to a Balanced and Healthful Ecology: The Odyssey of a Constitutional Policy*, 69 PHIL. L.J. 127, 156 (1994).

Why does a country like the U.S. have relatively good environmental outcomes, despite its failure to recognize a right to a clean environment? And to improve a country's environmental performance, should environmental advocates focus on recognition of environmental rights, or on something else? This Article argues that rule of law is the answer to both of these questions. Rule of law is a broad concept that includes the accountability of the government under the law; the clarity, stability, fairness, and public nature of laws; the accessibility, fairness, and efficiency of the process by which laws are enacted, administered and enforced; and the competence, independence, and ethics of adjudicators, attorneys, and judicial officers.

This Article presents an empirical analysis demonstrating that there is a correlation between countries with strong rule of law and superior environmental performance. This correlation is in fact a stronger correlation than that between environmental protection provisions in constitutions and environmental performance. This Article argues that these results can be explained by a variety of considerations, including that: 1) rights are meaningless without the ability to exercise them; 2) rule of law ensures that civil society can get the most out of whatever environmental laws and rights exist in any given legal system; and 3) rule of law measurements capture more information than a simple assessment of whether a right is on the books. This Article concludes by suggesting that environmental advocates should shift their focus from working towards greater recognition of environmental rights to strengthening rule of law.

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I. INTRODUCTION

Little in this world is more precious to humans and critical to life itself than water. The recent lead-contaminated drinking water crisis in Michigan² and four-year-long drought in California³ are potent reminders of our dependence on a sufficient quantity of water of adequate quality. Many water advocates rejoiced in 2010 when the United Nations General Assembly adopted a resolution recognizing the human right to water and sanitation.⁴ Just a few months later, the Human Rights Council also recognized the right to water and sanitization as part of the right to an adequate standard of living;⁵ the higher-order right is recognized in several binding human rights treaties.⁶ The United States joined the consensus,⁷ which surprised many because of its general skepticism about addressing environmental issues through a human rights framework.⁸

2. Scott Atkinson et al., *Anger and Scrutiny Grow Over Poisoned Water in Michigan City*, N.Y. TIMES (Jan. 15, 2016), <http://www.nytimes.com/2016/01/16/us/flint-water-michigan-attorney-general.html>.

3. Scott Smith, *California Farmers Brace for Water Shortage Despite El Nino*, HUFFINGTON POST (Jan. 17, 2016), <http://www.huffingtonpost.com/huff-wires/20160117/us-food-and-farm-el-nino-storms-farmers/>.

4. G.A. Res. 64/292 (Jul. 28, 2010), http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/64/292; see, e.g., Food & Water Watch, *Right to Water*, INSIGHT (July 28, 2011), <http://www.foodandwaterwatch.org/insight/right-water> (summarizing the UN General Assembly resolution recognizing the human right to water and sanitation).

5. Human Rights Council Res. 18/1, U.N. Doc A/HRC/RES/18/1 (Oct. 12, 2011).

6. See, e.g., Convention on the Rights of Persons with Disabilities art. 28(2)(a), Dec. 13, 2006, 2515 U.N.T.S. 3, <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> (establishing an obligation to ensure clean drinking water for persons with disabilities); Convention on the Rights of the Child art. 24(2)(c), Nov. 20, 1977, U.N.T.S. 3, <http://www.ohchr.org/Documents/ProfessionalInterest/crc.pdf> (establishing an obligation to take steps to ensure that clean drinking water is available); Convention on the Elimination of All Forms of Discrimination Against Women art. 14(2)(h), Dec. 18, 1979, 1249 U.N.T.S. 13, <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm#article14> (establishing an obligation to take steps to ensure that women in rural areas enjoy adequate living conditions, "particularly in relation to housing, sanitation, electricity and water supply, transport and communications").

7. Explanation of U.S. Position on Human Rights Council Resolution Human Rights and Access to Safe Drinking Water and Sanitation, UN Human Rights Council, 15th Session (Sept. 30, 2010), <http://www.state.gov/documents/organization/179234.pdf>.

8. E.g., The United States, *Observations by the United States of America on the Relationship Between Climate Change and Human Rights*, <http://www.ohchr.org/Documents/Issues/ClimateChange/Submissions/USA.pdf> ("[T]he United States takes the view that a 'human rights approach' to addressing climate change is unlikely to be effective, and that climate change can be more appropriately addressed through traditional systems of international cooperation and international mechanisms for addressing this problem . . .") (last visited July 9, 2016).

To close observers, however, it quickly became clear that the U.S. joining the consensus did not represent as much of a shift in position as some had hoped.⁹ In its Explanation of Position, the U.S. recognized that the right to water and sanitation is derived from the economic, social, and cultural rights contained in the International Covenant on Economic, Social and Cultural Rights, a binding human rights agreement to which the U.S. is not a party.¹⁰ In fact, the United States' Explanation of Position explicitly states that "[t]he right to safe drinking water and sanitation is not one that is protected in our Constitution, nor is it justiciable as such in U.S. courts, though various U.S. laws protect citizens from contaminated water."¹¹

One important step in the process of getting these resolutions adopted by the UN was the 2008 appointment of Catarina de Albuquerque as Special Rapporteur on the human right to safe drinking water and sanitation.¹² Her mandate was to examine the availability, accessibility, safety, and affordability of safe drinking water and sanitation, and to provide recommendations to governments, the United Nations, and other stakeholders.¹³ During her six-year tenure, de Albuquerque conducted 13 country visits.¹⁴

In 2011, she conducted a country visit to the United States.¹⁵ Considering de Albuquerque's support of a human rights approach,¹⁶ it may have been expected that she would be critical of the U.S. approach to water and sanitation, given the U.S.'s resistance to addressing this issue through a human rights framework. Indeed, in August 2011, she released a country report about the status of safe drinking water and sanitation in the United States with numerous anecdotal examples of the U.S. failing to provide safe

9. E.g., GEORGETOWN LAW HUMAN RIGHTS INSTITUTE FACT FINDING PRACTICUM, TAPPED OUT: THREATS TO THE HUMAN RIGHT TO WATER IN THE URBAN U.S. (2013), <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

10. *Observations by the U.S.*, *supra* note 8.

11. *Id.*

12. UNITED NATIONS SPECIAL RAPORTEUR ON THE HUMAN RIGHT TO WATER AND SANITATION, <http://sr-watersanitation.ohchr.org/> (last visited July 9, 2016).

13. *Id.*

14. *Country Visits*, United Nations Special Rapporteur on the Human Right to Water and Sanitation, <http://sr-watersanitation.ohchr.org/en/countryvisits.html> (last visited July 9, 2016).

15. *Id.*

16. International Service for Human Rights, *Human Rights Experts Warn GA: MDGs Give Fake Measure of Progress*, GENERAL ASSEMBLY (Oct. 11, 2010), <http://www.ishr.ch/news/human-rights-experts-warn-ga-mdgs-give-fake-measure-progress> ("In response to the EU's question about how a human rights-based approach to the right to water would help those most in need, [Ms. de Albuquerque] responded that such an approach provided a more realistic and honest picture.").

water to its citizens.¹⁷ The report criticized the U.S. for failing to recognize a human right to safe drinking water and sanitation, and concluded with 18 recommendations for the U.S., which ranged from ratifying the International Covenant on Economic, Social and Cultural Rights, to adopting a federal law guaranteeing the right to safe water and sanitation and further educating the public about water quality.¹⁸

The U.S. faces serious water quality and quantity issues, which the Special Rapporteur rightly identified, but the report may have been unfairly harsh, given that the U.S. also has some of the most reliably safe drinking water and sanitation services in the world.¹⁹ The Special Rapporteur had nearly the same number of recommendations for the U.S. as Egypt,²⁰ a nation where 6.4 million individuals lack household water connections and access to basic sanitation services.²¹ The country report for Bangladesh, a nation where 20 million people lack safe water and 63 million lack access to improved sanitation services,²² contained only 14 recommendations.²³ The

17. Catarina de Albuquerque (Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation), *Rep. of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation on Her Mission to the United States of America*, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf [hereinafter *Rep. on Mission to US*].

18. *Id.* ¶ 92.

19. In 2016, Yale gave the U.S. a score of 99.17 out of 100 for its drinking water and sanitation score and ranked it 22 out of 180 countries in its Environmental Performance Index, which scores and ranks 180 countries on their environmental performance, and is described in more detail in Part IV of this paper. Environmental Performance Index, WATER AND SANITATION 2016, <http://epi.yale.edu/issue-ranking/water-and-sanitation> (last visited June 23, 2016). In fact, the Special Rapporteur acknowledged as much in her report, where she wrote, “[p]eople living in the United States enjoy near universal access to safe water.” *Rep. on Mission to US*, *supra* note 17, ¶ 14.

20. Compare Catarina de Albuquerque (Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation), *Rep. of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation*, U.N. Doc. A/HRC/15/31/Add.3 (July 5, 2010), http://www.hlrn.org/img/documents/G1014935_En.pdf (providing 19 recommendations to Egypt), *with Rep. on Mission to US*, *supra* note 17 (providing 18 recommendations to the U.S.).

21. UNICEF, *Young Child Survival and Development: Water, Sanitation, and Hygiene, EGYPT*, http://www.unicef.org/egypt/Fact_Sheet_-_YCSA_Water_Sanitation_Hygiene.pdf (last visited July 9, 2016).

22. *The Water and Sanitation Crisis in Bangladesh*, WATER.ORG, <http://water.org/country/bangladesh/> (last visited July 9, 2016).

23. Catarina de Albuquerque (Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation), *Rep. of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation on Her Mission to Bangladesh*, ¶¶ 123–26, U.N. Doc. A/HRC/15/55 (July 22, 2010), http://www.ohchr.org/Documents/Issues/EPoverty/A.HRC.15.55_Bangladesh.pdf; e.g., Jen Cohen & Amanda Klasing, *Dispatches: Thirsting for Justice on World Water Day*, HUMAN RIGHTS WATCH (Mar. 20, 2014), <http://www.hrw.org/news/2014/03/20/dispatches-thirsting-justice-world-water-day>.

country report for Senegal, where in 2010 28% of the population lacked access to drinking water and 48% lacked access to sanitation services,²⁴ contained just 12.²⁵

What do all three of those countries have in common? All three have incorporated environmental rights and responsibilities into their national constitutions, something the United States has not done.²⁶ Regardless of whether this explains why the Special Rapporteur was arguably more forgiving of these countries than she was of the U.S., this incongruent treatment raises the question of how important constitutional provisions recognizing environmental rights are. Despite constitutional environmental provisions, Egypt, Bangladesh, and Senegal all have less reliable drinking water and sanitation services than the United States.²⁷

So why does the United States have relatively safe and reliable drinking water and sanitation services despite not recognizing a constitutional right to either, or to a clean environment more generally? It may be because of

In Bangladesh, Human Rights Watch documented the health effects of many decades of untreated effluent released from unregulated leather tanneries operating in the very heart of the country's capital, Dhaka. While Bangladesh voted to recognize the right to water and sanitation at the General Assembly, the country's Supreme Court had already ruled the tannery pollution toxic and ordered the government and tannery associations to relocate the tanneries out of the city and treat their industrial waste. Although the Supreme Court issued the order over a decade ago, the urban tanneries are still in full operation, spewing toxins into the local community's water source.

Id.

24. See AFRICAN MINISTERS' COUNCIL ON WATER, A SNAPSHOT OF DRINKING WATER AND SANITATION IN AFRICA – 2012 14 (2012), http://www.wssinfo.org/fileadmin/user_upload/resources/Africa-AMCOW-Snapshot-2012-English-Final.pdf.

25. Catarina de Albuquerque (Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation), *Rep. of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation on Her Mission to Senegal*, ¶¶ 82-87, U.N. Doc. A/HRC/21/42/Add.1 (Aug. 16, 2012), http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session21/A-HRC-21-42-Add1_en.pdf.

26. DAVID BOYD, *THE ENVIRONMENTAL RIGHTS REVOLUTION: A GLOBAL STUDY OF CONSTITUTIONS, HUMAN RIGHTS, AND THE ENVIRONMENT* 47 (2012). For more on the history of the effort to recognize a constitutional environmental right in the U.S., see generally Robin Kundis Craig, *Should There Be a Constitutional Right to a Clean and Healthy Environment?*, 34 *Env'tl. L. Rep.* 11013 (2004).

27. Yale's Environmental Performance Index gave the United States a water and sanitation score of 99.17 in 2016. Environmental Performance Index, *United States of America: Country Overview*, <http://epi.yale.edu/epi/country-profile/united-states-america> (last visited July 9, 2011). Egypt earned 86.72. Environmental Performance Index, *Egypt: Country Overview*, <http://epi.yale.edu/epi/country-profile/egypt> (last visited July 9, 2016). Bangladesh earned 57.11. Environmental Performance Index, *Bangladesh: Country Overview*, <http://epi.yale.edu/epi/country-profile/bangladesh> (last visited July 9, 2016). Senegal earned 57.02. Environmental Performance Index, *Senegal: Country Overview*, <http://epi.yale.edu/epi/country-profile/senegal> (last visited July 9, 2016).

the U.S.'s relatively strong rule of law.²⁸ Rule of law is a broad concept that includes the accountability of the government under the law; the clarity, stability, fairness, and public nature of laws; the accessibility, fairness, and efficiency of the process by which laws are enacted, administered and enforced; and the competence, independence, and ethics of adjudicators, attorneys, and judicial officers.²⁹ It is generally accepted that respect of rights depends in part on rule of law,³⁰ but could it be that rule of law actually is more important to achieving superior environmental outcomes than constitutional provisions recognizing environmental rights?

This Article argues that rule of law is indeed a critical ingredient, and that environmental advocates should focus their attention on rule of law. Part II will provide background on the status of human rights and the envi-

28. The Presidency of Donald Trump raises serious questions about whether the country's relatively strong rule of law will survive. Given Trump's statements over the past year, in which, among other things, he has indicated he might not accept the election results unless he won, has attacked the judiciary, and has indicated he might support registering Muslims in the U.S., there are well-founded concerns about his lack of respect for the rule of law. *E.g.*, Max Fisher, *Donald Trump's Threat to Reject Election Results Alarms Scholars*, N.Y. TIMES (Oct. 23, 2016), <http://www.nytimes.com/2016/10/23/world/americas/donald-trump-rigged-election.html>; Adam Liptak, *Donald Trump Could Threaten U.S. Rule of Law, Scholars Say*, N.Y. TIMES (June 3, 2016), http://www.nytimes.com/2016/06/04/us/politics/donald-trump-constitution-power.html?_r=0; Lauren Carroll, *In Context: Donald Trump's Comments on a Database of American Muslims*, POLITIFACT.COM (Nov. 24, 2015 2:39 PM), <http://www.politifact.com/truth-o-meter/article/2015/nov/24/donald-trumps-comments-database-american-muslims/>. Trump also nominated Scott Pruitt, who has shown his utter lack of respect for science by denying climate change, to be the new Administrator of the United States Environmental Protection Agency, an Agency required by law to make decisions and take action based on sound science. *E.g.*, Coral Davenport & Eric Lipton, *Trump Picks Scott Pruitt, Climate Change Denialist, to Lead E.P.A.*, N.Y. TIMES (Dec. 7, 2016), <http://www.nytimes.com/2016/12/07/us/politics/scott-pruitt-epa-trump.html>; 42 U.S.C. § 7408(a)(2) (1998). Since the inauguration, perhaps the most salient example of the current administration's threat to rule of law has been the response to an adverse court decision regarding Trump's executive order banning certain immigrants from entering the United States. This response included the statements of Trump's Senior Policy Advisor, Stephen Miller, who proclaimed that "our opponents, the media and the whole world will soon see as we begin to take further actions, that the powers of the president to protect our country are very substantial and will not be questioned." Aaron Blake, *Stephen Miller's Authoritarian Declaration: Trump's National Security Actions 'Will Not be Questioned.'* WASHINGTON POST (Feb. 13, 2017), https://www.washingtonpost.com/news/the-fix/wp/2017/02/13/stephen-millers-audacious-controversial-declaration-trumps-national-security-actions-will-not-be-questioned/?utm_term=.f1f4ca37d409. All of these statements and actions demonstrate a disregard for compliance with the Constitution and other laws and the most basic democratic principles upon which the United States was founded. They raise grave concerns about the fate of rule of law in the United States.

29. World Justice Project, *What is the Rule of Law?* [hereinafter *Rule of Law*], <http://.org/-law> (last visited July 9, 2016).

30. This Article discusses this further in Part III A, *infra*.

ronment under international and comparative law, will present a brief case study of a country that has recognized a right to a clean environment in its constitution, and will review existing research on the effectiveness of constitutional provisions recognizing human rights at achieving superior environmental outcomes. Part III will offer background on rule of law and will provide a case study of the effect weak rule of law can have on environmental outcomes. Part IV will examine whether countries with strong rule of law are indeed more likely to have better environmental outcomes and will consider why or why not. Finally, Part V will make suggestions for how environmental advocates might use these findings to improve environmental outcomes around the world.

II. HUMAN RIGHTS AND THE ENVIRONMENT

A. *A Brief History of the Status of Human Rights and the Environment under International and Comparative Law*

There has been growing recognition of the close link between human rights and the environment over the past several decades. The reasons for this are many, and include the following:

Human rights are grounded in respect for fundamental human attributes such as dignity, equality and liberty. The realization of these attributes depends on an environment that allows them to flourish. At the same time, effective environmental protection often depends on the exercise of human rights that are vital to informed, transparent and responsive policymaking. Human rights and environmental protection are inherently interdependent.³¹

As recognition of the link between human rights and the environment has grown, so too have the efforts of environmental and human rights advocates to use environmental human rights as a way to protect the environment and humankind.³² Environmental human rights proponents argue that this ap-

31. John H. Knox (Independent Expert), *Rep. of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, Preliminary Report*, ¶ 10, U.N. Doc. A/HRC/22/43 (Dec. 24, 2012) [hereinafter *Preliminary Report*], http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session22/A-HRC-22-43_en.pdf.

32. Some of the results of these efforts at the international level can be seen in the UNEP Compendium on Human Rights and the Environment. See generally CTR FOR INT'L ENVTL. LAW & UNITED NATIONS ENVT. PROGRAMME, UNEP COMPENDIUM ON HUMAN RIGHTS AND THE ENVIRONMENT (2014) [hereinafter UNEP COMPENDIUM], http://www.ciel.org/wp-content/uploads/2015/03/UNEP_Compndium_HRE_Mar2014.pdf.

proach results in stronger environmental laws, addresses disproportionate environmental burdens faced by vulnerable groups, leads to greater civil society participation in environmental decision-making, and forces consideration and prioritization of environmental interests when they might otherwise be ignored, such as in interpretation of legal rules.³³

Critics of this approach counter that environmental human rights are so vague as to be meaningless and are so ineffective as to undermine human rights as a whole.³⁴ Another common critique is that such an approach is anthropocentric.³⁵

When human rights first became the subject of significant international attention around the end of World War II, environmental issues were receiving little, if any, attention and thus received no mention in the new, foundational human rights instruments, such as the 1948 Universal Declaration of Human Rights.³⁶ As the nascent environmental movement grew, however, various instruments recognizing environmental human rights also appeared, with the 1972 Stockholm Declaration on the Human Environment being the preminent example.³⁷ Principle 1 states:

Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights— even the right to life itself.³⁸

33. BOYD, *supra* note 26, at 14; P. W. BIRNIE & A. E. BOYLE, *INTERNATIONAL LAW AND THE ENVIRONMENT* 250 (2d ed. 2002).

34. *Id.* at 256.

35. *Id.* at 257–58.

36. Sumudu Atapattu, *The Right to a Healthy Life or the Right to Die Polluted?: The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 *TUL. ENVIL. L.J.* 65, 67 (2002); UNEP *COMPENDIUM*, *supra* note 32, at 5.

37. Jessica Scott, *Protection of Environmentally Displaced Populations Through Strengthening Existing Environmental Human Rights Law* 8 (Apr. 3, 2009) (unpublished manuscript) (on file with author).

38. Declaration of the United Nations Conference on the Human Environment, Jun. 16, 1972, 11 *I.L.M.* 1416, 1416. Interestingly,

[s]everal developing countries, including Egypt, Zambia and Brazil, submitted a subsequent proposal which suggested a high level of normativity for intergenerational equity by stressing a “responsibility” toward future generations, and classifying adequate living conditions in a quality environment for the present generation

Since then, numerous international agreements and organizations have recognized the intersection between the environment and human rights, including the Rio Declaration of 1992,³⁹ the draft United Nations Declaration of Principles on Human Rights and the Environment, and the Plan of Action from the 2002 World Summit on Sustainable Development.⁴⁰ However, none have been as strong as the Stockholm Declaration of decades earlier, demonstrating a stagnation in progress at the international law level.⁴¹

A human right to a clean and healthy environment has not yet reached a hard law phase at the international level. Though a comprehensive consideration of this issue is beyond the scope of this Article, it is worth addressing briefly.⁴² Article 38 of the Statute of the International Court of Justice provides a starting point to address this issue with its list of four sources of international law. According to Article 38, the Court will apply interna-

as a “fundamental right”: “[m]an has the fundamental right to adequate conditions of life, in an environment of quality which permits a life of dignity and well-being and bears a solemn responsibility to protect and enhance the environment for future generations.” Chile[, which will be examined in greater detail in Part II of this Note,] found the above language inadequate because it implied that there was a responsibility only to protect the environment for future, but not present, generations. The final text of Principle 1 reflects Chile’s stance.

G.F. Maggio, *Inter/Intra-Generational Equity: Current Applications Under International Law for Promoting the Sustainable Development of Natural Resources*, 4 *BUFF. ENVIL. L.J.* 161, 202 (1997) (citing L. Sohn, *The Stockholm Declaration on the Human Environment*, 14 *HARV. INT’L L.J.* 423, 453 (1973)) (citations omitted).

39. Principle 1 states that “[h]uman beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.” U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol.I), annex I (Aug. 12, 1992), <http://un.org/documents/ga/conf151/aconf15126-1annex1.htm>. Some have criticized the Rio Declaration for restricting the right as first elucidated in the Stockholm Declaration of 1972 (as it does not use “rights” language), and for creating confusion following the Stockholm Declaration. Karrie A. Wolfe, *Greening the International Human Rights Sphere? An Examination of Environmental Rights and the Draft Declaration of Principles on Human Rights and the Environment*, 13 *J. ENV. L. & PRAC.* 109, 113 (2003).

40. Barry E. Hill, Steve Wolfson & Nicholas Targ, *Human Rights and the Environment: A Synopsis and Some Predictions*, 16 *GEO. INT’L ENVIL. L. REV.* 359, 375–77 (2004).

41. *Id.* That being said, “[e]very year since the 1972 Stockholm Declaration, at least one nation has written or amended its constitution to include or strengthen provisions related to environmental protection,” so there continue to be advancements domestically. BOYD, *supra* note 26, at 47.

42. For a more comprehensive analysis of this question, see generally John H. Knox (Independent Expert), *Rep. of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, Mapping Report, U.N. Doc. A/HRC/25/53 (Dec. 30, 2013), <http://www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/MappingReport.aspx>.

tional conventions, customary international law, “general principles of law,” and, as subsidiary means for the determination of rules of law, “judicial decisions and the teachings of the most highly qualified publicists.”⁴³ The last of these provides limited support in reality as it is only subsidiary means.

Considering first international conventions, there is not a strong argument that the right to a clean and healthy environment has taken on the status of treaty law. Such a right is not mentioned in the Universal Declaration of Human Rights,⁴⁴ the International Covenant on Civil and Political Rights (ICCPR),⁴⁵ or the International Covenant on Economic, Social and Cultural Rights (ICESCR),⁴⁶ which make up the International Bill of Human Rights.⁴⁷ There is a “lack of explicit reference to environmental rights in most human rights instruments.”⁴⁸ Nor are they mentioned in any truly global, binding environmental agreement.⁴⁹

Those who argue that an environmental right exists would point out that two binding regional instruments mention it: the Protocol of San Salvador, which provides that “[e]veryone shall have the right to live in a healthy environment;”⁵⁰ and the African Charter on Human and Peoples’

43. Statute of the International Court of Justice, Art. 38, http://www.icj-cij.org/documents/index.php?p1=4&p2=2&p3=0#CHAPTER_II (last visited July 9, 2016).

44. G.A. Res. 217 A (III) A, Universal Declaration of Human Rights (Dec. 10, 1948), <http://www.un-documents.net/a3r217a.htm>.

45. International Covenant on Civil and Political Rights, Mar. 23, 1976, S. Treaty Doc. No. 14668, 999 U.N.T.S. 172, <https://treaties.un.org/doc/Publication/UNTS/Volume%20999/volume-999-I-14668-English.pdf>. The U.S. has ratified this treaty. Office of the High Commissioner for Human Rights, *Status of Ratification Interactive Dashboard*, <http://indicators.ohchr.org/> (follow “United States of America” under Countries) (last visited July 9, 2016).

46. International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3, <http://www.ohchr.org/Documents/ProfessionalInterest/cescr.pdf>. The U.S. has not ratified this treaty. Office of the High Commissioner for Human Rights, *supra* note 45.

47. Office of the High Commissioner for Human Rights, *Fact Sheet No. 2 (Rev. 1): The International Bill of Human Rights*, PUBLICATIONS, <http://www.ohchr.org/Documents/Publications/FactSheet2Rev.1en.pdf> (last visited July 9, 2016).

48. Dinah Shelton, *The Environmental Jurisprudence of International Human Rights Tribunals*, in LINKING HUMAN RIGHTS AND THE ENVIRONMENT 1, 11 (Romina Picolotti & Jorge Daniel Taillant eds., 2003).

49. *Preliminary Report*, *supra* note 31 (“In contrast to these developments at the national and regional levels, no global agreement sets out an explicit right to a healthy (or satisfactory, safe or sustainable) environment.”).

50. Organization of American States, Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social, and Cultural Rights, Nov. 17, 1988, O.A.S.T.S. No. 69, <http://www.oas.org/juridico/english/treaties/a-52.html>. The U.S. has not signed or ratified this treaty. Organization of American States, *Signatories and Ratifications*, MULTILATERAL TREATIES, <http://www.oas.org/juridico/english/sigs/a-52.html> (last visited July 9, 2016).

Rights, which provides that “[a]ll peoples shall have the right to a general satisfactory environment favourable to their development.”⁵¹ Though this creates a treaty obligation for states that are parties to the treaties, non-parties are not bound to comply with these obligations.⁵²

Regarding the second Article 38 category, to demonstrate that certain norms and rules constitute customary international law, states must follow them based on *opinio juris*, or a sense of legal obligation.⁵³ To demonstrate that a principle meets this definition, one must identify significant empirical evidence of “both conduct and conviction on the part of the state.”⁵⁴ A common view of what the rule is matters, but state practice must also confirm that states are following a particular rule out of a sense of *opinio juris*.⁵⁵ Evidence of this for an environmental human right is limited, and examples of states refusing to acknowledge or protect a right to a healthy environment are rampant, from Chinese communities being poisoned by industrial and agricultural runoff into their water sources,⁵⁶ to indigenous peoples forced to flee their homes because their environment no longer supports their traditional lifestyle.⁵⁷

Those arguing that such a right constitutes a general principle of international law—the third Article 38 category—would point to the wide variety of environmental rights provisions in various individual countries’ domestic jurisprudence and constitutional regimes. General principles are perhaps the least clearly defined category, but they are thought to include principles that appear in all legal systems or that are inherent to what law itself is.⁵⁸

51. African Charter on Human and Peoples’ Rights, June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 1520 U.N.T.S. 217, 21 I.L.M. 58, http://www.achpr.org/files/instruments/achpr/banjul_charter.pdf.

52. It has been argued that these instruments have some value in indicating a growing consensus that such a right exists, but alone they do not create a principle of customary international law because they are regional rather than global agreements. Atapattu, *supra* note 36, at 87.

53. BIRNIE & BOYLE, *supra* note 33, at 16.

54. *Id.*

55. *Id.* at 18.

56. Chris Buckley & Vanessa Piao, *Rural Water, Not City Smog, May Be China’s Pollution Nightmare*, N.Y. TIMES (Apr. 12, 2016), <http://www.nytimes.com/2016/04/12/world/asia/china-underground-water-pollution.html>.

57. Stephen Sackur, *The Alaskan Village Set to Disappear Under Water in a Decade*, BBC NEWS MAGAZINE (July 29, 2013), <http://www.bbc.co.uk/news/magazine-23346370>.

58. Frances T. Freeman Jalet, *The Quest for the General Principles of Law Recognized by Civilized Nations: A Study*, 10 UCLA L. REV. 1041, 1050 (1963–64) (quoting CHARLES DE VISSCHER, *THEORY AND REALITY IN PUBLIC INTERNATIONAL LAW* 356–57 (Corbett transl. 1957) (“[The drafters] thought of these [general] principles as a source of law independent of convention and custom, as belonging in virtue of their rational character to a common legal fund, but as having acquired through recognition in *foro domestico* by the civilized nations that positive character which makes them rules of law and which forbids including among them

According to a recent study, three-quarters of national constitutions contain an explicit reference to environmental rights or responsibilities.⁵⁹ However, the right is enforceable in only about fifty countries.⁶⁰

Some form of an environmental human right is also mentioned in a variety of non-binding international instruments, including the Hague Declaration of 1989,⁶¹ the Rio Declaration of 1992,⁶² and the Stockholm Declaration discussed above, among other draft instruments.⁶³ A substantive environmental right is certainly gaining ground, but the idea that such a right is inherent to our concept of what law is remains a weak argument.

Some countries have taken substantial steps to ensure that they would be exempt even if such a right were found to exist in other countries. Great Britain, for example, made a limiting declaration when it signed the Aarhus Convention in 1998: “The United Kingdom understands the references . . . to the ‘right’ of every person ‘to live in an environment adequate to his or her health and well-being’ to express an *aspiration* which motivated

what has been called the “ideal element” or mere aspiration, more or less widespread, to a legal organization deemed desirable.”).

59. BOYD, *supra* note 26, at 47.

60. *Id.* at 246–47. According to Earthjustice’s 2007 report, fewer than twenty of these constitutions provide explicitly for “compensation or remediation of the harm, or establish a right to compensation for those suffering environmental injury.” Hill et al., *supra* note 40, at 381.

61. Hague Declaration on the Environment, Mar. 11, 1989, 28 I.L.M. 1308.

62. *See supra* note 40.

63. *Amici Curiae: Awas Tingni Mayagna (Sumo) Indigenous Community v. The Republic of Nicaragua*, reprinted in LINKING HUMAN RIGHTS AND THE ENVIRONMENT 211, 224 (Romina Picolotti & Jorge Daniel Taillant eds., 2003) (“A major development was publication of the 1994 Final Report on Human Rights and the Environment, of the Commission on Human Rights Sub-commission on Prevention of Discrimination and Protection of Minorities, more generally known as the ‘Ksentini 1994 Report.’ That document discussed the legal foundations of a right to a satisfactory environment. The first legal instrument to propose a right to a healthy environment is the draft legal principles of the Experts Group of the World Commission on Environment and Development (‘WCED’) in 1986. Principle 1 of the draft principles provides that: ‘[a]ll human beings have the fundamental right to an environment adequate for their health and well-being.’ A right to a healthy environment is also included in UNEP’s 1993 Proposal for a Basic Law on Environmental Protection and the Promotion of Sustainable Development. It includes within its ‘Governing Principles’ the ‘. . . right of present and future generations to enjoy a healthy environment and decent quality of life. . . .’ The Draft Principles on Human Rights and the Environment (which is attached to the 1994 Ksentini Report states that “[a]ll persons have the right to a safe and healthy working environment.” The IUCN draft Covenant on Environment and Development requires that “Parties undertake to achieve progressively the full realization of the right of everyone to an environment and a level of development adequate for their health, well-being and dignity.” The IUCN draft also avers that “[a]ll persons have a duty to protect and preserve the environment . . . ,’ thus recognizing that the ‘right to environment’ entails both a right for everyone to benefit from the environment as well as an obligation for all to manage it sustainably.”). *Id.*

the negotiation of this convention.”⁶⁴ There is thus only a weak argument that any of the three methods of establishing the existence of such a right can be met.

Regarding substantive rights, it is easier to demonstrate the existence of rights from which the right to a clean and healthy environment derive. For example, the right to health is protected by the International Convention on the Elimination of All Forms of Racial Discrimination (CERD), which has 163 parties, including the United States.⁶⁵ Additionally, the UN Committee for the Elimination of Racial Discrimination issued a decision to the U.S., urging the U.S. “to pay particular attention to the right to health and cultural rights . . . , which may be infringed upon by activities threatening [the] environment.”⁶⁶

The UN Human Rights Council (HRC) demonstrated interest in assessing the status of this right when it created a three-year mandate for an Independent Expert on Human Rights and the Environment.⁶⁷ The HRC appointed Professor John Knox as the Independent Expert in the summer of 2012.⁶⁸ As part of his mandate, he submitted a preliminary report to the HRC in which he assessed the status of the right.⁶⁹ His report noted that “no global agreement sets out an explicit right to a healthy (or satisfactory, safe or sustainable) environment.”⁷⁰ Though the Universal Declaration might include such a right were it drafted today, the Independent Expert noted that, “it must be acknowledged that the United Nations has not taken advantage of subsequent opportunities to recognize a human right to a healthy environment.”⁷¹

64. Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, 2161 U.N.T.S. 447, https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg_no=xxvii-13&chapter=27&lang=en (emphasis added) (last visited July 10, 2016).

65. International Convention on the Elimination of All Forms of Racial Discrimination, Dec. 21, 1965, 660 U.N.T.S. 195, <http://www.ohchr.org/Documents/ProfessionalInterest/cerd.pdf>; Office of the United Nations High Commissioner for Human Rights, *supra* note 45.

66. CERD, U.N. Doc. CERD/C/USA/DEC/1 (Apr. 11, 2006), <http://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=6QkG1d%2fPPRiCAqhKb7yhspzO19YwTXeABruAM8pBAK2NoyeqcMbmXNgOOeCr1oILT6ALuItFZLrmUsh7ZwCERBkWBtA8Ocfjk5cIvbuB0RkaXAS9J6za8eSQJb7rzMU>.

67. Human Rights Council Res. 19/10, U.N. Doc. A/HRC/RES/19/10, ¶ 2 (Apr. 19, 2012), <http://srenvironment.org/wp-content/uploads/2013/05/1910-PDF.pdf>.

68. *Preliminary Report*, *supra* note 31.

69. *Id.* ¶ 6.

70. *Id.* ¶¶ 14–16.

71. *Id.* ¶ 14.

B. *A Constitutional Right to a Clean Environment* *Case Study: Chile*

At the national level there has been more progress in both recognition of and jurisprudence on substantive environmental human rights.⁷² As mentioned above, a recent study indicates that three-quarters of the constitutions in the world include an explicit reference to environmental rights or responsibilities.⁷³ The rights that individual nations recognize at the domestic level vary from constitution to constitution, but often include language referring to a “clean,” “safe,” or “healthy” environment.⁷⁴ Chile provides an informative example of the important role a constitutional environmental right can play.

Following dramatic economic development, Chile was left “as perhaps the most environmentally devastated country in South America.”⁷⁵ And despite its troubling human rights record,⁷⁶ it was relatively progressive in its treatment of environmental human rights, and recognized its citizens’ right to a clean environment in its Constitution of 1980.⁷⁷

Article 19(8) of Chile’s constitution provides “the right to live in an environment free from contamination.”⁷⁸ It also states that “[i]t is the duty of the state to watch over the protection of this right and preservation of nature.”⁷⁹ Chile is one of the minority of countries where the provision is enforceable.⁸⁰ Specifically, Article 20 “creates a special cause of action”⁸¹ called “recurso de protection” that provides injunctive relief from illegal activity that precludes enjoyment of the right to live in a clean environment.⁸²

Historically, though, weak rule of law has limited the efficacy of Chile’s environmental regulatory program.⁸³ The 1994 Environmental Framework

72. Scott, *supra* note 37, at 13.

73. BOYD, *supra* note 26, at 47.

74. See generally *id.* at Appendix 2.

75. Scott C. Lazuna, *From Dictatorship to Democracy: Environmental Reform in Chile*, 19 HASTINGS INT’L & COMP. L. REV. 539, 594 (citing David Madeo, *Environmental Exports to Latin America*, 25 LAW & POL’Y INT’L BUS. 1223 (1994)).

76. Lila Barrera-Hernandez, *Indigenous Peoples, Human Rights and Natural Resource Development: Chile’s Mapuche Peoples and the Right to Water*, 11 ANN. SURV. INT’L & COMP. L. 1, 10 (2005).

77. David W. Tundermann & Craig D. Galli, *Emerging Environmental Law in Latin America: Lessons Learned and Challenges Ahead*, 43 RMMLF-INST 10 (1997).

78. CONSTITUCIÓN POLÍTICA DE LA REPÚBLICA DE CHILE [C.P.], art. 19, <http://confinder.richmond.edu/admin/docs/Chile.pdf>.

79. *Id.*

80. BOYD, *supra* note 26, at 72–73.

81. Tundermann & Galli, *supra* note 77.

82. *Id.* (citing CONSTITUCIÓN POLÍTICA DE LA REPÚBLICA DE CHILE [C.P.], art. 20).

83. See *infra* notes 120–21 and accompanying text (discussing effective national governance).

Law (EFL) was passed to alleviate some of these problems.⁸⁴ The EFL addresses a wide range of rule of law considerations, providing among other things “a regulatory authority to promulgate implementing regulations, enforcement mechanisms, liability for environmental damage, [and] citizen participation.”⁸⁵

The EFL considers whether a polluter is complying with applicable regulations an important factor in its liability scheme.⁸⁶ However, it “does not itself set specific pollution limits. Instead, it vests authority for the promulgation of ‘primary’ environmental quality standards (those affecting life or health of the population) in the Minister-Secretary General of Government (‘MSGG’).”⁸⁷ Thus, even in a system with a constitutional environmental right, pollution limits or standards have an important role to play. However, Chile still lacks adequate standards in the form of implementing regulations.⁸⁸

The constitutional right has been used at times to fill this gap. There are several cases in which citizens have effectively relied on the Article 20 cause of action to protect the environment. For example, Chile’s Supreme Court determined that its Constitution’s environmental provision created a substantive right in *Pedro Flores y Otros v. Corporacion Del Cobre, Codeloco*.⁸⁹ In that case, local citizens sued a copper mining company to prevent it from disposing of tailings and contaminating the water.⁹⁰

In another major environmental case, the “Trillium Case,” the Supreme Court of Chile broadly interpreted the constitutional environmental provision, finding that citizens could use it to protect the environment even if they had no individual damages.⁹¹ In recognizing that plaintiffs without an individualized injury could still have standing, the Court opined that in degrading the environment, present and future generations’ opportunities for life and development are limited:

84. Tundermann & Galli, *supra* note 77.

85. *Id.* (citing *Ley No. 19,300*).

86. *Id.*

87. Joseph G. Block & Andrew R. Herrup, *Addressing Environmental Concerns Regarding Chilean Accession to NAFTA*, 10 CONN. J. INT’L L. 221 (1995) (citing Basic Law on the Environment, National Commission on the Environment (CONAMA), Technical and Administrative Secretariat, Jan. 26, 1994, arts. 2(n), 32). “‘Secondary’ environmental standards (those affecting the environment, nature or environmental assets) will be promulgated by Supreme Decree and signed by the MSGG and the relevant sectoral ministry.” *Id.*

88. Tundermann & Galli, *supra* note 77 (citing *Ley No. 19,300*).

89. Hill et al., *supra* note 40, at 387.

90. *Id.* at 387–88; see also Ryan K. Gravelle, *Enforcing the Elusive: Environmental Rights in East European Constitutions*, 16 VA. ENVTL. L.J. 633, 654–55 (1997).

91. Corte Suprema de Justicia [C.S.J.] [Supreme Court], 19 marzo 1997, “The Trillium Case,” Rol de la causa: 2.732-96.

In this sense, the safekeeping of these rights are in the interest of the whole society, because it affects to [sic] a plurality of parties that are placed in the same factual situation, and whose damage, despite the fact that it carries an enormous social harm, does not cause a meaningful damage clearly appreciated in the individual realm.⁹²

Despite these successes, weak rule of law still takes a toll on the efficacy of this right in Chile. “The OECD reports that many environmental cases are brought to Chilean courts, but ‘the judicial system lacks the capacity to deal adequately with many environmental matters, for instance when it comes to obtaining evidence or estimating environmental damage and compensation values.’”⁹³ Additionally, the government does not do enough to keep citizens informed about activities that are likely to have environmental impacts, despite a law on the books requiring the State to keep citizens informed and ensure public participation.⁹⁴

C. *An Assessment of the Effectiveness of Constitutional Provisions Recognizing Environmental Rights*

The preceding example demonstrates that a constitutional environmental right is not a silver bullet to fix environmental law and environmental outcomes. However, there is evidence that a constitutional environmental right is correlated with superior environmental performance. In his book, *The Environmental Rights Revolution*, David Boyd examines whether “environmental provisions in constitutions – in particular, the right to live in a healthy environment – matter?”⁹⁵ He argues that they do, concluding that, “nations with constitutional provisions related to environmental protection have superior environmental records.”⁹⁶ He points to several pieces of evidence to support his argument. Such countries “have smaller per capita ecological footprints, . . . rank higher on several comprehensive indices of environmental performance, . . . are more likely to have ratified international environmental agreements, . . . have achieved deeper cuts in emis-

92. *Id.*

93. BOYD, *supra* note 26, at 139 (citing Organisation for Economic Co-operation and Development [OECD], *Environmental Performance Reviews: Chile 2005*, at 172 (May 9, 2005)).

94. Hale E. Shephard, *Native Forest Protection in Chile: The Inadequacies of the Recent Environmental Framework Law and Relevant Multilateral Instruments*, 14 J. ENVTL. L. & LITIG. 225, 249 (1999).

95. BOYD, *supra* note 26, at 16.

96. *Id.* at 276.

sions of nitrogen oxides and sulphur dioxide, . . . [and] have experienced slower growth in greenhouse gas emissions.”⁹⁷

Boyd acknowledges that further research is necessary to determine whether it is environmental constitutional provisions that cause superior environmental records or “that the causal relationship works in the other direction – a nation with strong environmental policies and broad public support for environmental protection may be more likely to entrench constitutional provisions related to environmental protection.”⁹⁸ However, he doubts “that this relationship is merely the result of chance.”⁹⁹

At the same time, Boyd acknowledges that even with constitutional recognition of environmental rights, “[p]aper tigers and cheap talk could result from the absence of the rule of law.”¹⁰⁰ He points to the constitutions of many communist nations and dictatorships as examples.¹⁰¹ The next section of this paper will examine rule of law in greater detail and consider why it is so important to environmental protection.

III. RULE OF LAW

A. Background

As recognition of a human right to a clean and healthy environment has mushroomed over the past several decades, there has also been increasing attention on “rule of law.”¹⁰² Unlike the human right to a clean and healthy environment, which is a relatively new concept, the concept of rule of law has been around for millennia.¹⁰³ Additionally, there is general acceptance within the western world that “the rule of law provides the foundation for predictability in the law and that government is subordinate to the law not superior to it.”¹⁰⁴ Some scholars have gone so far as to argue that it is “the most important political ideal today.”¹⁰⁵ Despite the concept’s long history

97. *Id.*

98. *Id.*

99. *Id.*

100. *Id.* at 14–15.

101. *Id.*

102. Rule of law is sometimes referred to as “governance.” See Scott Fulton & Antonin Benjamin, *Effective National Environmental Governance—A Key to Sustainable Development* (working draft), http://inece.org/conference/9/papers/Fulton-Benjamin_US-Brazil_Final.pdf.

103. Edric Selous & Giovanni Bassu, *The Rule of Law and the United Nations*, in *THE LEGAL DOCTRINES OF THE RULE OF LAW AND THE LEGAL STATE (RECHTSSTAAT)* 349, 349–50 (James R. Silkenat, James E. Hickey Jr. & Peter D. Barenboim, eds., 2014).

104. Arthur H. Garrison, *The Traditions and History of the Meaning of the Rule of Law*, 12 *GEO. J. L. & PUB. POL’Y* 565, 581 (2014).

105. Courtney Taylor Hamara, *The Concept of the Rule of Law*, in *LAW, LIBERTY, AND THE RULE OF LAW* 11, 11 (Imer B. Flores & Kenneth E. Himma eds., 2013) (first citing BRIAN Z.

and widespread acceptance, “rule of law” remains difficult to define.¹⁰⁶ Though a comprehensive consideration of the definition of “rule of law” is beyond the scope of this article, some attention to the meaning of the term is essential.

A useful starting point in attempting to understand “rule of law” is Plato’s *The Laws*, in which he called “rulers . . . servants of the laws . . . because [he] believe[d] that the success or failure of a state hinges on this point more than on anything else.”¹⁰⁷ The Magna Carta of 1215 embodied the concept that “no man is above the law” in Clauses 39 and 40, which read:

No free man shall be seized or imprisoned, or stripped of his rights or possessions, or outlawed or exiled, or deprived of his standing in any way, nor will we proceed with force against him, or send others to do so, except by the lawful judgment of his equals or by the law of the land;¹⁰⁸

and, “[t]o no one will we sell, to no one deny or delay right or justice.”¹⁰⁹

The United Nations also explicitly recognized the importance of the rule of law in the Universal Declaration of Human Rights of 1948. This document recognizes that “human rights should be protected by the rule of law.”¹¹⁰ The United Nations also “will support a rule of law framework that includes . . . strong institutions of justice, governance, security and human

TAMANAHA, ON THE RULE OF LAW: HISTORY, POLITICS, THEORY (2004) and then citing Jeremy Waldron, Jr., *The Concept and the Rule of Law*, 43 GA. L. REV. 1, 3 (2008)). Hans Christian Bugge describes it as encapsulating “the highest values and functions of law and the legal system in society” and writes that it “can also be regarded as a primary social value.” Hans Christian Bugge, *Twelve Fundamental Challenges in Environmental Law*, in RULE OF LAW FOR NATURE: NEW DIMENSIONS AND IDEAS IN ENVIRONMENTAL LAW 3, 6 (Christina Voigt ed. 2013).

106. For a more complete treatment of the varied definitions of “rule of law,” see Garri-son, *supra* note 104. A sampling of the literature attempting to define the term includes George Wright, *The Rule of Law: A Currently Incoherent Idea that Can Be Redeemed Through Virtue*, 43 HOFSTRA L. REV. 1125, 1127 (2014-2015); JOSEPH RAZ, *The Rule of Law and Its Virtue*, in THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY 211 (2nd ed. 2009); Waldron, *supra* note 105, at 6-8; TAMANAHA, *supra* note 105, 137-38; Richard H. Fallon, “Rule of Law” as a Concept in Constitutional Discourse, 97 COLUM. L. REV. 1, 6 (1997); Antonin Scalia, *The Rule of Law as a Law of Rules*, 56 U. CHI. L. REV. 1175 (1989); ALBERT V. DICEY, INTRODUCTION TO THE STUDY OF THE LAW OF THE CONSTITUTION 42 (8th ed. 1915).

107. PLATO, THE LAWS 174 (Trevor J. Saunders trans., Penguin Books 1975) (c. 350 B.C.E.).

108. Magna Carta, cl. 39 (1215), translated in *English Translation of Magna Carta*, BRITISH LIBRARY, bl.uk/magna-carta/articles/magna-carta-english-translation (last visited July 10, 2016).

109. *Id.* at cl. 40.

110. Universal Declaration of Human Rights, *supra* note 44.

rights.”¹¹¹ Both of these statements demonstrate the close tie between human rights and rule of law. Strong rule of law is more likely to ensure protection of human rights, and a rule of law framework must have respect for human rights at its core. Despite this link between the two concepts, however, they remain distinct.

The traditional view of the rule of law points to its value in providing predictability that the legal system will protect individual rights and restrict government power.¹¹² Others have defined it in the negative, contrasting it with the rule of man, or emphasized its being a system of governance that is based on “non-arbitrary” rules and applied to all, including the State itself.¹¹³ And some modern scholars argue that the rule of law includes moral principles such as social equity.¹¹⁴

Joseph Raz points to F. A. Hayek as formulating “one of the clearest and most powerful” definitions of “rule of law”: “stripped of all technicalities this means that government in all its actions is bound by rules fixed and announced beforehand—rules which make it possible to foresee with fair certainty how the authority will use its coercive powers in given circumstances, and to plan one’s individual affairs on the basis of this knowledge.”¹¹⁵

Hans Christian Bugge argues that rule of law is the principle that “law is the supreme factor in the relationship between the authorities and the citizen as well as between citizens with conflicting interests. It means that all persons, institutions and entities, public and private, including the state itself, are governed by established laws and accountable to legal institutions.”¹¹⁶ Enforcement of the laws on the books is one part of this, but not all of it.

The World Justice Project provides one of the most detailed definitions of the rule of law, and the one this article adopts:

[A] system in which the following four universal principles are upheld:

111. *Programme Analyst on Rule of Law*, UNITED NATIONS DEVELOPMENT PROGRAMME, https://jobs.undp.org/cj_view_job.cfm?cur_job_id=59494 (last visited Aug. 4, 2016); *see also United Nations and the Rule of Law*, UN.ORG, http://www.unrol.org/article.aspx?article_id=3 (last visited July 10, 2016).

112. Garrison, *supra* note 104, at 583.

113. *What is the Rule of Law?*, UNITED NATIONS AND THE RULE OF LAW, <https://www.un.org/ruleoflaw/what-is-the-rule-of-law/> (last visited Aug. 11, 2016).

114. *See e.g.*, RONALD DWORKIN, *TAKING RIGHTS SERIOUSLY* (1977) (the rule of law includes society’s overarching moral values); Garrison, *supra* note 104, at 590.

115. RAZ, *supra* note 106, at 210 (citing F.A. HAYEK, *THE ROAD TO SERFDOM* 54 (1944)) (quotation marks omitted).

116. Bugge, *supra* note 105.

1. The government and its officials and agents as well as individuals and private entities are accountable under the law.
2. The laws are clear, publicized, stable, and just; are applied evenly; and protect fundamental rights, including the security of persons and property.
3. The process by which the laws are enacted, administered, and enforced is accessible, fair, and efficient.
4. Justice is delivered timely by competent, ethical, and independent representatives and neutrals who are of sufficient number, have adequate resources, and reflect the makeup of the communities they serve.¹¹⁷

B. *National, Regional, and International Work Promoting Environmental Rule of Law*

Of late, practitioners' focus on rule of law has eclipsed scholarly attention to the concept.¹¹⁸ The United States government has emphasized the importance of rule of law in its work with other nations. As President Obama said, "I believe that our nation is stronger and more secure when we deploy the full measure of both our power and the power of values, including the rule of law."¹¹⁹ Former United States Environmental Protection Agency General Counsel Scott Fulton co-authored an article during his tenure entitled "Effective National Environmental Governance—A Key to Sustainable Development" arguing that rule of law is critical to sustainable development and advocating for effective environmental rule of law at the country level.¹²⁰ This article includes the following seven "precepts of effective national environmental governance":

117. *Rule of Law*, *supra* note 29. This definition includes what theorists refer to as a "formal" conception and a "substantive" one. TAMANAHA, *supra* note 105, at 91–92. It contains both procedural and substantive requirements.

118. One notable exception to this is the book, *RULE OF LAW FOR NATURE* (Christina Voigt, ed. 2013).

119. Barack Obama, President, Remarks at CIA Headquarters (Apr. 20, 2009), <https://www.cia.gov/news-information/speeches-testimony/president-obama-at-cia.html>.

120. Fulton & Benjamin, *supra* note 102, at 3 ("Effective national environmental governance complements efforts to improve international mechanisms for environmental protection. For example, international treaty commitments cannot be implemented without corresponding national laws and institutions. Effective national environmental governance helps ensure that parties to international environmental agreements actually reap the benefits those agreements are designed to provide and also produces mechanisms for addressing national and sub-national problems that are not the subject of international attention to the same degree. Effective national environmental governance also helps advance environmental justice, because protection of vulnerable communities requires strong legal institutions and open forms of governance that foster public participation. Finally, it contributes to a level

1. Environmental laws should be clear, even-handed, implementable and enforceable
2. Environmental information should be shared with the public
3. Affected stakeholders should be afforded opportunities to participate in environmental decision-making
4. Environmental decision-makers, both public and private, should be accountable for their decisions
5. Roles and lines of authority for environmental protection should be clear, coordinated, and designed to produce efficient and non-duplicative program delivery
6. Affected stakeholders should have access to fair and responsive dispute resolution procedures [and]
7. Graft and corruption in environmental program delivery can obstruct environmental protection and mask results and must be actively prevented.¹²¹

The United Nations and regional organizations have also begun working extensively on promoting rule of law. The Rio+20 outcome document, “The Future We Want,” includes explicit reference to rule of law in paragraphs 10 and 252, where it states that “[d]emocracy, good governance and the rule of law, at the national and international levels, as well as an enabling environment, are essential for sustainable development.”¹²² The United Nations Environment Programme (UNEP) Governing Council adopted a decision in 2013 calling on UNEP and countries around the world to develop and implement environmental rule of law.¹²³ This was the first international document of its kind to reference the term “environmental rule of law.”¹²⁴ In paragraph 5(a), this document also encapsulates the seven principles of environmental governance included above.¹²⁵

UNEP has formed strategic partnerships with a variety of leading international organizations, including the Organization of American States and the International Union for the Conservation of Nature, in an effort to strengthen rule of law, and has organized conferences with the judiciaries of a number of countries around the world to improve judicial capacity to

playing field for businesses operating globally and helps avoid the emergence of pollution havens in places lacking effective environmental governance.”).

121. *Id.* at 4.

122. G.A. Res. 66/228, ¶ 10 (Oct. 27, 2012), http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E.

123. UN Environmental Programme Res. 27/9, U.N. Doc. UNEP/GC.27/17 (Feb. 2013), http://www.unep.org/delc/Portals/24151/Documents/Decisions27-9Advancing_Justice_Governance&Law.pdf.

124. *Id.* ¶ 5(a).

125. *Id.*

ensure environmental justice.¹²⁶ At the First Session of the United Nations Environment Assembly (UNEA) in June 2014, the UNEA held a Global Symposium of Environmental Rule of Law.¹²⁷ The UNEP International Advisory Council for Environmental Justice has repeatedly emphasized that rule of law is “essential for societies to respond to increasing environmental pressures in a way that respects fundamental rights and principles of justice and fairness, including for future generations and across national borders.”¹²⁸ The Organization for Security and Cooperation in Europe has made strong rule of law a top priority for its work on environment as well.¹²⁹ International and regional organizations are increasingly focused on rule of law in their efforts to protect the environment.

C. Rule of Law Case Study: China

One way to better understand why rule of law is so important to environmental performance is to look at a country where it is lacking. The World Justice Project ranks 102 countries using 44 indicators of rule of law in practice.¹³⁰ These indicators are organized around eight themes: “constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice.”¹³¹ This ranking “is the world’s most comprehensive data set of its kind and the only to rely solely on primary data,” meaning it is “based on more than 100,000 household and expert surveys in 102 countries and jurisdictions.”¹³²

China appears in the bottom third of countries included in the ranking: 71 out of 102.¹³³ China’s relatively weak rule of law is apparent in the envi-

126. See, e.g., United Nations Environment Programme, *Report on the Implementation of the Fourth Programme for the Development and Periodic Review of Environmental Law (Montevideo Programme IV) for the Period 2010–2014*, U.N. Doc. UNEP/Env.Law/MTV4/MR/1/2/Add.1 (Aug. 21, 2015), <http://web.unep.org/sites/default/files/delc/documents/montevideo/report-implementation-forth-programme.pdf>.

127. UNITED NATIONS ENVIRONMENT PROGRAM, ENVIRONMENTAL RULE OF LAW: CRITICAL TO SUSTAINABLE DEVELOPMENT n.6 (2015), <http://www.unep.org/delc/Portals/24151/Documents/issue-brief-environmental-justice-sdgs.pdf>.

128. *Id.* at 2.

129. See *First Preparatory Meeting of the 24th OSCE Economic and Environmental Forum*, ORGANIZATION FOR SECURITY AND COOPERATION IN EUROPE, http://www.osce.org/event/24th_eef_prep (last visited July 10, 2016).

130. WORLD JUSTICE PROJECT, RULE OF LAW INDEX 2015 5 (2015) [hereinafter RLI 2015], http://worldjusticeproject.org/sites/default/files/roli_2015_0.pdf.

131. *Id.*

132. *Id.*

133. *Id.* at 6.

ronmental realm.¹³⁴ The Chinese Constitution explicitly mentions the principle of state protection and improvement of the environment, and China has many environmental laws.¹³⁵ However, only one percent of China's urban population breathes air that the European Union considers safe,¹³⁶ and cancer is the number one cause of death in urban China.¹³⁷ China's rural population does not fare much better—industrial pollution makes cancer their number two cause of death.¹³⁸ In fact, while China continues to enact environmental legislation, many environmental indicators have declined since 2008.¹³⁹

In China it is the national Ministry of Environmental Protection (MEP) that is involved in the development of environmental policies. However, MEP generally does not exercise direct oversight of regulated actors.¹⁴⁰ It is environmental protection bureaus (EPBs), operating at the provincial, prefecture, and county level, that have responsibility for implementation and enforcement of national (and local) environmental laws.¹⁴¹ EPBs are responsible for “ensuring that firms conduct environmental impact assessments, that factories install the proper pollution control technology, that industry properly disposes of waste, and that industry reduces harmful emissions.”¹⁴² They must collect data on local pollution discharges, monitor local environmental quality, and inspect facilities.¹⁴³ When there are gaps in national regulations or standards, it is EPBs that develop local

134. For more information on rule of law in China, and specifically access to justice in the form of public interest environmental lawsuits, see Jessica Scott, *Cleaning Up the Dragon's Fountain: Lessons From the First Public Interest Lawsuit Brought by a Grassroots NGO in China*, 45 GEO. WASH. INT'L L. REV. 727 (2013).

135. XIANFA art. 26 (1982) (“The state protects and improves the living environment and the ecological environment, and prevents and controls pollution and other public hazards. The state organizes and encourages afforestation and the protection of forests.”) (Xianfa is the Chinese word for Constitution).

136. Joseph Kahn & Jim Yardley, *As China Roars, Pollution Reaches Deadly Extremes*, N.Y. TIMES (Aug. 26, 2007), <http://www.nytimes.com/2007/08/26/world/asia/26china.html>.

137. See Lee Liu, *Made in China: Cancer Villages*, ENVIRONMENT MAGAZINE, (Mar./Apr. 2010), <http://www.environmentmagazine.org/Archives/Back%20Issues/March-April%202010/made-in-china-full.html>.

138. *Id.*

139. Chu Long, *What the Smog Can't Conceal*, CHINADIALOGUE (Jan. 19, 2012), www.china dialogue.net/article/show/single/en/4734-What-the-smog-can-t-conceal.

140. CHARLES R. McELWEE, ENVIRONMENTAL LAW IN CHINA: MITIGATING RISK AND ENSURING COMPLIANCE 83 (2011).

141. *Id.* at 115.

142. Scott, *supra* note 134, at 731 (citations omitted).

143. McELWEE, *supra* note 140, at 115 (citing Huanjing Baogu Xingzheng Chufa Banfa (环境保护行政处罚办法) [Measures on Administrative Penalty for Environmental Protection] (promulgated by the Ministry of Environmental Protection), Dec. 30, 2009, effective Mar. 1, 2010, at art. 1, http://www.mep.gov.cn/gkml/hbb/bl/201002/t20100201_185230.htm).

rules to supplement them.¹⁴⁴ Lastly, it is EPBs who impose most of the sanctions in Chinese environmental law.¹⁴⁵

Unfortunately, weak rule of law means that EPBs often do not implement the laws as they are supposed to do. Though EPBs report to government bureaus all the way up to the MEP,¹⁴⁶ they also report to the local people's government.¹⁴⁷ In fact, it is the people's government at the corresponding level that appoints the head of the EPB and provides most of its funding.¹⁴⁸ As a result, local protectionism is common.¹⁴⁹

Weak rule of law is a problem in the court system as well. As with local EPBs, local courts' budgets and facilities also depend on the local government.¹⁵⁰ This lack of an independent judiciary leads to "susceptibility to local-government and major-taxpayer pressure, which can give polluters unfair influence over local courts."¹⁵¹ Furthermore, many Chinese judges have minimal training.¹⁵² While today, one must pass a judicial exam to become a judge,¹⁵³ many current judges remain who became judges before 1982, when the Constitution was amended and there were subsequent reforms reestablishing China's judiciary.¹⁵⁴ Most Chinese judges at that time "were transferred from the Chinese Communist Party or from the military, and lacked any university-level education or legal expertise."¹⁵⁵

There have been some recent encouraging developments, including "the creation of environmental courts and a growing number of public interest environmental lawsuits," but there are still many obstacles to strengthening the rule of law in China.¹⁵⁶ Law has a low status and is regarded as an

144. *Id.* at 114.

145. *Id.* at 228.

146. *Id.* at 5.

147. *Id.* at 6.

148. *Id.*

149. *See id.* ("Given this employment and financial dependence, when conflicts arise between national environmental laws and the policies and goals of local governments, they are more likely to be resolved in favor of the local governments.").

150. Rachel E. Stern, *From Dispute to Decision: Suing Polluters in China*, 206 CHINA Q. 294, 298 (2011).

151. Scott, *supra* note 134, at 733 (citing Stern, *supra* note 150).

152. Jingjing Liu, *Overview of the Chinese Legal System*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10,885, 10,889 (2011) ("While significant efforts are being made to make the judiciary more professional and independent, there are still many poorly trained judges who are susceptible to undue outside influence in Chinese courts.").

153. *Id.* at 10,888.

154. *See* Karen Halverson, *China's WTO Accession: Economic, Legal and Political Implications*, 27 B.C. INT'L & COMP. L. REV. 319, 348-49 (2004).

155. Scott, *supra* note 134, at 736 (citing Halverson, *supra* note 154, at 348).

156. *Id.* at 737.

unimportant source of authority for right behavior in Chinese culture.¹⁵⁷ Additionally, as noted above, there is limited capacity within government and the judiciary, and local protectionism abounds; “economic growth is the supreme goal; there is minimal public oversight of the implementation of environmental law; and, despite the significant number of environmental laws, they are often vague and weak.”¹⁵⁸

The Chinese example demonstrates the close connection between rule of law and environmental outcomes. Strengthening rule of law would improve environmental conditions, as well. China is not unique in this way. “In general [in Asia], there is a pressing need for additional [judicial] capacity, training, and institutional development.”¹⁵⁹ Moreover, renowned Indian environmental attorney M.C. Mehta argues that weak rule of law, in the form of rampant corruption, is “the single most important factor inhibiting” environmental protection in India.¹⁶⁰

Thus, rule of law is a critical ingredient to environmental protection in general and to enforcement of constitutional environmental rights specifically.¹⁶¹ As Charles Epp argues, for human rights to be effective, “certain conditions need to be present,” including the rule of law.¹⁶² In Africa, “despite constitutional environmental provisions and strengthened environmental laws,” there have not yet been measurable improvements in environmental outcomes largely because of weak rule of law.¹⁶³ Boyd notes that “enforcement of the constitutional right to a healthy environment is common in Latin America and Western Europe, is becoming more frequent in parts of Eastern Europe and Asia (particularly South Asia), and remains rare in Africa.”¹⁶⁴ This overall pattern is generally consistent with Epp’s position¹⁶⁵ and does indicate that rule of law increases the efficacy of constitutional environmental rights at protecting the environment.

157. McELWEE, *supra* note 140, at 4 (citing WILLIAM ALFORD, *TO STEAL A BOOK IS AN ELEGANT OFFENSE: INTELLECTUAL PROPERTY LAW IN CHINESE CIVILIZATION* 10 (1995)); *see also* Charles Baum, *Trade Sanctions and the Rule of Law: Lessons from China*, 1 *STAN. J. E. ASIAN AFF.* 46, 48–49 (2001); GEORGE PRING & CATHERINE PRING, *GREENING JUSTICE: CREATING AND IMPROVING ENVIRONMENTAL COURTS AND TRIBUNALS* 65 (2009) (“The Confucian tradition places an emphasis on moral values as the basis for social order, not the rule of law.”).

158. Scott, *supra* note 134, at 737 (citing McELWEE, *supra* note 143, at 4–9).

159. BOYD, *supra* note 26, at 189.

160. *Id.* at 188 (citations omitted).

161. *Id.* at 242 (citations omitted).

162. *Id.* (citing CHARLES R. EPP, *THE RIGHTS REVOLUTION: LAWYERS, ACTIVISTS, AND SUPREME COURTS IN COMPARATIVE PERSPECTIVE* (1998)).

163. *Id.* at 160.

164. *Id.* at 241.

165. *Id.* at 242.

There are multitudes of ways to work towards stronger rule of law, though more work needs to be done to determine the most effective approaches. Environmental advocates may want to focus their efforts on the seven “precepts of effective national environmental governance” listed above. The United Nations Environment Programme is actively engaged in this work at the international level.¹⁶⁶ Additionally, the American Bar Association’s Rule of Law Initiative (ABA ROLI) works with individuals and communities to help empower them to assert their rights, through education, legal clinics, legal aid approaches, and traveling lawyer programs.¹⁶⁷ It also collaborates with civil society groups to work towards greater implementation of existing laws.¹⁶⁸ Another important aspect of its work is judicial reform, such as providing forums for a dialogue on judicial independence and training judges in accountability, efficiency, and transparency.¹⁶⁹ The U.S. Environmental Protection Agency’s Environmental Appeals Board (EAB) has also participated in judicial trainings.¹⁷⁰

There is evidence that these types of efforts can lead to progress. For example, judges in China’s Yunnan province participated in several trainings with the EAB, where they discussed approaches to effective environmental litigation, and the role of public interest litigation, among other topics.¹⁷¹ Following these interactions, the Yunnan high court had, in the words of one Chinese attorney, an unusually “good attitude” regarding environmental public interest litigation.¹⁷² For years, despite numerous attempts by NGOs to get their public interest cases accepted under a local standing law, no Yunnan court had been willing to do so.¹⁷³ However, following these trainings, the Yunnan High Court took the unprecedented step of relying on the relevant standing law to accept a public interest environmental case filed by a grassroots NGO.¹⁷⁴

166. See *supra* notes 123–28 and accompanying text.

167. *Access to Justice and Human Rights*, AM. BAR ASSOC., http://www.americanbar.org/advocacy/rule_of_law/thematic_areas/access_justice_human_rights.html (last visited July 10, 2016).

168. *Id.*

169. *Judicial Reform*, AM. BAR ASSOC., http://www.americanbar.org/advocacy/rule_of_law/thematic_areas/judicial_reform.html (last visited July 10, 2016).

170. Scott, *supra* note 134, at 757.

171. *Id.*

172. *Id.*

173. *Id.* at 749.

174. *Id.* at 754.

IV. RULE OF LAW AND ENVIRONMENTAL PROTECTION

This Part will examine whether countries with strong rule of law are indeed more likely to have better environmental outcomes. In *The Environmental Rights Revolution*, David Boyd concludes that there is a correlation between constitutional provisions related to environmental protection and superior environmental records.¹⁷⁵ At the same time, he acknowledges that the results of his analysis “are not capable of demonstrating conclusively that constitutionalizing environmental protection does (or does not) cause improved environmental performance.”¹⁷⁶ This inability to draw conclusions about causation is because there are so many factors that impact environmental performance.¹⁷⁷ “Because of multiple causality, it is difficult to disentangle the effects of constitutional provisions related to the environment from other potentially influential factors, including a nation’s geographic size, population density, wealth, economic structure, level of urbanization, income inequality, international trade profile (i.e., types of imports and exports), public opinion, history, climate, natural resource endowment, and socio-economic status.”¹⁷⁸

Another relevant factor, Boyd acknowledges, is rule of law. Arguably, it is one of the most important factors. Antonio G. M. La Viña observes this in his lecture, “The Right to a Balanced and Healthful Ecology: The Odyssey of a Constitutional Policy”:

Particularly among developing countries, [the Philippines is] certainly one of the most if not *the* most advanced in articulated policy. The categorical right to ecological security in the 1987 Constitution and our laws on protected areas as well as toxic and hazardous wastes, and the precedent-setting case of *Oposa v. Factoran* are just some examples. Yet, on the ground, we cannot deny that our environmental problems remain daunting. We cannot in any way say that we have turned the tide. Hence, it is imperative to pierce our legal text and ask why there is a gap between policy and reality. . . .¹⁷⁹

*Oposa v. Factoran*¹⁸⁰ was a groundbreaking case in which the Philippine constitutional right to a balanced and healthful ecology was interpreted for

175. BOYD, *supra* note 26, at 276.

176. *Id.* at 254.

177. *Id.*

178. *Id.* (citations omitted).

179. La Viña, *supra* note 1, at 130.

180. *Minors Oposa v. Factoran*, G.R. No. 101083 (S.C., July 30, 1993) (Phil.), <http://elibrary.judiciary.gov.ph/thebookshelf/showdocs/1/31418>.

the first time.¹⁸¹ The plaintiffs, which included minors represented by their parents, sued the Secretary of the Department of Environment and Natural Resources (DENR) to compel him to cancel timber license agreements and cease and desist from granting new agreements.¹⁸² Eventually reaching the Supreme Court, the ultimate decision “recognized that the children in this case correctly asserted that they represent their generation as well as generations yet unborn,”¹⁸³ and held that the right to a clean environment “is actionable.”¹⁸⁴

However, despite the plaintiffs’ victory in court, “the decision did not result in the cancellation of any timber license agreement. . . .”¹⁸⁵ One reason was likely weak rule of law. Professor La Viña points out that “[i]n many cases, many environmental decisions by the DENR are made on the basis of political exigency rather than a rigorous economic and scientific analysis of issues.”¹⁸⁶ As is common in countries with weak rule of law, the government does not enforce obligations imposed on industry “for political reasons or because of corruption.”¹⁸⁷ Additionally, an effective judiciary can only be achieved if there are “good, efficient and honest judges,” another hallmark of strong rule of law.¹⁸⁸ As this case demonstrates, recognition of a human right to a clean environment is meaningless if the political and legal systems are not able to ensure its realization.

A comparative correlation analysis bears out this critical link between environmental performance and strong rule of law. In fact, this analysis indicates that rule of law has a much stronger correlation to environmental performance than do constitutional provisions recognizing environmental rights. Using Spearman’s rank correlation coefficient it is possible to assess the statistical dependence between rule of law and environmental performance rankings. Spearman’s rank is used to test for a correlation between two ranked variables, or in other words, “whether, as one variable increases, the other variable tends to increase or decrease.”¹⁸⁹

Boyd did not consider rule of law rankings. However, the World Justice Project’s (WJP) Rule of Law Index (RLI) provides the necessary data to do so. As described above, the WJP ranks 102 countries using 44 indica-

181. La Viña, *supra* note 1, at 131.

182. *Id.* at 132.

183. *Id.* at 133.

184. *Id.* at 135.

185. *Id.* at 139.

186. *Id.* at 151–52.

187. *Id.* at 153.

188. *Id.* at 155.

189. JOHN H. McDONALD, HANDBOOK OF BIOLOGICAL STATISTICS (3rd ed. 2014), <http://www.biostathandbook.com/spearman.html>.

tors of rule of law in practice in its RLI.¹⁹⁰ Those indicators are organized around eight factors that are derived from the four universal principles included in the WJP's definition of rule of law.¹⁹¹

Boyd did consider environmental performance rankings (along with the ecological footprint of 150 nations and other environmental performance indicators). However, the rankings he used resulted in small sample sizes of 30 and 17 relatively wealthy countries.¹⁹² Despite the small sample sizes, one advantage of Boyd's approach is that the countries in these samples are similarly situated.¹⁹³ The Yale Environmental Performance Index (EPI), on the other hand, ranks 180 countries, so includes a much larger sample size of more diverse countries.¹⁹⁴

The EPI measures environmental health, meaning "the protection of human health from environmental harm," and ecosystem vitality, meaning "ecosystem protection and resource management."¹⁹⁵ These measures are further divided into nine issue categories: health impacts, air quality, water and sanitation, climate and energy, biodiversity and habitat, fisheries, for-

190. RLI 2015, *supra* note 130.

191. See *supra* notes 130–33 and accompanying text.

192. The sample of 30 was for the Organisation for Economic Co-operation and Development (OECD) countries. BOYD, *supra* note 26, at 259. The sample of 17 was for the Conference Board of Canada Environmental Performance Rankings, which consists of 17 countries. *Id.* at 263. The Conference Board began with the 38 nations the World Bank deemed "high income," and then removed:

[N]ations with populations smaller than 1 million[,] . . . nations with an area smaller than ten thousand square kilometres (e.g., Singapore); and . . . nations whose per capita income was below the mean income (based on a five-year average of GDP per capita). The seventeen remaining nations represent a relatively homogeneous subset of OECD nations.

Id. Boyd also considered ecological footprint, which is defined as "the area of biologically productive land and water required to produce the resources consumed and to assimilate the wastes generated by humanity, under the predominant management and production practices in any given year." *Id.* at 257 (citations omitted). Boyd acknowledges that this metric has weaknesses. *Id.* at 257–58.

193. *Id.* at 259.

194. Environmental Performance Index, *Country Rankings*, DATA, <http://epi.yale.edu/country-rankings> (last visited Aug. 4, 2016). One disadvantage that this analysis and Boyd's OECD analysis share is that both use rankings. As Boyd acknowledges, "the ordinal scale measures only whether one nation is ahead of another nation; it does not measure the magnitude of the difference. Nations far apart in ranks may still be relatively close in environmental performance, whereas countries close in ranking may be far apart in environmental performance." BOYD, *supra* note 26, at 260. However, this approach does have the advantage of "simplicity." *Id.*

195. Environmental Performance Index, *What does the EPI Measure*, METHODS, <http://epi.yale.edu/chapter/methods> (last visited July 11, 2016).

ests, agriculture, and water resources.¹⁹⁶ Twenty indicators underlie these nine issue categories, which are “extensive but not comprehensive.”¹⁹⁷

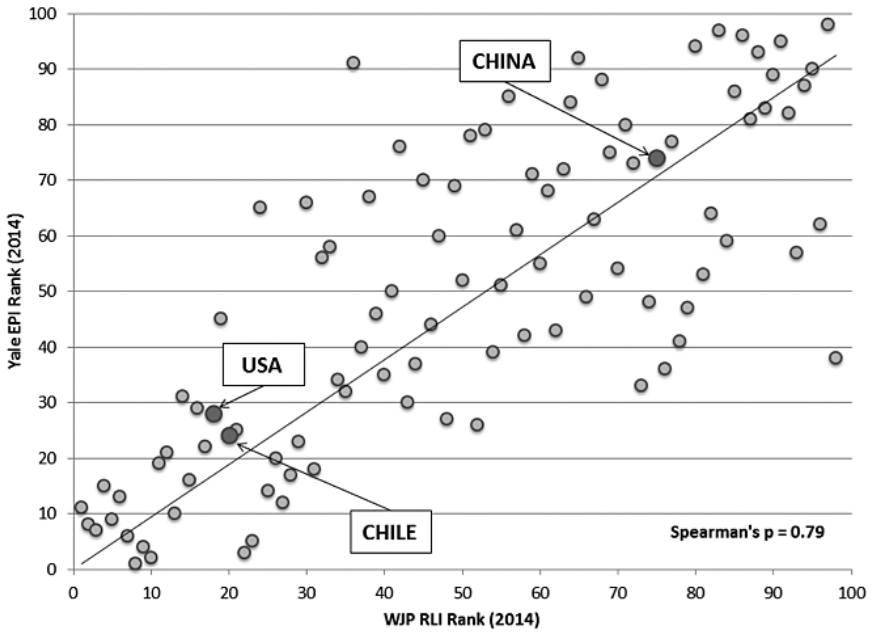
Using Spearman’s rank correlation coefficient to measure the correlation between 98 countries included in both the 2014 World Justice Project Rule of Law Index (RLI) and the 2014 Yale Environmental Performance Index (EPI) establishes a strong correlation of 0.79 (out of 1).¹⁹⁸ This is in fact a *stronger* correlation than was found between environmental protection provisions in constitutions and the EPI, which had virtually no correlation.¹⁹⁹

196. *Id.*

197. *Id.* Certainly, this environmental metric, like other environmental metrics, has strengths and weaknesses. One weakness is that “global data remain incomplete for a number of key environmental issues,” including toxic chemical exposures, freshwater quality, and nuclear safety, among others. *Id.* One strength of this approach, however, especially over the ecological footprint metric that Boyd uses, is that it measures ecosystem health and more directly considers environmental health, which is exactly what a human right to a healthy environment is supposed to protect.

198. Data on file with author. The 2014 World Justice Project Rule of Law Index (RLI) includes 99 countries and the 2014 Yale EPI includes 178 countries. Just one of the countries included in the 2014 RLI was not also included in the 2014 EPI: Hong Kong. Before conducting this correlation analysis, I removed the countries from each list that were not included in both, modifying the rankings accordingly to result in a ranking from one to 98 for each. For example, Switzerland and Luxembourg are ranked first and second, respectively, on the 2014 EPI. Neither Switzerland nor Luxembourg is included, however, in the 2014 RLI. Therefore, the third ranked country on the 2014 EPI, Australia, received a rank of one on my modified EPI, as it was the first ranked EPI country to appear in the RLI. The numbers included on the graph and discussed *infra* describing various country’s rankings are those from the modified one-to-98 data set used to conduct the correlation analysis. They are different numbers from those included in the original 2014 EPI and 2014 RLI. Though the WJP has already released its 2015 Rule of Law Index, this analysis compares the 2014 RLI and the 2014 EPI in an effort to ensure the time covered by both was as closely aligned as possible; the 2014 data sets for both included data through 2013. The data for the 2014 RLI came from 2011-2013. WORLD JUSTICE PROJECT, RULE OF LAW INDEX 2014 167 (2014) [hereinafter RLI 2014], http://worldjusticeproject.org/sites/default/files/files/wjp_rule_of_law_in dex_2014_report.pdf. The data for the 2014 EPI covered a range of different years for the various data sources, from 1950-2013. Environmental Performance Index, Metadata (2014). As this indicates, it was not possible to ensure coverage of identical time periods given the diverse data sets used by the EPI. This article’s analysis sacrifices more closely aligned time periods for more comprehensive indicators of environmental performance.

199. Data on file with author. This is a different result than Boyd’s analysis, which analyzed a smaller dataset.



Again, Spearman's rank correlation coefficient allows the statistical correlation between two variables (here, rule of law and environmental performance) to be measured.²⁰⁰ It demonstrates whether two variables covary.²⁰¹ On the graph above, the line indicates the identity function, which is a perfect correlation (where, for example, a rank of 1 on the x axis correlates with a rank of 1 on the y axis).²⁰² As the graph demonstrates, there are numerous examples of strong alignment between rule of law and environmental performance. For example, the United States is ranked 28 on the EPI and 18 on the RLI.²⁰³ Chile is ranked at 24 on the Yale EPI and 20 on the RLI.²⁰⁴ And China is even more closely aligned, as it is ranked at 74 on the EPI and 75 on the RLI.²⁰⁵ There are also a few examples of misalignment. For example, Venezuela, whose RLI rank is 98 and whose EPI rank is 38, is a country with moderate to strong environmental performance and

200. McDONALD, *supra* note 189, at 209.

201. *Id.*

202. This line is not a regression line for the graphed data.

203. Data on file with author. These are the modified rankings used in this correlation analysis for the 98 countries included in both the 2014 RLI rankings and the 2014 EPI rankings. These are not the original EPI or RLI rankings, which included 178 and 99 countries respectively.

204. *Id.*

205. *Id.*

very weak rule of law.²⁰⁶ Ghana, on the other hand, has relatively poor environmental performance, with an EPI rank of 91, and relatively strong rule of law, with a RLI rank of 36.²⁰⁷ As the strong correlation of .79 demonstrates, however, these examples of misalignment are the outliers.

There are a number of possible reasons for the strong correlation between rule of law rankings and environmental performance rankings. For one thing, rights are meaningless if there is no way for people to exercise or protect them. However, even without constitutional rights to a clean and healthy environment, strong rule of law helps to ensure that the public can protect its environment through access to justice and participatory decision-making. Whatever the environmental laws and rights in any particular legal system, strong rule of law ensures that the public can get the most out of them.

Moreover, in evaluating the effectiveness of a law or right in achieving a particular outcome, one must look not just at the existence of laws or rights, but at whether they are implemented or utilized. The World Justice Project's Rule of Law Index measures how the rule of law is actually experienced by the general public.²⁰⁸ Boyd's empirical comparison focuses on whether the existence of a constitutional right in various nations correlates with superior environmental performance in them.²⁰⁹ Rather than focusing on what laws are on the books, as Boyd's empirical comparison of nations' constitutions and environmental performance does, the RLI focuses on "how the rule of law is experienced . . . by ordinary people."²¹⁰ Presumably this focus on how rule of law is experienced allows the RLI to move beyond consideration of the simple existence of laws and reach a more comprehensive assessment of whether strong rule of law is actually achieved.

Considering actual achievement of strong rule of law is a critical ingredient in a more comprehensive analysis. This is further demonstrated by

206. *Id.*

207. *Id.*

208. "The World Justice Project (WJP) Rule of Law Index® provides original, impartial data on how the rule of law is experienced by the general public in 102 countries around the globe." World Justice Project, *WJP Rule of Law Index 2015*, RULE OF LAW INDEX, <http://worldjusticeproject.org/rule-of-law-index> (last visited July 11, 2016). "The Index's scores are built from the assessments of local residents (1,000 respondents per country) and local legal experts, ensuring that the findings reflect the conditions experienced by the population, including marginalized sectors of society." *Id.*

209. "Chapter 12 presents an empirical comparison of the environmental performance of nations with and without constitutional provisions related to environmental protection." BOYD, *supra* note 26, at 17. Boyd also "explores the legal consequences of environmental provisions in constitutions," but this part of his book does not include an empirical comparison of environmental performance. *Id.*

210. World Justice Project, *supra* note 208.

the experience of the developers of the Yale Environmental Performance Index when examining whether there was a meaningful relationship between their Environmental Performance Index scores and their Environmental Democracy Index (EDI) scores. The EDI ranks countries on a variety of democratic indicators in decisions about the environment, including access to information, participation, and justice, by evaluating the rights of citizens.²¹¹ Surprisingly, there was a relatively weak correlation of 0.29 between the EPI and EDI.²¹² There could be a number of reasons for such a weak correlation between EDI and EPI scores, including the fact that, as EDI developers made a point of noting, “the EDI does not measure implementation of laws.”²¹³ In this respect, the RLI is more comprehensive. If future editions of the EDI do measure implementation of laws, as is being considered,²¹⁴ it will be interesting to see if a stronger correlation appears.

Though many of the same caveats apply to this analysis as to Boyd’s, including, first and foremost, that the results cannot conclusively demonstrate that strong rule of law causes better environmental performance, the strong correlation does indicate that further research is needed. A more complete causation analysis should be conducted for both environmental rights and rule of law.

A correlation analysis also demonstrates that countries with higher gross domestic product (GDP) tend to have superior environmental outcomes.²¹⁵ There are a number of reasons why this may be. One possibility is that strong rule of law is appealing to foreign investors, who are then more likely to invest, which leads to economic growth.²¹⁶ Rule of law proponents and scholars have long argued that rule of law is critical to a successful market economy and economic growth.²¹⁷ This would mean that even if one of the proximal causes is a strong economy, an underlying cause of a strong economy is rule of law. Alternatively, GDP and environmental

211. Environmental Performance Index, *Environmental Democracy Index (EDI)*, NEWS & INSIGHTS, <http://archive.epi.yale.edu/-in-practice/environmental-democracy-index-edi> (last visited July 11, 2016).

212. *Id.*

213. *Id.*

214. *Id.*

215. Data on file with author.

216. Benjamin K. Guthrie, *Beyond Investment Protection: An Examination of the Potential Influence of Investment Treaties on Domestic Rule of Law*, 45 N.Y.U. J. INT’L L. & POL. 1151, 1159 (2013) (citations omitted).

217. See, e.g., *id.*; see also Samuel L. Bufford, *International Rule of Law and the Market Economy—An Outline*, 12 SW. J.L. & TRADE AM. 303, 303 (2006) (arguing that rule of law is “indispensable” to “a market economy, which provides an essential environment for the creation and preservation of wealth, economic security, and well-being, and the improvement of the quality of life”).

performance rankings may be strongly correlated because the same cause, rule of law, both increases GDP and improves environmental performance. Another possible explanation is that countries with higher GDP have stronger environmental laws, leading to movement of the highest polluting industries to poorer countries with weaker environmental laws.

In considering the effect of GDP on environmental performance, the countries of Lebanon and Jordan provide an interesting comparison, and indicate that GDP may not be a primary cause of superior environmental performance. Jordan has relatively strong rule of law and high environmental performance, despite its relatively low GDP. Jordan's RLI rank is 41 out of 102,²¹⁸ and its EPI rank is 74 out of 180.²¹⁹ It has a relatively low GDP, however, of \$4,940.²²⁰ Meanwhile, Lebanon has a relatively higher GDP of \$8,050, almost twice that of Jordan,²²¹ but has relatively weak rule of law and environmental performance. Its RLI rank is 68 out of 102²²² and its EPI rank is 94 out of 180.²²³ This example further demonstrates that more research is needed into the causal relationships between GDP and rule of law and how these two factors combined affect environmental performance.²²⁴

However, even acknowledging the limitations of the rule of law and environmental performance correlation analysis, the strong correlation indicates that environmental advocates should not exclusively focus on a human rights approach—rule of law plays a significant role in superior environmental performance, as well.

V. CONCLUSION

There can be little doubt that environmental degradation contributes to human rights violations. The examples are many, from the effects of cli-

218. RLI 2015, *supra* note 130, at 7. Jordan receives high marks for a variety of rule of law indicators, including civil justice, absence of corruption, and effective regulatory enforcement. *Id.* at 23. At the same time, it struggles with protection of fundamental rights and open government as well as constraints on government powers. *Id.*

219. Environmental Performance Index, *supra* note 194.

220. This was its 2015 GDP per capita in U.S. dollars. The World Bank, *GDP Per Capita*, DATA, <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD> (last visited July 11, 2016).

221. This was its 2015 GDP per capita in U.S. dollars. *Id.*

222. RLI 2015, *supra* note 130, at 7. Lebanon performs relatively well in the rule of law indicators of protection of fundamental rights and constraints on government powers, largely thanks to its free media and vibrant civil society. *Id.* at 23. However, Lebanon struggles with corruption, government agency efficiency, and the civil court system. *Id.*

223. Environmental Performance Index, *supra* note 194.

224. Additional research on which rule of law indicators are most closely correlated with superior environmental performance would also be informative.

mate change forcing some of the world's most vulnerable to flee their homes, to multinational corporations depleting local communities' water supply to produce their products. Recognition of a substantive environmental human right may help protect against such human rights violations, as Boyd argues. However, rule of law has a critical role to play, as well.

Worldwide, there is a stronger correlation between strong rule of law and superior environmental performance than there is between a constitutional environmental human right and superior environmental performance. Environmental advocates should focus attention on strengthening rule of law. By doing so, they can work to ensure that the public can actually employ whatever environmental laws and rights exist in any given legal system. Moreover, strong rule of law strengthens the public's ability to protect the environment in a variety of ways, including through the procedural rights of access to justice and participatory decision-making. Strengthening rule of law lays the groundwork to ensure that people can exercise or protect the rights they have and helps ensure translation of legal rights into victory in the field in the form of superior environmental performance.