

STRUCTURAL ENVIRONMENTAL CONSTITUTIONALISM

BLAKE HUDSON*

I. INTRODUCTION

The phrase “environmental constitutionalism” may have a number of distinct meanings in different contexts.¹ For the purpose of this symposium, environmental constitutionalism is framed as addressing the question of how constitutional provisions impact environmental quality and the environmental rights of citizens. Importantly, this conception of environmental constitutionalism comes in at least two forms. The first, and more typical conception, might be termed *fundamental* environmental constitutionalism—the primary form highlighted in this symposium. Fundamental environmental constitutionalism often involves textual constitutional provisions protecting fundamental substantive or procedural citizen rights to a quality environment in national or subnational instruments. Sometimes these textual provisions create new constitutional rights. At other times, these provisions may codify common law principles of public rights to environmental health, as do the provisions of some state constitutions in the United States that reify public trust rights in water, air, wildlife, or other resources.² For instance, consider the Pennsylvania Constitution’s Environmental Rights Amendment, at issue in the recent *Robinson Township v. Pennsylvania*³ case:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.⁴

* Professor of Law, Joint Appointment. LSU Law Center and LSU School of the Coast and Environment. I would like to thank the participants in the Global Environmental Constitutionalism symposium at Widener University School of Law for including me in the conference and for their feedback on this article (though analysis expressed in the article is my own). I would also like to thank the *Widener Law Review* for their hard work in preparing the article for publication.

¹ See Brian J. Gareau, *Foreword: Global Environmental Constitutionalism*, 40 B.C. ENVTL. AFF. L. REV. 403, 403-04 (2013); Louis J. Kotzé, *Arguing Global Environmental Constitutionalism*, 1 TRANSNAT’L ENVTL. L. 199, 203-04 (2012); Douglas A. Kysar, *Global Environmental Constitutionalism: Getting There from Here*, 1 TRANSNAT’L ENVTL. L. 83, 90 (2012).

² See generally MICHAEL BLUMM & MARY CHRISTINA WOOD, THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL AND NATURAL RESOURCES LAW (2013).

³ *Robinson Twp. v. Pennsylvania*, 83 A.3d 901 (Pa. 2013).

⁴ *Id.* at 913 (citing PA. CONST. art. I, § 27 (commonly known as the “Environmental Rights Amendment”).

A second form of environmental constitutionalism is equally important to the exercise of national and subnational environmental protection measures across the globe—that is, *structural* environmental constitutionalism, which is the allocation of environmental regulatory authority across levels of government within particular nations. Structural environmental constitutionalism is particularly relevant in federal systems of government. Some federal nations constitutionally divide regulatory authority over certain environmental subject matter between national (federal) and subnational (state/provincial and local) governments. This can create a number of constraints on environmental regulatory efforts at each level of government.⁵ For example, subnational governments may constrain national environmental efforts by claiming that a regulatory realm is constitutionally reserved to the states, and is therefore legally protected from federal interference.⁶ On the other hand, national governments may preempt potentially efficacious state or local environmental regulatory efforts pursuant to claimed exclusive constitutional powers.⁷

Importantly, structural constraints on environmental policymaking do not only arise out of national constitutions. The same dynamic may take place within subnational jurisdictions if state or provincial constitutions limit local government efforts to create innovative environmental policies. This may occur if state or provincial governments fail to constitutionally empower local governments to regulate in certain environmental areas, take back powers previously granted to local governments to do so, or legislatively preempt local government environmental regulatory efforts.⁸ Ultimately, constitutional design related to regulatory authority within national and subnational jurisdictions can be a structural form of environmental constitutionalism that may have as much, or more, impact than the protection of fundamental environmental rights within constitutional text.

The regulatory divide across levels of government in federal nations may arise from explicit environmental constitutional text or, in its absence, implicitly from constitutional interpretation undertaken by the judiciary. It may also arise, of course, via legislative preemption of lower levels of government pursuant to other constitutional powers that are not explicitly of an environmental nature. I have previously highlighted these dynamics in the context of forest policy⁹ and land use planning¹⁰ in a number of federal

⁵ There are a number of additional scenarios in which this can play out. See Blake Hudson & Jonathan Rosenbloom, *Uncommon Approaches to Commons Problems: Nested Governance Commons and Climate Change*, 64 HASTINGS L.J. 1273, 1292-1312 (2013).

⁶ See *id.* at 1279. Contrast this with subnational governments in unitary systems, which may not legally constrain environmental protection measures undertaken by the national government, even though political subdivisions in unitary systems may apply political pressure to shape national environmental policies or may be free to craft their own policies at the allowance of the national government.

⁷ *Id.* at 1304.

⁸ See *id.* at 1308-09.

⁹ See generally Blake Hudson, *Climate Change, Forests and Federalism: Seeing the Treaty for the Trees*, 82 U. COLO. L. REV. 363 (2011) [hereinafter Hudson, *Climate Change, Forests and Federalism*]; Blake

nations, concluding that certain constitutional designs in federal nations can negatively impact natural capital management across scales—that is—from local to global scales of governance.¹¹ For example, state and provincial governments currently maintain virtually exclusive constitutional regulatory authority over subnationally controlled forests in the United States and Canada (which make up sixty-five and eighty-four percent of each nation's forests, respectively).¹² This can pose serious complications for national level forest policies that seek to harness subnational forests to combat climate change as land development activities in both countries are expected to reduce forest cover over the next several decades.¹³ Such forms of constitutional design can also complicate international agreements, as the federal governments in these nations may be unable to obligate subnational governments to certain potential requirements of global agreements related to forests.¹⁴

This Article introduces this structural, but arguably less obvious, form of environmental constitutionalism by detailing its relationship with fundamental environmental constitutional textual provisions, and by describing some of the environmental ramifications of constitutional designs that do not optimally allocate regulatory authority across scales of government. Part II details how both fundamental and structural environmental constitutionalism may be contained in explicit constitutional text. Part II further analyzes how both the likelihood of achieving textual changes within constitutions and the efficacy of such changes depend upon the type of governmental system involved (federal versus unitary), the level of government where textual changes are sought (national versus state constitutions), and the type of environmental constitutionalism sought to be achieved (fundamental versus structural). Part III discusses how structural constitutionalism, in particular, is also embodied within judicial interpretation of other constitutional provisions, while Part IV details how it may manifest through legislative instruments. Part V briefly details the promises and perils of structural environmental constitutionalism and its implications for achieving the goals of environmental constitutionalism generally—a different set of implications than those presented by fundamental environmental constitutionalism. Part VI briefly concludes.

Hudson, *Fail-safe Federalism and Climate Change: The Case of U.S. and Canadian Forest Policy*, 44 CONN. L. REV. 925 (2012) [hereinafter Hudson, *Fail-safe Federalism and Climate Change*]; Blake Hudson, *Federal Constitutions, Global Governance, and the Role of Forests in Regulating Climate Change*, 87 IND. L.J. 1455 (2012) [hereinafter Hudson, *Role of Forests in Regulating Climate Change*].

¹⁰ See generally Blake Hudson, *Federal Constitutions: The Keystone of Nested Commons Governance*, 63 ALA. L. REV. 1007, 1007-08 (2012) [hereinafter Hudson, *The Keystone of Nested Commons Governance*]; Hudson & Rosenbloom, *supra* note 5, at 1291.

¹¹ See generally BLAKE HUDSON, CONSTITUTIONS AND THE COMMONS: THE IMPACT OF FEDERAL GOVERNANCE ON LOCAL, NATIONAL, AND GLOBAL RESOURCE MANAGEMENT (2014).

¹² Hudson, *Fail-safe Federalism and Climate Change*, *supra* note 9, at 931-32.

¹³ *Id.* at 932-33.

¹⁴ Hudson, *Climate Change, Forests and Federalism*, *supra* note 9, at 385.

II. CONSTITUTIONAL TEXT: FUNDAMENTAL VERSUS STRUCTURAL CONSTITUTIONALISM

The most straightforward forms of fundamental or structural environmental constitutionalism are contained in explicit constitutional text providing, respectively, citizen rights to a quality environment or allocating regulatory authority over certain environmental subject matter to particular levels of government.¹⁵ Many national and subnational constitutions already contain environmental constitutionalism in some form or another.¹⁶ Other participants at this symposium have discussed at length national and subnational constitutions that contain fundamental environmental constitutionalism. Yet nations also maintain a wide spectrum of approaches to structural environmental constitutionalism regarding specific resources. Consider an example from the forest management sector. Canada's constitution explicitly allocates subnational forest management policy authority to the provinces, with no prescriptive role for the national government.¹⁷ In contrast, Brazil, Russia, and India all maintain national constitutions containing explicit constitutional text allocating ultimate national and subnational forest management authority to the national government.¹⁸

Though many constitutions already contain explicit fundamental or structural environmental constitutional provisions, to the extent that environmental constitutionalism is a growing phenomenon, governments may attempt to strengthen those forms or otherwise adjust them through constitutional amendment to achieve more effective or balanced environmental governance. Both national and state constitutions can be difficult to amend to incorporate either fundamental or structural environmental constitutionalism. Yet, just how difficult depends upon, first, whether the governmental system is federal or unitary, and second, whether it is the national or the state government that is seeking to amend its constitution. Once an amendment is passed, the next important question is whether it will be viable in achieving environmental protection goals. This question implicates whether the amendment is aimed at fundamental versus structural constitutionalism. Each of these three binary categories is discussed in turn below.

A. Federal versus Unitary

Amending national constitutions in unitary systems is typically not as difficult as doing so in federal systems (at least from a *legal* perspective) since only one *body politic* must coordinate to pass a constitutional amendment in a

¹⁵ See, e.g., PA. CONST. art. I, § 27.

¹⁶ See David R. Boyd, *The Constitutional Right to a Healthy Environment*, ENV'T, July/Aug. 2012, at 4 (providing a map identifying nations that recognize the right to a healthy environment in constitutions, legislation, or international agreements).

¹⁷ See Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1497.

¹⁸ *Id.* at 1491-92, 1500, 1502.

unitary system. In federal systems, however, state or provincial governments not only have political interests at stake in any national constitutional amendment, but these subnational governments maintain legally guaranteed participation in the amendment process. States or provinces, therefore, may legally thwart efforts to undertake constitutional amendment at the national level.

In the United States, for example, citizens have made over ten thousand attempts to amend the national Constitution.¹⁹ Only a handful of amendments have passed, in large part because of the difficulties posed by the Article V amendment process. Under that process, an amendment must be proposed by either two-thirds of both houses (the Senate or House of Representatives) or two-thirds of state governments, and then it must be ratified by three-quarters of state governments.²⁰

Similarly, the Canadian national constitution has only been amended ten times since Canada was officially vested with the power to amend its constitution in 1982.²¹ Most of these amendments are aimed at province-specific issues,²² and the citizenry has trended toward using the amendment process to vest more powers in the provinces rather than the national government.²³ Further, Canada's amending procedure was not unanimously agreed upon by the provinces, as Quebec raised questions as to its legitimacy.²⁴ Due to fears of illegitimacy, courts have refused to interpret, or even acknowledge, certain Canadian amendments.²⁵ Even if considered legitimate, it is virtually impossible to pass an amendment that binds the provinces entirely. For some amendments, two-thirds of the provinces must agree, including at least fifty percent of the population,²⁶ and provinces may opt out of adopting an amendment that all other provinces agree to merely by passing a resolution opposing the amendment within one year.²⁷

The amendment processes in these federal systems demonstrate the difficulty of amending national constitutions when subnational governments

¹⁹ RICHARD B. BERNSTEIN & JEROME AGEL, AMENDING AMERICA: IF WE LOVE THE CONSTITUTION SO MUCH, WHY DO WE KEEP TRYING TO CHANGE IT? 169 (1993); see JOHN R. VILE, ENCYCLOPEDIA OF CONSTITUTIONAL AMENDMENTS, PROPOSED AMENDMENTS, AND AMENDING ISSUES, 1789–1995 363–80 (1996); Ruth Bader Ginsburg, *On Amending the Constitution: A Plea for Patience*, 12 U. ARK. LITTLE ROCK L.J. 677, 679 (1990).

²⁰ U.S. CONST. art. V.

²¹ Prior to 1982, the amendment power had been with the British government. Kevin Sneesby, *National Separation: Canada in Context—A Legal Perspective*, 53 LA. L. REV. 1357, 1366 (1993).

²² Constitution Act, 1867, 30 & 31 Vict., c. 3 (U.K.).

²³ Jeffrey L. Friesen, *The Distribution of Treaty-Implementing Powers in Constitutional Federations: Thoughts on the American and Canadian Models*, 94 COLUM. L. REV. 1415, 1439 (1994).

²⁴ Canadian Charter of Rights and Freedoms, Part V of the Constitution Act, 1982, *being* Schedule B to the Canada Act, 1982, c. 11 (U.K.); Sujit Choudhry, *Ackerman's Higher Lawmaking in Comparative Constitutional Perspective: Constitutional Moments as Constitutional Failures?*, 6 INT'L J. CONST. L. 193, 222 (2008).

²⁵ Choudhry, *supra* note 24, at 227.

²⁶ Canadian Charter of Rights and Freedoms, Part V, § 38(1)(b) of the Constitution Act, 1982, *being* Schedule B to the Canada Act, 1982, c. 11 (U.K.).

²⁷ *Id.* at § 38(3).

maintain constitutionally protected legal inputs into the amendment process. Achieving either fundamental or structural environmental constitutional changes in these systems, therefore, is fraught with more legal difficulties than achieving them in unitary systems.

B. National Versus State Constitutions

The operation of state and provincial governments in federal systems approximates that of national governments in unitary systems and, therefore, state and provincial governments are more readily capable of achieving constitutional amendment. States and provinces, of course, have local governments within their borders (municipalities, counties, and other subnational units), which in turn maintain legal authority. However, that legal authority typically arises solely from the state or provincial governments.

In both the U.S. and Canada, for example, local governments do not exist under national constitutions (as do the states and provinces), but rather they are created out of state or provincial constitutional authority. In this way, as with unitary systems, local governments only maintain as much power as the state or provincial government gives them, which conceivably could be no legal authority at all. State governments in the United States, for example, must empower local governments legislatively or constitutionally through the grant of “home rule” or pursuant to “Dillon’s Rule,” and remain free to withhold or take back some of that power through preemption.²⁸ State governments therefore also may operate as one *body politic* when undertaking constitutional amendment to incorporate or adjust fundamental or structural environmental constitutionalism. In this way, achieving either fundamental or structural environmental constitutionalism through constitutional amendment is an easier legal task at the state or provincial level than at the national level.

C. Fundamental Versus Structural Constitutionalism

Notwithstanding the uncertain political probability of passing or amending constitutional provisions related to the environment—at either the national or state/provincial level—there are many ways in which national or subnational constitutions could conceivably be amended to affect environmental rights and regulations and to achieve either fundamental or structural environmental constitutionalism. The effectiveness of such an amendment in actually achieving environmental goals may depend in large part on the type of environmental constitutionalism sought to be achieved. First, consider fundamental constitutionalism.

J.B. Ruhl has provided a useful analytical tool for assessing the viability of fundamental environmental constitutional provisions, specifically seeking to assess the utility of an “environmental quality amendment” (EQA).²⁹ As

²⁸ Hudson & Rosenbloom, *supra* note 5, at 1308-09.

²⁹ J.B. Ruhl, *The Metrics of Constitutional Amendments: And Why Proposed Environmental Quality Amendments Don’t Measure Up*, 74 NOTRE DAME L. REV. 245, 248-49 (1999).

described by Ruhl, EQAs tend to be aspirational, broad, and include language such as: “[t]he natural resources of the nation are the heritage of present and future generations. The right of each person to clean and healthful air and water, and to the protection of other natural resources of the nation, shall not be infringed by any person.”³⁰ These amendments may be assessed based upon their function (the institutional purpose of the amendment) and their target (the societal interaction adjusted by the functional change).³¹ The potential functions include whether the amendment: (1) alters the operational rules of government; (2) prohibits specified government action; (3) creates or affirms individual rights; or (4) expresses aspirational goals.³² The targets of the function may be: (1) intra- and intergovernmental relations; (2) relations between the government and its citizens; or (3) relations between citizens.³³

Ruhl determined that EQAs fall into a category not currently represented within the United States Constitution, since it would be an amendment establishing aspirational goals (function 4) aimed at citizen-citizen relations (target 3).³⁴ These types of amendments are just the types that Ruhl argues should not be included in the United States Constitution³⁵ since they must necessarily be drafted either ambiguously broad or so narrowly that implementing them would be nearly impossible.

Applying Ruhl’s matrix, the many state constitutions that contain public trust or similar provisions³⁶ appear to establish aspirational goals (function 4) or even create or affirm individual rights (function 3) targeting the relationship between the government and its citizens (target 2) since the provisions seek to compel government protection of important resources. If viewed as establishing aspirational goals (function 4), then these provisions may also lend themselves to the same criticisms levied by Ruhl against national amendments, in that they are ambiguous as to what protections must actually occur or what the remedy will be if protections are not put into place through legislative or judicial action. Even so, if state provisions are viewed as creating or affirming citizens’ rights (function 3), by reifying common law concepts like the public trust doctrine, they can provide support for citizen judicial claims that states must meet their obligations to protect certain resources.³⁷ The United States Constitution currently contains three amendments in this category.³⁸ In this

³⁰ Ruhl, *supra* note 29, at 248.

³¹ *Id.* at 253.

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at 252 (“[A]ny EQA attempting to capture a normative statement about the environment and plug it into the United States Constitution is simply a bad idea.”). Furthermore, “amendments purporting to express aspirational values or regulate civil relations, or do both, should set off bells and whistles in the political evaluation process.” *Id.* at 260.

³⁶ See generally BLUMM & WOOD, *supra* note 2.

³⁷ See *Robinson Twp. v. Pennsylvania*, 83 A.3d 901, 954-56 (Pa. 2013); *Bonser-Lain v. Texas Comm’n on Env’tl. Quality*, No. D-1-GN-11-002194, 2012 WL 3164561, at *1-2 (Tex. Dist. Ct. Aug. 2, 2012), *vacated*, 438 S.W.3d 887 (Tex. App. 2014).

³⁸ Ruhl, *supra* note 29, at 261 fig.1 (identifying Amendments Six, Seven, and Ten as creating or affirming citizens’ rights).

way, fundamental constitutionalism providing citizen rights to compel government action may be more efficacious, especially at the state level, than those criticized by Ruhl as ineffectual.

While fundamental constitutionalism may lead to constitutional protections of environmental rights that are of varying degrees of effectiveness, these are not the only types of constitutional adjustments that can affect environmental quality. In addition to amendments providing constitutionally protected individual rights to environmental welfare, other amendments might simply clarify or adjust regulatory authority over environmental resource management between levels of government. Citizens may seek federal intervention into a resource management category dominated by state governments, such as land use regulation or direct forest management in the United States. Or perhaps state governments wish to regulate certain subject matters free of federal preemption. In these scenarios, a constitutional amendment could clarify that the federal government maintains regulatory authority over certain categories of resource management in addition to the states. Or, an amendment could provide that the states will be able to regulate in certain resource management areas free from undermining federal interference. These types of amendments would fall into a category far more likely to be viable according to Ruhl's matrix.

Take an example in the forest management context, where an amendment might simply declare: "The federal government of the United States maintains the authority to regulate, in addition to the states, the management of the nation's forest resources; federally-owned, state-owned, and privately-owned." This amendment would serve a function of altering the operational rules of government (function 1) and would adjust the target of intergovernmental relations (target 1). Nine United States constitutional amendments currently fall under the "function 1, target 1" category of the matrix.³⁹ In this way, the federal and state governments in the United States might one day agree to change the operational rules of government and the current status of intergovernmental relations by rebalancing federal-state roles in regulating forest management or other regulatory subject areas where one level of government is precluded from prescriptively regulating. The same may occur at the state level, for example, if citizens would prefer more local control over the location of fracking activities within their states, rather than being preempted by state law,⁴⁰ or if states want to prevent local governments from blocking citizen rights to utilize distributed solar or wind renewables on their rooftops.⁴¹

Such an amendment may emerge as necessary since society may be unable to achieve some policies in the absence of an amendment.⁴² In the federal

³⁹ Ruhl, *supra* note 29, at 261 fig.1 (identifying Amendments Twelve, Fourteen (Section Two), Seventeen, Twenty, Twenty-One, Twenty-Two, Twenty-Three, Twenty-Five, and Twenty-Seven).

⁴⁰ See *Robinson Twp.*, 83 A.3d at 936.

⁴¹ See Troy A. Rule, *Renewable Energy and the Neighbors*, 2010 UTAH L. REV. 1223, 1242 (2010).

⁴² Ruhl, *supra* note 29, at 270–71.

context, though the legislative process may be preferable to constitutional amendment so that the meaning of the Constitution does not become diluted and otherwise take the form of a legislative instrument, Ruhl asserts that:

The question of need, therefore, is whether there is any institutional barrier to fulfilling the fundamental, widely accepted social policy through routine legislative and judicial forums. . . . [S]ome amendments have forced an intransigent minority of states to come into line with the rest of the nation on fundamental social policy issues associated with matters traditionally (or constitutionally) left to state jurisdiction. Where federal legislation cannot impose the policy over state resistance and the courts cannot mold the existing constitutional text to handle the stubborn states, an amendment is the only alternative. These are examples of institutional necessity, where an amendment, and only an amendment, can allow the widely accepted social policy to move forward in society.⁴³

There are a number of institutional barriers to regulatory inputs into certain forms of natural capital regulation at various levels of government—barriers that arise out of federal and state constitutional and legislative provisions.⁴⁴ As one example, the absence of adequate forest management standards in many states, especially in the southeastern United States, supports the idea that an amendment remedying exclusive state regulatory authority over subnational forest policy *could* be a last resort to overcoming that institutional barrier with a more effective policy approach.⁴⁵ Indeed, some scholars have argued for constitutional amendments that rebalance the relationship between the United States federal government and the states in the presence of ineffective state environmental policymaking.⁴⁶ These types of amendments would be “purely structural,” unlike a constitutional amendment providing for an individual’s right to a clean and healthy environment, and would “empower[] Congress to legislate regarding the environment”⁴⁷ if it chose to do so. These amendments, therefore, would not compel particular levels of government to legislate nor would any new fundamental constitutional rights be created for citizens. The constitutional authority to regulate would merely be reallocated between levels of government.

⁴³ Ruhl, *supra* note 29, at 271.

⁴⁴ See generally Hudson, *The Keystone of Nested Commons Governance*, *supra* note 9.

⁴⁵ See Blake Hudson, *Dynamic Forest Federalism*, 71 WASH. & LEE L. REV. 1643, 1686 (2014).

⁴⁶ See, e.g., Robin Kundis Craig, *Should There Be a Constitutional Right to a Clean/Healthy Environment?*, 34 ENVTL. L. REP. 11013, 11018 (2004). Professor Craig argues that “a constitutional amendment could allow Congress to reenact the federal environmental statutes pursuant to that amendment’s grant of legislative authority, freeing them of any lingering Commerce Clause limitations and leaving Congress free to reach the last federally unregulated impediments to environmental quality—such as nonpoint source pollution—currently deemed to be outside the federal regulatory sphere.” *Id.* at 11019–20.

⁴⁷ Dan L. Gildor, *Preserving the Priceless: A Constitutional Amendment to Empower Congress to Preserve, Protect, and Promote The Environment*, 32 ECOLOGY L.Q. 821, 823 (2005).

This discussion, of course, is not an assessment of the likelihood of such an amendment being passed. Even though the type of structural amendment highlighted above may be the kind most likely to be effective if enacted, it remains incredibly difficult to convince three-quarters of the states to ratify an amendment that intrudes on state regulatory powers—and it remains that any kind of “constitutional environmental amendment is unlikely in the current political climate,” at least at the federal level.⁴⁸ For the reasons discussed in Part II (B), it may be easier to craft such an amendment at the state or provincial government level or within unitary systems of government, which might act more readily, for example, to prevent local governments from barring the use of distributed renewables within their jurisdictions.

III. JUDICIAL INTERPRETATION OF CONSTITUTIONAL PROVISIONS

Structural environmental constitutionalism is not always embodied explicitly within constitutional text. The judiciary, at both the state/provincial and national levels, plays a key role in interpreting both textual environmental constitutional provisions and explicitly non-environmental provisions of constitutions that, while not specifically addressing environmental subject matter, establish authority for such regulation. For instance, the United States Congress cannot regulate unless it does so pursuant to one of its constitutional powers, such as the power to tax, make treaties, manage federal property, or to “regulate Commerce . . . among the several states[.]”⁴⁹ This last power, the Commerce Clause, is the provision pursuant to which most federal environmental legislation is passed. The Endangered Species Act of 1973,⁵⁰ the Clean Air Act,⁵¹ and the Clean Water Act,⁵² among a number of other federal statutes, were enacted under Commerce Clause authority.⁵³ A number of constitutional tests have arisen to determine when Congress is acting pursuant to this power, including the “substantial effects” test, which asks whether Congress is regulating an economic activity that in the aggregate has a substantial effect on interstate commerce (regardless of whether that activity is clearly interstate or completely intrastate).⁵⁴ Interpretation of this provision has proven fertile ground for judicial wrangling over the scope of federal authority under the Commerce Clause and when federal exercise of that authority might begin to intrude on powers reserved for the states.⁵⁵

⁴⁸ Craig, *supra* note 46, at 11018.

⁴⁹ U.S. CONST. art. I, § 8, cl. 3.

⁵⁰ 16 U.S.C. §§ 1531–1544 (2012).

⁵¹ 42 U.S.C. §§ 7401–7671q (2012).

⁵² 33 U.S.C. §§ 1251–1387 (2012).

⁵³ See, e.g., Solid Waste Disposal Act, 42 U.S.C. §§ 6901–6992k (2012); Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601–9675 (2012).

⁵⁴ Blake Hudson, *Commerce in the Commons: A Unified Theory of Natural Capital Regulation Under the Commerce Clause*, 35 HARV. ENVTL. L. REV. 375, 377–78 (2011).

⁵⁵ See Randy E. Barnett, *Foreword: Limiting Raich*, 9 LEWIS & CLARK L. REV. 743, 746–47 (2005); Eric Brignac, *The Commerce Clause Justification of Federal Endangered Species Protection*: Gibbs

In the judicial interpretation context, let us once again revisit our forest policy example. Forests are not explicitly mentioned in the United States Constitution, as they are in the Canadian, Brazilian, Russian, and Indian constitutions.⁵⁶ As a result, regulatory authority over subnational forest policy in the United States is up for judicial interpretation. Currently, subnational governments in the United States maintain sole authority over subnational forest management because forests fall into the category of land use planning, long considered a regulatory role for state and local governments.⁵⁷ Furthermore, the United States federal government has never legislatively claimed authority over direct subnational forest management, so United States courts have not had a chance to adjust, through judicial interpretation, structural environmental constitutionalism related to United States forest policy.

Contrast the United States with Australia, which also has a constitution that does not explicitly contemplate forest governance. Australian courts have declared that all levels of government can maintain regulatory inputs into forest management at any level and of any type, including the federal

v. Babbitt, 79 N.C. L. REV. 873, 883 (2001); Eric R. Claeys, Raich and *Judicial Conservatism at the Close of the Rehnquist Court*, 9 LEWIS & CLARK L. REV. 791, 816 (2005); Christy H. Dral & Jerry J. Phillips, *Commerce by Another Name: The Impact of United States v. Lopez and United States v. Morrison*, 68 TENN. L. REV. 605, 621 (2001); Gildor, *supra* note 47, at 830, 833-35; Christine A. Klein, *The Environmental Commerce Clause*, 27 HARV. ENVTL. L. REV. 1, 23-27 (2003); Bradford C. Mank, *Protecting Intrastate Threatened Species: Does the Endangered Species Act Encroach on Traditional State Authority and Exceed the Outer Limits of the Commerce Clause?*, 36 GA. L. REV. 723, 735-44 (2002); Bradford C. Mank, *The Murky Future of the Clean Water Act After SWANCC: Using a Hydrological Connection Approach to Saving the Clean Water Act*, 30 ECOLOGY L.Q. 811, 844-46 (2003); Thomas W. Merrill, *Rescuing Federalism After Raich: The Case for Clear Statement Rules*, 9 LEWIS & CLARK L. REV. 823, 844 (2005); John Copeland Nagle, *The Commerce Clause Meets the Delhi Sands Flower-Loving Fly*, 97 MICH. L. REV. 174, 191-92 (1998); Sara D. Van Loh, *The Latest and Greatest Commerce Clause Challenges to the Endangered Species Act: Rancho Viejo and GDF Realty*, 31 ECOLOGY L.Q. 459, 462-69 (2004); Lori J. Warner, *The Potential Impact of United States v. Lopez on Environmental Regulation*, 7 DUKE ENVTL. L. & POL'Y F. 321, 321-40 (1997); Omar N. White, *The Endangered Species Act's Precarious Perch: A Constitutional Analysis Under the Commerce Clause and the Treaty Power*, 27 ECOLOGY L.Q. 215, 235-39 (2000); Ernest A. Young, *Just Blowing Smoke? Politics, Doctrine, and the Federalist Revival after Gonzales v. Raich*, 2005 SUP. CT. REV. 1, 21-25 (2005).

⁵⁶ See Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1497, 1500, 1502-03.

⁵⁷ See *Rapanos v. United States*, 547 U.S. 715, 738 (2006); *Vill. of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 387-88 (1926); *Mugler v. Kansas*, 123 U.S. 623, 660-61 (1887); PAUL GOLDSTEIN & BARTON H. THOMPSON, JR., *PROPERTY LAW: OWNERSHIP, USE AND CONSERVATION* 967 (2006); JAN G. LAITOS ET AL., *NATURAL RESOURCES LAW* 849 (2006); James R. May, *Constitutional Law and the Future of Natural Resource Protection*, in *THE EVOLUTION OF NATURAL RESOURCES LAW AND POLICY* 124, 132 (Lawrence J. MacDonnell & Sarah F. Bates eds., 2010); JOHN R. NOLON ET AL., *CASES AND MATERIALS ON LAND USE AND COMMUNITY DEVELOPMENT* 17 (7th ed. 2008); Gerald A. Rose et al., *Forest Resources Decision-Making in the U.S.*, in *THE POLITICS OF DECENTRALIZATION: FORESTS, PEOPLE AND POWER* 238, 239 (Carol J. Pierce Colfer & Doris Capistrano eds., 2005); Marci A. Hamilton, *Federalism and the Public Good: The True Story Behind the Religious Land Use and Institutionalized Persons Act*, 78 IND. L.J. 311, 335 (2003).

government so long as it maintains obligations under its “external affairs” power.⁵⁸

Even in countries with explicit environmental constitutional text, courts play a key role in interpreting those provisions. For example, Canadian courts have trended toward increasing provincial authority in environmental and other regulatory areas,⁵⁹ whereas Brazilian courts have trended toward centralized, national authority.⁶⁰

State and provincial constitutional powers must be interpreted as well, whether related to the balance of environmental regulatory authority between state/provincial and local governments (structural environmental constitutionalism) or related to citizen environmental rights (fundamental environmental constitutionalism). A clear example of both structural and fundamental environmental constitutionalism arises from a case discussed in depth at this symposium, *Robinson Township v. Pennsylvania*.⁶¹ In *Robinson Township*, the Pennsylvania Supreme Court held that a statute preempting municipalities’ ability to regulate natural gas fracturing (“fracking”) and other oil and gas operations out of environmental concern violated the Environmental Rights Amendment of the state constitution.⁶² While the amendment in question dealt with fundamental constitutional environmental protections, the court’s ruling adjusted the structure of regulatory authority over fracking activities since, as discussed in the next section, it found that the exercise of legislative preemption under the circumstances violated structural mandates of the state constitution.⁶³

Despite judicial interpretations in Pennsylvania, as of 2012, over 100 municipalities in the United States had banned fracking activities within their borders,⁶⁴ and other states’ efforts to preempt these policies have been upheld by courts.⁶⁵ Courts in Louisiana and Ohio, for example, have upheld state preemption of local government regulation of fracking activities,⁶⁶ demonstrating the key role the judiciary plays in the implementation of structural environmental constitutionalism.

⁵⁸ Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1484-86.

⁵⁹ *Id.* at 1499.

⁶⁰ *Id.* at 1493.

⁶¹ *Robinson Twp. v. Pennsylvania*, 83 A.3d 901 (Pa. 2013).

⁶² *Id.* at 985.

⁶³ *Id.* at 978.

⁶⁴ Shaun A. Goho, *Municipalities and Hydraulic Fracturing: Trends in State Preemption*, 64 PLANNING & ENVTL. L. 3, 4, available at <http://blogs.law.harvard.edu/environmentallawprogram/files/2013/03/Municipalities-and-Hydraulic-Fracturing-Trends-in-State-Preemption.pdf>.

⁶⁵ Of course, a constitutional provision like the one at issue in *Robinson Township* could always be legislatively amended by the state to allow preemption.

⁶⁶ See *Energy Mgmt. Corp v. City of Shreveport*, 467 F.3d 471, 483-84 (5th Cir. 2006); *State ex rel. Morrison v. Beck Energy Corp.*, 989 N.E.2d 85, 99 (Ohio Ct. App. 2013).

IV. LEGISLATIVE PROVISIONS ARISING OUT OF CONSTITUTIONAL AUTHORITY

Structural environmental constitutionalism also manifests in legislative attempts to supersede the environmental authority of some other branch of government. This can come in the form of federal regulation preempting state and local activities or state regulation preempting local governments. For example, the federal government has preempted the ability of state and local governments to require more restrictive standards than federal government for controlling air pollution from mobile sources.⁶⁷ In *Metropolitan Taxicab Board of Trade v. City of New York*, for example, the city of New York attempted to mandate fuel efficiency standards for its taxi fleet that were higher than federal standards.⁶⁸ The court ruled that the regulations that attempted to do so were preempted by the Clean Air Act and, therefore, were invalid.⁶⁹

At the state level, *Robinson Township* provides a prime example. Recall that the Pennsylvania state government attempted by statute to preempt local governments' ability to regulate natural gas fracturing ("fracking") and other oil and gas operations.⁷⁰ Though the legislature was ultimately found to be unconstitutionally seeking to adjust the structure of environmental policymaking, other state legislatures have been able to legislatively make such an adjustment—potentially for the worse.⁷¹

Though federal and state preemption occurs through legislative acts, preempting legislation clearly arises out of constitutional authority. Even so, it is most directly the legislation rather than the constitution that readjusts the balance of environmental policymaking inputs across levels of government.

V. THE PROMISES AND PERILS OF STRUCTURAL ENVIRONMENTAL CONSTITUTIONALISM

Structural environmental constitutionalism has yet to be integrated into the environmental constitutionalism literature, yet there are a number of reasons why it should be given greater attention.⁷² First, and stated most simply, properly balancing the structure of environmental policymaking across scales of government can create more optimal environmental management, whereas imbalances can create a variety of harms. The dynamic federalism literature demonstrates that for structural environmental constitutionalism to be adequate, policy inputs at local, state/provincial, and federal levels will achieve

⁶⁷ See Kirsten H. Engel, *Harnessing the Benefits of Dynamic Federalism in Environmental Law*, 56 EMORY L.J. 159, 184-87 (2006).

⁶⁸ *Metro. Taxicab Bd. of Trade v. City of New York*, 615 F.3d 152, 155 (2d Cir. 2010).

⁶⁹ *Id.* at 158.

⁷⁰ See PA. CONST. art. I, § 27 (stating that "Pennsylvania's public natural resources are the common property of all of the people . . .").

⁷¹ See *Energy Mgmt. Corp.*, 467 F.3d at 483; *Morrison*, 989 N.E.2d at 99.

⁷² See generally JAMES R. MAY & ERIN DALY, GLOBAL ENVIRONMENTAL CONSTITUTIONALISM (2015) (providing an in depth discussion of the types of environmental constitutionalism).

better environmental outcomes than siloing off separate regulatory spheres between levels of government under a dual federalist model.⁷³ Returning once again to our forest example, the constitutional structure of Australian forest policy regulatory authority, which as you recall allows inputs at all levels of government,⁷⁴ will more readily legally facilitate the type of forest management policy considered optimal by forest policy analysts.⁷⁵ The dual federal structure of United States and Canadian forest policy, on the other hand, can lead to suboptimal environmental outcomes in the forest sector.⁷⁶

The second reason that structural environmental constitutionalism should be given greater attention is that it might have an overall greater practical impact than fundamental constitutional provisions, at least at present and until fundamental environmental constitutional provisions are taken more seriously by more governments. Both structural changes to constitutions and the establishment of fundamental rights within them can come about through procedural and political processes. However, as discussed in Part II(C), J.B. Ruhl's useful matrix assessing the viability of different environmental constitutional amendments supports a conclusion that making structural changes to how government operates may be more efficacious if ultimately achieved—at least at the federal level.⁷⁷ In other words, using aspirational language like that found in the Pennsylvania State Constitution is not likely to be very effective in a national constitution like the United States Constitution, since the constitutional authority of subnational governments must still be contended with and there is a lack of clarity about what these rights mean and what obligations the government maintains to carry them out. On the other hand, incorporating a national constitutional provision that declares “the federal government shall have the authority to directly regulate land use planning” or a state constitutional provision that declares “state governments will not interfere with local regulation of oil and gas development activities” would provide clear constitutional authority where before it may have been uncertain. Such provisions would further facilitate any political will that exists to take action at those levels of government, through a minimum standards approach or otherwise.

Third, and finally, structural environmental constitutionalism may also cure some of the ills associated with fundamental environmental constitutionalism.

⁷³ See Engel, *supra* note 67, at 175-76; Robert A. Schapiro, *Toward a Theory of Interactive Federalism*, 91 IOWA L. REV. 243, 246 (2005).

⁷⁴ Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1484-86.

⁷⁵ See Doris Capistrano & Carol J. Pierce Colfer, *Decentralization: Issues, Lessons and Reflections*, in *THE POLITICS OF DECENTRALIZATION: FORESTS, POWER AND PEOPLE* 296, 311-12 (Carol J. Pierce Colfer & Doris Capistrano eds., 2005); HANS GREGERSEN ET AL., *FOREST TRENDS, FOREST GOVERNANCE IN FEDERAL SYSTEMS: AN OVERVIEW OF EXPERIENCES AND IMPLICATIONS FOR DECENTRALIZATION* 8-9, 15 (2004), available at http://www.cifor.cgiar.org/publications/pdf_files/interlaken/Interlaken_pre-paper.pdf; ARNOLDO CONTRERAS-HERMOSILLA ET AL., *FOREST TRENDS, FOREST GOVERNANCE IN COUNTRIES WITH FEDERAL SYSTEMS OF GOVERNMENT: LESSONS FOR DECENTRALIZATION* 7 (2008), available at http://www.cifor.cgiar.org/publications/pdf_files/GovBrief/GovBrief0739E.pdf.

⁷⁶ See generally Hudson, *Fail-safe Federalism and Climate Change*, *supra* note 9.

⁷⁷ See Ruhl, *supra* note 29, at 11.

Fundamental environmental constitutional protections may work at the state level in Pennsylvania, but what about nationally or at the state level in Brazil, India, and elsewhere? Consider Brazil, which has both fundamental environmental constitutional provisions and structural provisions related to certain resources, like forests.⁷⁸ Brazil's fundamental protections are largely disregarded, and "[a]ttempts to embody environmental protection clauses in national constitutions, such as Brazil's, do not appear to have appreciably influenced the prevailing bureaucratic culture."⁷⁹ At some point, if fundamental provisions are in place, but are disregarded for long enough, there may be an erosion of institutional legitimacy for any future government seeking to actually implement those provisions. This can devalue the constitutional text in practice as governments disregard constitutional provisions or court decisions interpreting them.⁸⁰ If, however, nations can make structural adjustments to the allocation of constitutional authority, empowering, for example, the local populous through restructuring control over forest resources in a more legally decentralized manner, then perhaps fundamental environmental constitutional provisions may be taken more seriously. This, of course, would likely require building capacity at local levels, increasing enforcement and respect for the rule of law within a nation, among a number of other governance adjustments. Indeed, these adjustments are very much needed in nations like Brazil and India.⁸¹ Yet, if they can succeed, then both structural changes and fundamental constitutional provisions can better protect the environment.

VI. CONCLUSION

By including an analysis of structural environmental constitutionalism into the current canon of environmental constitutionalism scholarship, we can identify imbalances in environmental governance authority and how to adjust those imbalances, facilitate more immediate practical impacts on environmental governance across scales, and lay a firm foundation for other forms of environmental constitutionalism, like fundamental. Failing to see environmental governance authority as also a constitutional matter rather than merely a political matter can lead to path dependency and the perpetuation of institutions that negatively impact environmental governance. Too often, a disproportionate amount of blame is placed on political will for poor environmental policy—either poor political will leads to a lack of needed policies at certain levels of government or poor political will leads to governance institutions incapable of enforcing law on the books. Obviously, political will is a key component to crafting any policy. Yet political will and

⁷⁸ See Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1491-96.

⁷⁹ Benjamin J. Richardson, *Environmental Law in Postcolonial Societies: Straddling the Local-Global Institutional Spectrum*, 11 *COLO. J. INT'L ENVTL. L. & POL'Y* 1, 26 (2000).

⁸⁰ See generally Brigham Daniels & Blake Hudson, *Our Constitutional Commons*, 49 *GA. L. REV.* (forthcoming 2015).

⁸¹ See Hudson, *Role of Forests in Regulating Climate Change*, *supra* note 9, at 1491-96, 1500-01.

legal institutions (like constitutions) are intertwined in a “chicken or egg” relationship. I have often described this problem as legal perception informing political reality. If we do not recognize the legal reality—that is, a form of structural environmental constitutionalism that may place constitutional constraints on the exercise of environmental regulatory authority at particular levels of government—then governments get a free pass to continue to politically perceive that they are unable to act on certain important environmental subject matter. The study of structural environmental constitutionalism and adjustment of deficient constitutional structures will be critical to ensuring that structural deficiencies within constitutions do not undermine political will when it is present.