Fail-safe Federalism and Climate Change: The Case of U.S. and Canadian Forest Policy

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Article

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BLAKE HUDSON

Recent research demonstrates the difficulties that federal systems of government may present for international treaty formation, a prime example being legally binding treaties aimed at harnessing global forests to regulate climate change. Some federal constitutions, such as the U.S. and Canadian constitutions, grant subnational governments virtually exclusive direct forest management regulatory authority for non-federally owned forests. With subnational governments controlling sixty-five percent of forests in the United States and eighty-four percent in Canada, the U.S. and Canadian federal governments may be constrained during international negotiations and unable to legally bind subnational governments to any agreement prescribing methods of utilizing these forests to combat climate change. These constraints are especially important since these two countries control fifteen percent of the world’s forests. Decentralized forest policy in the U.S. and Canada certainly provides valuable benefits. Yet constitutional decentralization in federal systems should be more effectively balanced with global forest governance if that mechanism for addressing climate change is to be preserved in its most flexible form. Though a binding agreement has yet to materialize, and other increasingly touted mechanisms may be utilized to tackle climate change, it is imperative that world governments maintain every legal and policy tool at their disposal to address the problem.

A recent comparative constitutional analysis of five federal systems controlling fifty-four percent of global forests determined that the United States and Canada lack two of the three key elements of federal constitutional structure that best facilitate a federal nation’s ability to enter into and successfully implement an international climate agreement including forests while also preserving the recognized benefits of decentralized forest policy. This Article addresses how these constitutional deficiencies might be remedied to achieve more effective climate and forest governance. In other words, the Article explores mechanisms for establishing “Fail-safe Federalism” for forest management in the United States and Canada, by first highlighting the domestic nuances of both constitutional structure and forest policy in the two countries and next assessing whether top-down, bilateral, horizontal, or transnational approaches are the most effective mechanisms for forging Fail-safe Federalism within each.
ARTICLE CONTENTS

I. INTRODUCTION ............................................................................................................. 927

II. BACKGROUND AND CONTEXT: U.S. AND CANADIAN CONSTITUTIONAL IMPACTS ON GLOBAL CLIMATE AND FOREST GOVERNANCE ................................................................. 934
   A. ELEMENTS OF FEDERAL CONSTITUTIONAL ORDERS THAT BEST BALANCE GLOBAL FOREST GOVERNANCE AND DECENTRALIZED FOREST POLICY-MAKING ................................... 936
   B. STATUS OF ELEMENTS IN THE UNITED STATES ..................................................... 940
   C. STATUS OF ELEMENTS IN CANADA ..................................................................... 945

III. U.S. AND CANADIAN DOMESTIC FOREST GOVERNANCE: DIVERGENT APPROACHES, DISPARATE IMPLICATIONS FOR FAIL-SAFE FEDERALISM ........................................................................ 950
   A. FRAMEWORK FOR ASSESSING U.S. AND CANADIAN DOMESTIC FOREST POLICIES ................................................................................................................................. 951
   B. EXPLAINING THE UNITED STATES-CANADA FOREST POLICY GAP: PRIVATE VS. PUBLIC FOREST OWNERSHIP ................................................................. 959
   C. IMPLICATIONS OF THE PRIVATE-PUBLIC FOREST OWNERSHIP DIVIDE FOR SUGGESTED MECHANISMS OF FAIL-SAFE FEDERALISM ................................................................. 968

IV. FORGING FAIL-SAFE FEDERALISM BY FORTIFYING KEYSTONE CONSTITUTIONS ................................................................................................................................. 969
   A. FORTIFICATION FROM WITHIN: TOP-DOWN, BILATERAL, AND HORIZONTAL GOVERNANCE ......................................................................................................................... 971
   B. FORTIFICATION IN RESPONSE TO EXTERNAL FORCES: PATHWAYS OF TRANSNATIONAL IMPACTS ON DOMESTIC GOVERNANCE ................................................................. 993

V. CONCLUSION ..................................................................................................................... 999

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I. INTRODUCTION

Climate change is perhaps the most important environmental issue of our time. Yet it is also the most complex. While it is difficult to craft a regulatory solution or a cooperative response among nations for most global governance issues, it is especially challenging in the case of climate change. Scientific uncertainty regarding climate change’s potential impacts, the difficulties in measuring and predicting changing climatic conditions, the global scale of the problem, the innumerable sources of greenhouse gases, the role of those sources in forming the very carbon-constructed foundation upon which society operates, and the political and jurisdictional complexities arising out of these factors make climate change an exceptionally difficult environmental and global governance challenge. It is therefore imperative that world governments and citizens both maintain and are able to effectively use every legal and policy tool at their disposal in the battle against climate change. More specifically, the global nature of the problem requires that each nation be able to successfully utilize mechanisms of domestic governance to forge a collaborative international response. Such a response could take many forms, ranging

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from individualized action by single nations, to transnational actions,\(^1\) to a legally binding global treaty. Even so, the utilization of a global treaty may be diminished, as recent scholarship demonstrates that domestic governance limitations in the form of constitutional federalism may complicate the implementation of a non-self-executing, legally binding climate change treaty or perhaps even thwart treaty formation in the first instance.\(^2\)

Countries with federal systems of government, such as the United States and Canada, pose a particular challenge to a variety of international negotiations\(^3\) because regulatory authority over treaty subject matter may be constitutionally decentralized\(^4\) and divided in an exclusive manner between the national and subnational governments. As a result, subnational governments may legally constrain national governments during international negotiations by resisting domestic treaty implementation as outside the scope of the national government’s

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\(^3\) Examples include negotiations related not only to the environment, but also human rights, criminal law and punishment, and commerce and trade. Curtis A. Bradley, *The Treaty Power and American Federalism*, 97 MICH. L. REV. 390, 402–06 (1998).

\(^4\) Scholars have observed that federations use the principle of constitutional non-centralization rather than decentralization. In other words, when independent states decide to create a federation and a federal system of government, they confer, generally through a constitution, certain specific responsibilities and authorities to the federal government in the interest of all states. . . . [F]or these reasons, use of the term decentralized is somewhat awkward in the case of federal governments.

constitutional authority. The complications presented by federal systems of government for international negotiations have critical implications for global climate governance—at least to the extent that countries wish to preserve a legally binding treaty as one mechanism for addressing climate change. Worldwide there are only twenty-four federal systems of government compared to over 160 unitary systems. Thus, only thirteen percent of the world’s governments are federal and subject to potential legal constraints posed by subnational governments. Yet while there are far fewer federal systems of government than unitary systems, approximately forty-six percent of the world’s land base (and associated natural resources) and between seventy and eighty percent of the world’s forests—a resource crucial to combating climate change—are contained

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5 By contrast, nation-states with centralized, or “unitary,” systems of government may act without legal constraint during international negotiations—the lack of exclusive subnational constitutional authority over certain subject matters in these countries allows central governments to freely obligate their respective nations to the requirements of a legally binding treaty. “Unitary” systems of government “may have subnational levels of governments; but these are not constitutionally empowered to make decisions on major government services and functions; rather, they are subordinate units,” id. at 15, intended to “balance the burden of governance.” Ian Ferguson & Cherukat Chandrasekharan, Paths and Pitfalls of Decentralization for Sustainable Forest Management: Experiences of the Asia Pacific Region, in THE POLITICS OF DECENTRALIZATION, supra note 4, at 63, 65.


8 Unitary action at the national level may certainly be politically thwarted by subnational interest groups or powerful subnational government influence, but unitary governments maintain the legal authority to act if and when they politically choose to do so. In federal systems, even in the presence of national government political will, any one subnational actor may challenge a national act as unconstitutional and may succeed in having national regulatory action thwarted.

9 The total surface area of the earth is 148,940,000 km². Federal systems of government maintain the following surface areas: Argentina: 2,766,890 km²; Australia: 7,617,930 km²; Austria: 83,872 km²; Belgium: 30,528 km²; Bosnia and Herzegovina: 51,209 km²; Brazil: 8,514,877 km²; Canada: 9,984,670 km²; Comoros: 2,235 km²; Ethiopia: 1,104,300 km²; Germany: 357,021 km²; India: 3,287,263 km²; Iraq: 438,317 km²; Malaysia: 329,847 km²; Mexico: 1,972,550 km²; Micronesia: 702 km²; Nepal: 147,181 km²; Nigeria: 923,768 km²; Pakistan: 796,095 km²; Russia: 17,075,400 km²; Saint Kitts and Nevis: 261 km²; Sudan: 2,505,813 km²; Switzerland: 41,285 km²; United Arab Emirates: 83,600 km²; United States: 9,826,675 km²; Venezuela: 916,445 km². Thus, federal nation total surface area is 68,858,734 km², or roughly forty-six percent of the world’s total surface area. See Countries of the World Ordered by Land Area, LIST OF THE COUNTRIES OF THE WORLD, http://www.listofcountriesoftheworld.com/area-land.html (last visited Dec. 16, 2011).


11 See A. Angelsen, REDD Models and Baselines, 10 INT’L FORESTRY REV. 465, 465 (2008) (explaining how environmental non-governmental organizations have come to realize that failing to address tropical deforestation is dangerous, given that deforestation currently accounts for one fifth of global greenhouse gas emissions); T. Johns et al., A Three-Fund Approach to Incorporating Government, Public and Private Forest Stewards Into a REDD Funding Mechanism, 10 INT’L
within federal systems of government. This is both the great irony and the great challenge of our time: the placement of the vast majority of one of the most critical resources to combating global climate change largely within systems of government with the greatest potential to complicate holistic global responses through international legal instruments.

The role of the United States and Canada in climate change and global forest management negotiations provides a compelling case study of the potential impact of federal systems on global governance via international treaty. The international community is increasingly looking to harness the power of carbon sequestration via improved forest management as a mechanism to combat climate change, and “realization of the significance of climate change impacts of greenhouse gas emissions from deforestation and forest degradation has brought renewed impetus to efforts to conserve and better manage forests globally.”

Nearly twenty percent of annual global carbon emissions result from forest loss and degradation, an amount greater than emitted by the global transportation sector each year. As a result, mechanisms to achieve “Reduced Emissions from Deforestation and Degradation” (REDD) have been placed on the agenda of both future international climate negotiations and negotiations related to establishing a global sustainable forest management regime. Not only is forest destruction a substantial source of atmospheric carbon, but a recent U.S. Forest Service report found that one-third of global carbon emissions are absorbed by forests each year, making forests the most significant terrestrial carbon sink. Consequently, preservation of forests provides a multiplied effect in regulating greenhouse gases; and, correspondingly, forest destruction amplifies concentrations of carbon in the atmosphere.


12 See Levin, supra note 11, at 539 (describing how environmental groups, firms, industry associations, and governments are focusing on forest management policies to address climate change).


14 Id. at 6.


16 MCDERMOTT, supra note 13, at 6.

since it constitutes both a source of carbon and the loss of a significant carbon sink.

The United States and Canada alone account for over thirteen percent of the world’s land base,\(^{18}\) over fifteen percent of the world’s forests,\(^{19}\) and maintain two of the top ten world economies as measured by annual gross domestic product\(^{20}\)—carbon-based economies to be certain. With these two nations controlling such a significant amount of the world’s natural and financial capital, full and unconstrained participation by the United States and Canada in international climate negotiations is of crucial importance if that route of response is ultimately chosen. Even so, the involvement of these two federal systems in global climate governance related to forests is hindered by legal constraints that subnational governments may place on national government involvement in international negotiations.

For example, U.S. regulatory authority over forest management is currently constitutionally divided between federal and state governments, with state governments responsible for regulating the nearly sixty-five percent of U.S. forests owned by subnational governments (five percent) or private parties (sixty percent).\(^{21}\) As a result, if the federal government sought to obligate the United States to certain types of forest management directives within an international climate treaty, it may arguably do so only on the thirty-five percent of nationally owned forests over which it maintains constitutional control.\(^{22}\) This is because a non-self-executing treaty would require Congress to pass implementing legislation that would invariably be challenged by state governments and private property owners as beyond the scope of the U.S. treaty power and other federal powers, and as intruding upon a regulatory role constitutionally reserved to state governments. Thus nearly two-thirds of the United States’ forested lands would be outside the orbit of the treaty, rendering the United States in violation of its international obligations. Furthermore, the United States would likely be less inclined to even enter into serious international negotiations based upon perceived federalism constraints. In this way

\(^{18}\) See Countries of the World Ordered by Land Area, supra note 9.


\(^{22}\) See id. (noting that the federal government publically owns and manages only thirty-five percent of forests in the country).
legal perception is often political reality in the United States, as the government politically refuses to act both domestically and internationally based upon perceived constitutional constraints.  

The consequences of this constitutional state of affairs for U.S. forests are substantial. The U.S. Forest Service recently released a report detailing the projected impacts that population growth, urbanization, climate change, timber markets, and invasive species will have on southeastern U.S. forests alone over the next fifty years, finding that these factors may reduce forest cover by as much as twenty-three million acres, or approximately thirteen percent of total forestland in the south. Not surprisingly, southeastern U.S. forests also maintain the highest proportion of private forest ownership, meaning that under current understandings of constitutional law, a prescriptive regulatory response at national or international levels may be an unavailable mechanism for avoiding this dramatic loss of U.S. forest cover and the carbon sequestration and other ecosystem service benefits forests provide.

Similarly, the Canadian Constitution grants the provinces exclusive forest management regulatory authority over non-federally owned forests. Thus the provinces maintain control over nearly all of the nation’s forests since eighty-four percent of Canadian forests are owned by the provinces or private parties. The provinces place even more constraints on the Canadian national government in international negotiations than do the states in the United States because while U.S. state hegemony over

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23 See Hudson, Federal Constitutions, supra note 2 (manuscript at 14) (describing how the U.S. government “acts as if its hands are tied due to perceived legal constraints”). Curtis Bradley has observed that “in a number of instances in the late nineteenth and early twentieth centuries, U.S. officials declined to enter into negotiations concerning private international law treaties because of a concern that the treaties would infringe on the reserved powers of the states.” Curtis A. Bradley, The Treaty Power and American Federalism, Part II, 99 Mich. L. Rev. 98, 131–32 (2000) (citing Kurt H. Nadelmann, Ignored State Interests: The Federal Government and International Efforts to Unify Rules of Private Law, 102 U. Pa. L. Rev. 323 (1954), and Harold W. Stokes, The Foreign Relations of the Federal State 187–88 (1931)). Additionally, the United States has invoked federalism and states’ rights to avoid international treaties related to labor conditions. Id. at 132. Perceived federalism limitations have also reduced the United States’ bargaining power during international negotiations as the United States has sought both treaty exemptions to reduce state obligations and concessions for states in domestic implementation. Edward T. Swaine, Does Federalism Constrain the Treaty Power?, 103 Colum. L. Rev. 403, 408–10 (2003). Examples include the United States’ opposition to the Convention on the Rights of the Child, treaty exemptions for the states within human rights treaties, and the Agreement on Government Procurement, and concessions to the states in domestic implementation of trade matters, such as in the Uruguay Round Agreements Act. Id. at 408–10.


subnational forest management has been understood as a “reserved power” for the states in the absence of a recognized enumerated federal power. Canadian provincial hegemony over forests is made explicit in the text of the Canadian Constitution. So while the United States may have some flexibility to exert federal authority over subnational forests under the Commerce Clause or some other federal power (though direct regulation has never before been attempted), the Canadian federal government’s options are expressly limited. In addition, and also unlike the United States, Canadian courts have definitively found that the Canadian treaty power is constrained by reserved provincial powers.

Ultimately, the lack of national or international input into Canadian forest practices also has implications for preserving the full slate of climate change solutions. While Canadian boreal forests store a great deal of carbon—an estimated sixty-seven billion tons (equal to 303 years of the country’s 2002 carbon emissions)—deforestation of nearly 230,000 acres of forest a year due to cropland conversion and urbanization is a significant source of emissions. At this rate, over eleven million acres of Canadian forest will be lost over the next fifty years. This is in addition to logging activities that remove an average of 122 megatons of carbon dioxide equivalent forest carbon a year, an amount that if released into the atmosphere would equal sixteen percent of Canada’s total yearly greenhouse gas emissions. Without greater coordination of forest policy, either among the provinces or provided by some higher governmental authority, destruction of forests in the name of economic development may proceed apace as provinces jockey for economic growth and development.

Ultimately, if utilization of full treaty-making authority is to be preserved in the context of climate change and appropriately balanced with the benefits of decentralized forest governance, federal systems like the United States and Canada will need to overcome the holistic resource management problems posed by federalism. In other words, mechanisms for forging “Fail-safe Federalism” will need to be established in the event that U.S. states or Canadian provinces do not unilaterally act to protect their respective forests in ways consistent with the needs of a robust global

29 See Blake Hudson, Federal Constitutions: The Keystone of Nested Commons Governance, 63 ALA. L. REV. (forthcoming 2012) (manuscript at 3, 4) (explaining how the lack of coordination at the federal level could potentially give rise to a natural capital commons within national and state boundaries).
30 Hudson, Federal Constitutions, supra note 2 (manuscript at 26).
climate change response. Such mechanisms would allow these countries’ federal governments to have the constitutional authority to act as a fail-safe by participating in the establishment of national forest objectives based upon minimum forest protection standards—standards that may need to be coordinated on a global scale to effectively address climate change. This Article analyzes the various mechanisms that may be utilized to facilitate Fail-safe Federalism in the context of global forest governance and climate change, proceeding in five parts.

Part II provides background and context for how both the U.S. and Canadian brands of constitutional federalism impact global climate governance related to forest management through their lack of previously identified elements that best balance global forest governance and decentralized forest policy-making in federal systems of government. This Part first describes the foundational research upon which this Article builds, detailing the elements of federal constitutional orders that best strike that balance. Next, this part details how the U.S. and Canadian constitutional orders are missing certain of those elements. Part III then clarifies that despite the similar potential impacts of U.S. and Canadian constitutional federalism on global governance, different domestic circumstances give rise to widely divergent domestic forest policies between the two countries—with Canadian provinces providing a higher baseline of minimum forest management standards upon which to build toward effective global forest governance, while the United States maintains more constitutional authority and flexibility at the federal level to allow participation in binding international agreements. These distinctions have important implications for which mechanisms of forging Fail-safe Federalism are most appropriate in the respective countries. Part IV then assesses the various mechanisms by which the constitutional orders of the United States and Canada might be fortified to allow more robust, forest-driven responses to climate change on a global scale. These fail-safes may be driven by internal forces and forged from the current constitutional order, or they may be driven by external forces, such as transnational pressure to change domestic forest policies. Importantly, the fail-safes that allow the U.S. and Canadian national governments to act unconstrained in global forest and climate governance will also allow the national governments to perform a fail-safe role domestically—thus striking the global forest governance/decentralized forest policy balance. Part V concludes.

II. BACKGROUND AND CONTEXT: U.S. AND CANADIAN CONSTITUTIONAL IMPACTS ON GLOBAL CLIMATE AND FOREST GOVERNANCE

Though the international community has increasingly sought mechanisms to utilize global forest management to more effectively combat climate change, efforts over the past two decades to harmonize
national and local forest policies within a legally binding international treaty have failed. This failure is driven both by political disconnects between the developed and developing worlds and the international community’s inability to gain the unequivocal support of leading developed nations like the United States. Notwithstanding past failures, the international community is increasingly seeking to develop mechanisms to facilitate direct inclusion of forest management within a future climate agreement. Even so, recent scholarship demonstrates that certain federal systems of government maintain constitutional structures insufficient to adequately balance sustainable, decentralized domestic forest governance with effective negotiation and implementation of a


32 The developing world has taken the position that a global forest treaty would allow the developed world to raise trade barriers by obligating the developing world to take developmentally detrimental action to protect tropical forests while refusing to regulate temperate and boreal forests to the same degree. Radoslav S. Dimitrov, Knowledge, Power, and Interests in Environmental Regime Formation, 47 INT’L STUD. Q. 123, 135 (2003).

33 See Deborah S. Davenport, An Alternative Explanation for the Failure of the UNCED Forest Negotiations, 5 GLOBAL ENVTL. POL. 105, 106 (2005) (noting a lack of willingness on the part of the United States to forge an international deforestation treaty); see also Radoslav S. Dimitrov, Hostage to Norms: States, Institutions and Global Forest Politics, 5 GLOBAL ENVTL. POL. 1, 3 (2005) (attributing the failure of a deforestation treaty partially to U.S. opposition). The failure of the United States to participate is especially significant because the United States is widely considered to be the most influential country in the global environmental governance system and U.S. participation is crucial to the success of global environmental treaty formation. See id. at 9–13 (providing several examples of efforts by the United States to jettison international climate talks). Even so, the United States fully participates in only one-third of existing international environmental agreements, and refused to ratify the current guiding climate change treaty, the Kyoto Protocol. Katrina L. Fischer, Harnessing the Treaty Power in Support of Environmental Regulation of Activities that Don’t “Substantially Affect Interstate Commerce”: Recognizing the Realities of the New Federalism, 22 Vt. ENVTL. L.J. 167, 199 (2004). The Kyoto Protocol was adopted in 1997 and entered into force in 2005. The protocol assigned binding carbon reduction targets and timeframes to “Annex I” industrialized nations, as well as general commitments for all signatory nations. Levin, supra note 11, at 543–44.

34 See supra note 11.
global treaty aimed at setting forest management standards.35 With between seventy and eighty percent of the world’s forests contained within the boundaries of federal systems, these deficiencies need to be addressed.

Recent scholarship has identified three elements of federal systems that facilitate the “global forest governance/decentralized forest policy” balance: (1) national constitutional primacy over both national and subnational forest policy; (2) national sharing of constitutional authority over forest policy with subnational governments; and (3) forest policy institutional enforcement capacity.36 After an introduction to these three elements in Section II.A, Sections II.B and II.C. detail how the United States and Canada each only maintain one element, establishing the basis for the suggested mechanisms for forging Fail-safe Federalism presented in this Article.

A. Elements of Federal Constitutional Orders that Best Balance Global Forest Governance and Decentralized Forest Policy-making

The first element, “[n]ational constitutional primacy” is the feature of a federal system whereby the national government maintains constitutional authority to guide national and subnational regulatory or management standards for a resource subject to an international treaty,37 such as forests included within a climate treaty. To be certain, this element should not supplant decentralized forest policy-making, which clearly provides many benefits, including: reduced central government bureaucracy, corruption, and political meddling; more efficient decision-making; better access to knowledge of local needs and constraints; increased information flow between local and central governments; and greater local cooperation and participation in governance.38 Achieving these benefits is clearly the driving purpose behind establishing a federal form of government in the first instance, and these results are important components of effective resource governance on local, national, and global scales. Nonetheless, given the increased recognition of the key role of forests in regulating global atmospheric carbon, national constitutional primacy gives the national government in a federal system the constitutional authority to course-correct a trend of “over-decentralization” of forest management

35 See Hudson, Federal Constitutions, supra note 2 (manuscript at 6–7) (noting that the U.S. federal system presents challenges to decentralized forest governance systems).
36 See generally id.
37 Id. (manuscript at 23).
38 Gregersen, supra note 4, at 27–28. These benefits track the recognized benefits of federalism generally: promoting economic growth; providing reciprocity in the enforcement of the law; safeguarding against the potential tyranny of centralized power; encouraging local citizen participation in governance; experimenting with new forms of governance; and providing administrative efficiency through greater shaping of law and policy to local conditions. Keith S. Rosem, Federalism in the Americas in Comparative Perspective, 26 U. MIAMI INTER-AM. L. REV. 1, 6–7 (1994).
policy, whereby disaggregated local and national forest policies worldwide fail to coordinate in a way that facilitates a holistic and consequential climate change response. As noted by scholars, “[d]ecentralization offers great opportunities for improved forest management, but also great challenges. It is far from being a final solution to the ills of the forest sector because significant possible disadvantages and dangers threaten its potential benefits.”

These disadvantages include interfering with the coordination and implementation of national policies, undermining national objectives with inconsistent local objectives, fostering environmentally unsustainable decision-making at local levels, losing non-commercial objectives of national forest policy, and facing pressure to extract forest resources for immediate local benefit to the detriment of long-term national and global goods and services.

National constitutional primacy allows the national government to “[i]dentify which national policies should override the preferences of decentralized bodies and establish clear rules for their enforcement at [the] national level” and to further “[e]stablish forest management minimum standards for decentralized institutions.”

It also helps facilitate Fail-safe Federalism by “strik[ing] a balance between centralized planning and minimum standards at the federal level and decentralized implementation, harnessing of local information and expertise, and other benefits at the subnational level.” This element arises directly out of the constitutional order of federal systems and is granted either explicitly by the federal constitution or declared jurisprudentially as flowing from some other national government power granted by the constitution.

The second element, national sharing of constitutional forest authority, is present in a federal system when the national government maintains constitutional primacy over forest policy (element 1) but seeks to achieve the most effective management on local scales by sharing forest policy decision-making authority with subnational governments. This element provides a mechanism for protecting against “over-centralization” of national forest policy. Indeed, a condition of successful forest governance in decentralized systems is “effective and balanced distribution of forest related responsibilities and authority among levels of government,” because “[c]ertain forest management decisions are better made at the subnational, or even local levels of government, while others may best be retained at a central level.”

Stated differently, national sharing of forest

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39 Gregersen, supra note 4, at 29.
40 Id. at 28.
41 Id. at 28–29.
42 Hudson, Federal Constitutions, supra note 2 (manuscript at 27).
43 Contreras-Hermosilla, supra note 10, at 7.
44 Id.
authority allows the national government to perform its fail-safe role by establishing “minimum standards” without giving rise to the myriad problems arising from a national government micromanaging forest policy decisions on local scales. This element is established as a political matter and typically arises when the national government uses its legislative authority to statutorily establish cooperative federalism arrangements with subnational governments. Under these arrangements, subnational governments maintain the general authority to formulate forest policy while receiving inputs from the national level when aggregated subnational policy fails to achieve some national objective crossing subnational jurisdictional boundaries, such as watershed and biodiversity protection or climate change mitigation.\footnote{Id.}

The third and final element, institutional enforcement capacity, is necessary for a rather obvious reason—without the ability to adequately enforce regulatory policy, even a national government that maintains constitutional authority to direct forest policy (element 1) and to share that authority with subnational governments (element 2) will ultimately be ineffectual. This element reflects the notion that “forest governance is strongly dependent on the institutional and political conditions of the government in general.”\footnote{Id. at 4.} Indeed, forest policy scholars note that “[c]losing the gap between law and on-ground outcomes is one of the main challenges in the forest sector . . . and so issues of enforcement and compliance are amongst the most important arenas of policy analysis.”\footnote{McDermott, supra note 13, at 21 (internal citation omitted).}

Many of the federal systems that maintain control over important forest resources—especially in the developing world—maintain both national constitutional primacy over subnational forest management (element 1) as well as a sharing of that authority with subnational governments (element 2). Nonetheless, these countries are plagued by unclear constitutional divisions of power between national and subnational governments, as well as between branches of the national government, a great degree of corruption in government, inadequate funding or political will for policy enforcement, and a variety of other institutional problems that result in direct negative effects on forest policy formulation and implementation. As demonstrated in Figure 1, Brazil, India, and Russia fall into this category.\footnote{Mark David Agrast et al., The World Justice Project Rule of Law Index 2011 47, 66, 90 (2011) [hereinafter World Justice Project], available at http://worldjusticeproject.org/sites/default/files/wjproli2011_0.pdf. Brazil, India, and Russia also each have a negative score on the...}
Australia, on the other hand, provides an example of a federal system that maintains all three elements: Australian courts have interpreted the constitution as allowing the federal government to trump what would otherwise be exclusive subnational authority whenever the federal government enters into an international treaty (element 1). In response, the Australian federal government has established legislative cooperative federalism arrangements to share that authority with subnational governments in the area of forest management—effectively tying its own hands to achieve the benefits of decentralized forest governance (element 2). Finally, Australia maintains sufficient institutional enforcement capacity (element 3).

As further discussed in Sections II.B and II.C, the United States and Canada only maintain one of these elements—institutional enforcement capacity—giving rise to the suggested fail-safe mechanisms presented in Part IV.

Environmental Regulatory Regimes Index. MCDERMOTT, supra note 13, at 43 fig.2.5. The Environmental Regulatory Regimes Index, which was developed by Yale and Columbia Universities, “integrates assessment of the stringency of the environmental pollution standards, the sophistication of regulatory structure, the quality of available environmental information, the extent of subsidization of natural resources, the strictness of enforcement, and the quality of environmental institutions.” Id. at 43–44.


50 See Hudson, Federal Constitutions, supra note 2 (manuscript at 34–39).

51 The World Justice Project Rule of Law Index rates Australia 9th (out of sixty-six countries assessed) for the absence of corruption and 7th (out of sixty-six countries assessed) for regulatory enforcement. WORLD JUSTICE PROJECT, supra note 48, at 42. Australia also has a positive score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. See MCDERMOTT, supra note 13, at 43 fig.2.5.
B. Status of Elements in the United States

The U.S. Constitution contains no explicit constitutional authority for either the federal government or the states to regulate the sixty-five percent of U.S. forests in either private or state ownership. As a result, subnational forest management regulation is a role reserved for the state governments under the Constitution, undertaken pursuant to state and local authority to regulate land use. State governments have long maintained the primary responsibility of regulating land use under their authority to exercise the “police power” to protect the “general welfare.” The Tenth Amendment, which reserves powers not constitutionally granted to the federal government for the states, places limits on Congress’s regulatory authority

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52 See Mugler v. Kansas, 123 U.S. 623, 646–47 (1887) (stating that under the Constitution a state may only restrain a use of private property through exercise of its police power, and determining that a proper exercise of a state’s police power is that which “is necessary and reasonable for guarding against the evil which injures or threatens the [general] welfare in the given case . . . .”).
“in traditional areas of state and local authority, such as land use.”53 and “[t]he weight of legal and political opinion holds that this allocation of power in [the United States] leaves the states in charge of regulating how private land is used.” JOHN R. NOLON ET AL., CASES AND MATERIALS ON LAND USE AND COMMUNITY DEVELOPMENT 17 (7th ed. 2008).


59 Gerald A. Rose et al., Forest Resources Decision-Making in the U.S., in THE POLITICS OF DECENTRALIZATION, supra note 4, at 238, 239; see also JAN G. LAITOS ET AL., NATURAL RESOURCES LAW 849 (2006) (“The laws related to timber management vary depending on whether it takes place on private, state, tribal, or federal lands . . . [s]tate timber laws regulate the forestry industry by requiring practices designed to minimize water pollution, soil erosion, and fire dangers, and by encouraging or requiring deforestation.”). Despite maintaining the regulatory authority to do so, most states do not place legally binding forest management standards upon private forest managers. As noted by scholars, “[a]lthough a few states have laws that regulate forest practices on private land, most rely upon voluntary best management practices and technical assistance.” Rose, supra, at 238 (emphasis added).

60 As discussed below in Section IV.A.2.i, however, cooperative federalism arrangements can be established in the opposite direction—that is, the federal government can entice the states, via
Even so, there are two means by which the U.S. federal government could attempt to exert constitutional authority over subnational forest management. First, Congress could attempt to pass domestic legislation asserting direct control over subnational forest management under one of its other enumerated powers, such as the Commerce Clause. To date, this route has not been taken by the federal government, and U.S. courts have not had an opportunity to assess the constitutionality of federal private forest legislation. Second, notwithstanding Commerce Clause authority, the United States might enter into a legally binding international treaty requiring Congress to pass implementing legislation mandating that certain forest management directives be carried out on subnationally-owned forests. In such a circumstance, would the federal government’s treaty power trump the states’ reserved power under the Tenth Amendment to regulate subnational forest management? Currently, U.S. constitutional law scholars are in heated disagreement as to whether the treaty power established in Article II of the Constitution may be constrained by constitutional federalism principles. In one camp are “new federalist[s]” who assert that recent U.S. Supreme Court decisions place federalism restraints on the United States’ ability to implement international treaties requiring the passage of congressional legislation that would be unconstitutional if enacted in the absence of a treaty, such as legislation intruding into regulatory areas traditionally reserved for the states under the Constitution. On the other side of the debate are

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61 U.S. Const. art. II, § 2, cl. 2.

62 For a thorough discussion of this disagreement and its implications, see Hudson, Climate Change, supra note 2, at Section III.A.

63 See Swaine, supra note 23, at 408 & n.15.

64 United States v. Morrison, 529 U.S. 598, 617–18 (2000) (invalidating a federal domestic violence statute on the grounds that it is not a proper exercise of the Commerce Clause, stating “[i]ndeed, we can think of no better example of the police power, which the Founders denied the National Government and reposed in the States, than the suppression of violent crime and the vindication of its victims”); Printz v. United States, 521 U.S. 898, 933 (1997) (holding federal statute that imposed obligation to perform background checks on prospective handgun purchases unconstitutional in accordance with traditional federalism principles); City of Boerne v. Flores, 521 U.S. 507, 511 (1997) (holding the Religious Freedom Restoration Act of 1993 exceeds Congress’ power); United States v. Lopez, 514 U.S. 549, 551 (1995) (holding that the Gun-Free Schools Zones Act of 1990 unconstitutional because gun possession in a school zone “neither regulates a commercial activity nor contains a requirement that the possession be connected in any way to interstate commerce”); New York v. United States, 505 U.S. 144, 187 (1992) (“[T]he Constitution protects us from our own best intentions: It divides power among sovereigns and among branches of government precisely so that we may resist the temptation to concentrate power in one locations as an expedient solution to the crisis of the day.”).

65 See Bradley, supra note 23, at 132 (“[T]he nationalist view . . . conflicts with the limited and enumerated powers structure of the Constitution.”); Bradley, supra note 3, at 394 (“[I]f federalism is to be the subject of judicial protection . . . there is no justification for giving the treaty power special
“nationalists,” who assert that domestic legislation implemented pursuant to an international treaty allows the national government to maintain regulatory authority even over matters traditionally regulated by state governments and that would otherwise be outside the scope of federal constitutional authority in the absence of a treaty.\footnote{See David M. Golove, Treaty-Making and the Nation: The Historical Foundations of the Nationalist Conception of the Treaty Power, 98 Mich. L. Rev. 1075, 1313–15 (2000) (concluding that the “text, structure, precedent, and history” of our “constitutional argument” lends “overwhelming support” for the nationalist view); see also Hollis, supra note 65, at 1330–31 (outlining the ideologies of the “nationalists,” and summarizing: “[n]ationalists thus reject the idea that federalism imposes subject matter limitations on the conclusion or implementation of treaties, even for subjects Congress could not otherwise regulate in the treaty’s absence”).} Ultimately, though the new federalist/nationalist debate is driven by divergent theories of constitutional interpretation, the issue is not settled largely due to the narrow fact pattern and unclear reasoning of the seminal U.S. Supreme Court case addressing the scope of the treaty power, \textit{Missouri v. Holland},\footnote{252 U.S. 416 (1920). \textit{Missouri v. Holland} has been described as “perhaps the most famous and most discussed case in the constitutional law of foreign affairs.” Louis Henkin, \textit{Foreign Affairs and the United States Constitution} 190 (2d ed. 1996).} decided in 1920. In \textit{Holland}, the Supreme Court ruled that Congress could pass implementing legislation (the Migratory Bird Treaty Act) pursuant to a treaty with Canada, despite a challenge by the state of Missouri that the Act was unconstitutional because it interfered with the states’ reserved powers under the Tenth Amendment.\footnote{Id. at 430–31.} Missouri argued that the statute was impermissible in part because states traditionally controlled the management of wildlife resources.\footnote{Id. at 430–31.} The Court’s ruling ultimately turned on the fact that the birds were migratory (crossing international boundaries) and that the important national interest could be adequately managed “only by national action in concert with that of another power.”\footnote{Id. at 435.}

The narrow fact pattern presented in \textit{Holland}, however, is arguably distinguishable from federal regulation of subnational forest management. Not only has subnational forest management traditionally been considered a land use activity subject to the exclusive regulatory authority of state
governments, similar to zoning standards, but unlike wildlife forests are owned by identifiable parties, are not a migratory resource, and are not “protected only by national action in concert with that of another power.” In fact, numerous constitutional scholars have argued that *Holland*, at the least, should be limited to its facts, is not in line with the nationalist view, and should be construed narrowly, and at the most, should be overruled.

Ultimately, under current understandings of U.S. constitutional law the federal government may be legally constrained from effectively entering into and implementing an international climate treaty that seeks a certain degree of control over forest management activities because nearly two-thirds of U.S. forests are subject to subnational regulatory authority. This presents a “legal” constraint because even if the national government politically chose to act, it would only take one private property owner or

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See Swaine, supra note 23, at 412 (“While Missouri v. Holland may survive for the foreseeable future, it will likely be read narrowly.”); see also Bradley, supra note 3, at 459 (observing that a brief filed by the Clinton administration gives support to the conclusion that the *Holland* decision would be read much more narrowly today); Fischer, supra note 33, at 181 (finding arguments that Missouri v. *Holland*’s holding is still good law unpersuasive in light of recent Supreme Court jurisprudence and the modern context of international law-making).

An example would be if the United States signed and ratified an international treaty requiring Congress to pass domestic legislation establishing nationwide forest management standards on publicly and privately owned forest lands. Such standards might take the form of maintenance of partial forest cover on forested lands (a prohibition on clear-cutting), implementation of soil erosion reduction programs, establishment of nationwide riparian buffer zones in forested watersheds, or limitation of fertilizer use. In fact, the Intergovernmental Panel on Climate Change has stated that international agreements on forests could ensure the implementation of

> [Forest management activities to increase stand-level forest carbon stocks[,] [which] include harvest systems that maintain partial forest cover, minimize losses of dead organic matter (including slash) or soil carbon by reducing soil erosion, and by avoiding slash burning and other high-emission activities. Planting after harvest or natural disturbances accelerates tree growth and reduces carbon losses relative to natural regeneration. Economic considerations are typically the main constraint, because retaining additional carbon on site delays revenues from harvest. The potential benefits of carbon sequestration can be diminished where increased use of fertilizer causes greater N2O emissions.


For a broader discussion on the tension between U.S. federalism and international law and treaty obligations, see Hudson, CLIMATE CHANGE, supra note 2, at 355–59.
one state government combined with the right mix of U.S. Supreme Court Justices to have national action blocked by a constitutional challenge. Furthermore, as described above, legal perception is often political reality in the United States, and the United States has invoked federalism limitations in past treaty negotiations on a number of subjects in an effort to avoid global agreements restricting traditional state regulatory authority.77 Without national constitutional primacy (element 1), and national sharing of forest policy authority (element 2), the only element of the global forest governance/decentralized forest policy balance that the U.S. maintains is institutional enforcement capacity (element 3).78

The United States is not the only federal system potentially constrained by subnational governments during international climate negotiations. Edward Swaine has noted that “[f]ederal states not infrequently seek broader concessions based on the political feasibility of national implementation, but the arguments that have had purchase are based on more genuine constitutional limits. Much the same may be said with respect to . . . outright refusals to participate based on federalism grounds.”79 Recent research suggests that Canada also maintains only one of the three elements that best facilitate the global forest governance/decentralized forest policy balance.80 As discussed in the next section, Canada’s federal government is more restricted by the provinces during global governance efforts than the U.S. federal government is by the states.

C. Status of Elements in Canada

Unlike the U.S. Constitution, the Canadian Constitution Act of 1867 explicitly allocates forest management regulatory authority between the federal government and the provinces.81 Section 92A delegates responsibility for non-federally owned forest regulation and overall management exclusively to the provincial governments.82 In other words, the Canadian Constitution does not allow concurrent jurisdiction over

77 See supra note 23.
78 The World Justice Project Rule of Law Index rates the U.S. 17th (out of sixty-six countries assessed) for the absence of corruption and 15th (out of sixty-six countries assessed) for regulatory enforcement. World Justice Project, supra note 48, at 103. The U.S. also has a positive score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. McDermott, supra note 13, at 43.
79 Swaine, supra note 23, at 445–46; see also Hollis, supra note 65, at 1327–1328 (discussing the dual nature of treaties as creatures subject to substantive and procedural rules of both international law and national law).
80 See generally, Hudson, Federal Constitutions, supra note 2.
82 Id. § 92A.
forests, as do the constitutions of many other federal systems. This explicit grant of authority has significant implications for Canada’s ability to both maintain a national forest policy, and to negotiate an international climate treaty that includes forests, because eighty-four percent of Canada’s forests are non-federally owned (seven percent are privately owned and seventy-seven percent are provincially owned). This is an even higher proportion of forests under subnational control than in the United States, where state governments are responsible for regulating the sixty percent of forests that are privately owned and the five percent of forests that are state-owned.

Passage of Section 92 of the Constitution Act of 1982 reinforced provincial authority over subnational forest management by declaring that provinces maintain exclusive control over property rights. Canadian courts have broadly construed this constitutional provision to include land use and natural resources management. These amendments to Canada’s Constitution place it “beyond dispute that the provinces are primarily responsible for forest management.” As a result, Canadian forest policy is “extremely decentralized,” with national authority over forests being “particularly weak.” Even the national government itself has come to eschew attempts to form a national policy on forest management, declaring that “[f]orest management is a matter of provincial jurisdiction. Each province and territory has its own set of legislation, policies and regulations to govern the management of its forests.” Indeed, the Canadian national government has consistently refused to apply national environmental laws, forest policies, or international forest management agreements to the provinces.

Despite explicit provincial constitutional authority over forest

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84 See generally Hudson, Federal Constitutions, supra note 2 (undertaking a comparative constitutional analysis of five federal systems: Australia, Brazil, Canada, India, and Russia).
85 Sustainable, supra note 26, at 4.
86 U.N. ENVIRONMENTAL PROGRAMME, GLOBAL ENVIRONMENTAL OUTLOOK 3, supra note 21, at 110.
88 Kibel, supra note 83, at 247.
89 DAVID R. BOYD, UNNATURAL LAW: RETHINKING CANADIAN ENVIRONMENTAL LAW AND POLICY 133 (2003). Under the Canadian Constitution, however, the federal government does retain the role of participating in international negotiations “related to the conservation and use of forests.” Id. at 132.
91 Kibel, supra note 83, at 246 (quoting CANADIAN FOREST SERV., THE STATE OF CANADA’S FORESTS 1993 8 (1994)).
92 Kibel, supra note 83, at 246.
management, Section 91 of the Canadian Constitution does grant the national government exclusive authority over “trade and commerce” as well as “peace, order, and good government.” The Canadian Supreme Court has construed this provision as including the implementation of treaties concerning trade and commerce and other matters of “national concern.” Certain climate change would seem to affect both commerce and trade in Canadian forest products, and it is clearly a matter of national and global concern. Yet, the Canadian national government has not attempted to invoke this constitutional power to justify the implementation of international climate and forest agreements, and “[t]he Canadian federal government has so far adopted the position that, under the Canadian Constitution, its hands are tied.” Indeed, scholars have noted that the “ambiguous nature of the federal role in . . . forest policy” formation has resulted in “a variety of idiosyncratic organizational” mechanisms geared toward greater federal input into Canadian forest policy, and “[t]he need for governments at both levels [to maintain] greater administrative capacity in order to better coordinate increasingly sophisticated policy regimes . . . [as is] evident in efforts made at the intergovernmental level to develop more effective forest policy structures.” This is especially so since Canada has been “aggressive” in signing on to various international treaties related to forest management, including climate change, even though “implementation remains the responsibility of the provinces.” As a result, scholars have recognized “the need for greater coordination of these increasingly sophisticated policy regimes” or Canada’s forest practices will continue to come under international scrutiny. Similarly, scholars have recognized that Canada must play a role in shaping international relations on forests by “vigorously participat[ing] and be[ing] proactive in international discussions.”

Despite the Canadian national government’s desire to act “aggressively” regarding international environmental agreements, the Canadian provinces’ exclusive control over direct forest management has in the past contributed to Canada’s lack of formal participation in a variety

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93 Id. at 248.
94 Id.
95 Id.
98 Id. at 37.
99 Steven Bernstein & Benjamin Cashore, The International-Domestic Nexus: The Effects of International Trade and Environmental Politics on the Canadian Forest Sector, in CANADIAN FOREST POLICY, supra note 96, at 65, 85.
of international agreements and has resulted in “constant tensions between the provinces and the federal government over sharing of power” over forests. It appears that the presence of explicit constitutional provisions regarding forests actually causes federalism to be far more of a problem in the forest context than in the context of other types of resource management, such as fisheries and agriculture. In those areas, the federal and provincial governments have resolved management conflicts with “cooperative federalism” arrangements, whereby political and fiscal pressures by the national government achieved provincial compliance with national policy—an approach that might better be called uncooperative federalism. These results have yet to be achieved regarding forest management, even though scholars have argued that similar avenues exist for greater federal involvement in non-federal forest policy.

Ultimately, the lack of national constitutional primacy (element 1) adversely impacts not only the Canadian federal government’s ability to formulate a national forest policy, but also the interplay between Canadian federalism and international agreements concerning forests, since the Canadian national government is constrained by provincially reserved powers in exercising its treaty power. Limitations on the Canadian treaty power became Canadian constitutional precedent in the Labor Conventions case, where the Privy Council established that the Canadian federal government does not have the authority to implement treaties via enacting legislation that interferes with matters constitutionally reserved to the provinces. In other words, “in Canada, the federal government lacks legislative competence to implement treaties whose subject matter falls within provincial jurisdiction”—a constitutional state of affairs similar to the situation in the United States, if not more problematic. The U.S. Supreme Court’s narrow ruling in Missouri v. Holland did not give such definitive treatment to the question of the relationship between the treaty power and federalism principles, and it remains to be seen whether the U.S. Congress has the power, pursuant to an international treaty, to intrude upon the regulatory role of the states over subnational forest policy.

100 Howlett, supra note 90, at 268.
101 Gregersen, supra note 4, at 37.
102 Kibel, supra note 83, at 250.
103 Id. at 249.
104 Bradley, supra note 3, at 456.
105 Canada (Att’y Gen.) v. Ontario (Att’y Gen.), [1937] 1 D.L.R. 673 (Can.).
106 Jeffrey L. Friesen, The Distribution of Treaty-Implementing Powers in Constitutional Federations: Thoughts on the American and Canadian Models, 94 COLUM. L. REV. 1415, 1416 (1994). This state of affairs arises from the Labor Conventions case where the Privy Council established that the Canadian federal government may not implement treaties via implementing legislation that intrudes into matters constitutionally reserved to the provinces. Canada (Att’y Gen.) v. Ontario (Att’y Gen.), [1937] 1 D.L.R. 673 (Can.).
The explicit constitutional grant of regulatory authority over forests to the provinces, coupled with the fact that Canadian courts have definitively declared the treaty power to be restricted by reserved provincial powers, makes it clear that Canada is currently even more restricted in international negotiations regarding forests than the United States. Indeed, “[w]hile the United States Constitution actually contemplates a system that values the importance of the nation’s being able to implement its treaties, the Canadian constitutional framework appears to subordinate international concerns to domestic separation of legislative competence.”\textsuperscript{108} Furthermore, and unlike U.S. courts, “Canadian courts have consistently extended rather than diminished provincial power.”\textsuperscript{109}

This review demonstrates that the Canadian national government, though maintaining institutional enforcement capacity (element 3) as a general matter,\textsuperscript{110} currently does not maintain constitutional primacy over forest management (element 1). As a result, the government necessarily cannot maintain any resulting national sharing of constitutional forest policy authority (element 2). Thus, subnational constitutional primacy over forests, combined with the vast subnational ownership of forests, constrains the national government from utilizing certain forms of global forest governance to address climate change—a constraint equal to, if not greater than, that placed on the U.S. federal government by the states.

Ultimately, the U.S. and Canadian federal systems’ lack of the necessary elements required to fully balance global governance of forests with effective decentralized forest policy must be addressed. Mechanisms for doing so are discussed in Part IV. First, however, Part III explains that even though the U.S. and Canadian brands of federalism impact global governance of forests in similar ways, their respective subnationally-established domestic forest policy frameworks are quite different—a difference driven largely by the fact that subnational governments own a vast majority of forests in Canada, whereas private property owners maintain control over a majority of forests in the United States. These differences, combined with the distinct constitutional structure of each country in the context of forest policy, give rise to contrasting recommended approaches in Part IV for forging Fail-safe Federalism in the event that subnational governments do not address the increasing threats to domestic forests and the international community seeks to aggressively

\textsuperscript{108} Friesen, supra note 106, at 1433.
\textsuperscript{109} Id. at 1439. Additionally, “proposed constitutional amendments, particularly since 1982, have uniformly sought to vest more power in the provinces at the expense of the central government.” Id.
\textsuperscript{110} The World Justice Project Rule of Law Index rates Canada 11th (out of sixty-six countries assessed) for the absence of corruption and 13th (out of sixty-six countries assessed) for regulatory enforcement. World Justice Project, supra note 48, at 108, 110. Canada also has a positive score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. McDermott, supra note 13, at 43 fig.2.5.
harness domestic forestry to combat climate change via a legally binding international treaty.

III. U.S. AND CANADIAN DOMESTIC FOREST GOVERNANCE: DIVERGENT APPROACHES, DISPARATE IMPLICATIONS FOR FAIL-SAFE FEDERALISM

Both the U.S. and Canadian national governments are constrained by subnational governments from entering into certain types of legally binding treaties aimed at harnessing the capacity of forests to regulate climate change. Even so, each country’s domestic forest governance structure gives rise to important differences, which should be analyzed to provide a vector for the most appropriate constitutional methods of forging national-level fail-safes for forest management.

As demonstrated in this Part, the main driver of these differences is the fact that a vast majority of Canada’s forests are provincially owned (seventy-seven percent)—in stark contrast to the sixty percent of U.S. forests that are privately owned.111 As a result, Canada’s subnational governments tend to maintain forest management standards that are both more consistent across the nation and more rigorous in setting minimum standards for a variety of forest management policies. The provinces also seem to respond more readily to external demands for heightened forest management standards, such as those raised by environmental, scientific, or other members of civil society, than do U.S. state governments. This is likely due to the fact that a government will more readily respond to the demands of civil society regarding the management of its own lands than the management of private lands. In addition, the provincial electorate’s constituent members have no legally vested private property rights in public forestlands. Rather, their interests are likely to be focused on the benefits that forests can provide the subnational government’s citizenry as a whole. In the United States, on the other hand, where sixty percent of forests are privately owned, a higher proportion of civil society is made up of the very private forest owners who would be regulated, and who are, therefore, more resistant to government interference. Ultimately, provincial governments are simply freer to adjust the management of their own policies in response to the electorate’s demands than are state governments in the United States. As explained below, it is true that the provinces may face countervailing pressure from the forest industry, but provincial interaction with the “one face” of this relatively unified industry is a different matter altogether from U.S. state governments, who interact with innumerable private property owners, any one of whom may constitutionally challenge regulatory action as infringing on private property rights.

111 CAN. COUNSEL OF FOREST MINISTERS, supra note 26, at 4.
Despite the more responsive nature of provincial forest management, however, it remains that the Canadian federal government is more constitutionally restricted from asserting any measure of authority over forest management than is the U.S. federal government. 112 This state of affairs creates a curious scenario in Canada, where—from a strictly domestic perspective—constitutional prescriptive (and even sometimes cooperative) national involvement in forest policy is exceedingly difficult to achieve, but it may also be less necessary from an environmental protection standpoint. Canadian subnational domestic forest policy, at least from a statutory point of view, is simply more rigorous and of a higher quality across the board than that of U.S. subnational governments. This assertion is made from a strictly domestic perspective, because if the international community seeks robust mechanisms to utilize forests as carbon sinks to regulate carbon via a legally binding treaty, then a “good” Canadian forest policy today may not be viewed as “good” tomorrow. In other words, Canadian forests may currently be subject to strong, fundamental forest management standards such as protecting riparian watersheds, limiting clear-cut sizes, or regulating the number and extent of roads built during foresting operations, but if the goal is to keep fewer trees from hitting the ground, then the Canadian national government remains limited in institutional capacity to formulate such a policy consistent with the needs and requirements of the global community. Correspondingly, while U.S. subnational forest standards may not be as robust, the U.S. Constitution appears to allow more opportunity for the U.S. federal government to achieve inputs into subnational policy, whether those inputs are prescriptive or cooperative in nature. So an understanding of U.S. and Canadian domestic forest policies provides insights into the most appropriate methods of forging Fail-safe Federalism to facilitate global climate governance related to forests, discussed in Part IV.

A. Framework for Assessing U.S. and Canadian Domestic Forest Policies

In the first comprehensive study of its kind, McDermott et al. provided a framework for assessing and comparing the domestic forest policies of governments around the globe, 113 identifying four “styles” of forest policy regulation. The first is “procedural voluntary,” which, as the name suggests, encourages the voluntary development of forest management processes or plans, but does not require such plans to be developed. 114 These are contrasted with “procedural mandatory” rules, which require the

112 See infra notes 250–264 and accompanying text.
113 McDERMOTT, supra note 13, at 7–11 (discussing frameworks for comparative forest policy analysis).
114 Id. at 10.
development of forest management plans or procedures, much as the National Environmental Policy Act (NEPA) requires environmental assessment reports for agency projects.\textsuperscript{115} Third are “substantive voluntary” policies, where specific forest practice guidelines exist, but they are not binding on forest managers.\textsuperscript{116} Finally “substantive prescriptive” rules “refer[] to mandatory, on-the-ground requirements or restrictions, such as a rule that no timber harvest may occur within x metres of a river of y width.”\textsuperscript{117} Substantive prescriptive rules are, of course, enforceable at law.

McDermott et al. assessed domestic forest governance policies to determine which of these “styles” of forest policy regulation different governments maintain regarding five types of environmental protection for forests. For each type of protection, the authors assigned an “indicator” used to classify the policy approach as one of the above “styles” of regulation. The types of protection and associated indicators are as follows:

1) Protection of riparian zones in forested watersheds\textit{(indicator: riparian streamside buffer zone rules)}

2) Protection from environmental damage caused by roads\textit{(indicator: rules for culvert size at stream crossings and road decommissioning)}

3) Protection from clearcutting damage\textit{(indicator: clearcut size limits or other relevant cutting rules)}

4) Reforestation\textit{(indicator: requirements for reforestation, including specified time frames and stocking levels)}

5) Limitations on annual allowable cut\textit{(indicator: cut limits based on sustained yield)}\textsuperscript{118}

In addition to these five metrics, a variety of additional environmental protection metrics can be assessed to determine whether forests are managed sustainably. The most holistic forest management approaches take into account metrics beyond those that maximize timber harvest and may include the protection of biodiversity, species habitat, ecosystems,

\textsuperscript{115} Id.
\textsuperscript{116} Id.
\textsuperscript{117} Id.
\textsuperscript{118} Id. at 15–19.
genetic resources, and recreational and cultural values, as well as the provision of water purification, flood prevention, and air quality regulation services. The five metrics used by McDermott et al., however, are fundamental and reflect a baseline upon which good silvicultural practices may build and expand.

Protecting riparian zones in forested watersheds prevents erosion that might otherwise take timberland out of production, prevents siltation of waterways that can lead to eutrophication, provides wildlife corridors, regulates water temperatures, protects aquatic habitat, and provides a variety of other benefits. Road building is “one of the ‘main causes of the environmental degradation of most forest regions.’” Roads degrade forests because they provide greater access for resource extraction (or over-extraction), cause erosion that damages watersheds, and fragment forested landscapes and habitat. As a result, decommissioning roads or limiting their location or extent is an important sustainable forest management objective. Clearcutting practices can also be highly damaging to the environment and are “perhaps the most controversial forest harvesting practices”—criticized by ecologists, civil society, and forest market scholars alike. Clearcutting is effectively a complete removal and replacement of the forest. Though subsequent reforestation normally occurs, the removal of so much stored carbon, as well as the carbon sequestering potential of larger trees, has serious consequences for regulating greenhouse gases—not to mention the complete destruction of a variety of other ecological processes and habitats. Finally, reforestation and annual allowable cut policies are aimed at ensuring that no more of the resource is being harvested than is sustainable.

As can be seen in the McDermott et al. table, “Summary of jurisdictional approaches to all five forest practice criteria,” there are dramatic differences between the “styles” of riparian zone,
road, clearcut, reforestation, and annual allowable cut forest policies applied by the Canadian provinces and those applied by the U.S. states. The chart reflects the styles of “mandatory substantive” in black, “mandatory procedural” in gray, where the two types of mandatory are both used in some capacity, the chart depicts “mandatory mixed” in grid form. Both styles of voluntary are represented by horizontal lines, while the “no policy” category is blank (white). Different governments are ranked based on an average of the “style” utilized for each of the five indicators, with mandatory approaches landing governments nearer to “10” on the scale (with mandatory substantive the most stringent) and voluntary or no policy landing governments nearer to “0.”

The Canadian provinces of Alberta, British Columbia, and New Brunswick, the U.S. state of California, and the U.S. Forest Service (which manages federally owned forests) each score a “9” on the scale, maintaining very high forest policy standards. The Canadian provinces of Ontario and Quebec and the U.S. state of Washington score a high “8” on the scale. The U.S. state of Oregon scores a “7” while Idaho scores a “5,” and Alaska scores a “4.” Lowest on the scale are the states of Montana with a “2.5,” Louisiana and Virginia with a “2,” and the rest of the southeastern United States—Alabama, Arkansas, Georgia, Mississippi, North Carolina, South Carolina, and Texas with a score of “1.” To put the southeastern U.S. states’ legal standards for forest policy in perspective, consider that developing countries average a “6.7” on the scale while nine southeastern U.S. states average a “1.2,” maintaining entirely voluntary “guidelines” or no standards at all.

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127 Id. The chart misidentifies “mandatory substantive” as “mandatory prescriptive” in the key.
128 McDermott, supra note 13, at 327 tbl.10.7.
129 Id.
130 Id.
131 Id.
132 To be clear, “it cannot be assumed that regions with higher levels of regulation are actually performing better than those with lesser levels.” Id. at 350. A lack of institutional enforcement capacity and other issues of implementation may render forest standards on paper far less efficacious than voluntary standards in countries with better management practices on the ground. See id. at 10 (discussing four styles of forest policy regulation: procedural voluntary, procedural mandatory, substantive voluntary, and substantive prescriptive). Yet, maintaining legal standards on paper within countries that respect the rule of law and do maintain institutional enforcement capacity remains important, as it provides some environmentally sound standards to which citizens can legally hold the government and their fellow citizenry accountable, even if other voluntary programs or cooperative arrangements are made to achieve better compliance and to take advantage of boots on the ground. See id. at 342 (noting that there is a “demand for prescriptive regulations to ensure high environmental performance from forest managers” around the world).
As these rankings indicate, Canadian provinces maintain far higher and more consistent standards across the board than do U.S. states. While some U.S. states maintain high forest management standards, others, particularly in the Southeast, maintain no enforceable standards at all.  

133 Id. at 327 tbl.10.7. These lax standards have implications for other resources beyond forests and fail to facilitate the protection of forest habitat critical to species protection. Indeed, there is a sharp contrast between the regulatory standards for forests in the Southeast and the high amount of...
The implications of these lax standards in the southeastern United States for domestic forest health are profound and provide just one of the many compelling justifications for forging Fail-safe Federalism, not only to facilitate the international community’s efforts to utilize forests to mitigate the effects of climate change, but also for the benefit of domestic forests.

For example, the U.S. Forest Service’s Southern Forests Futures Project (Futures Project)\(^\text{134}\) highlighted in dramatic fashion the pressure that southeastern U.S. forests will face over the next fifty years. The project specifically focused on four factors that would “define the South’s future forests.”\(^\text{135}\) These factors include: population growth, climate change,\(^\text{136}\) timber markets, and invasive species.\(^\text{137}\) In particular, “[u]rbanization is forecasted to result in forest losses, increased carbon emissions, and stress to other forest resources.”\(^\text{138}\) Conversion of forests to urban and other land uses is also expected to degrade a variety of water ecosystem services, including flood control and water filtration—even to the point of threatening public health.\(^\text{139}\) Population growth in the Southeast would “result[]” in declines in forest cover, increases in demand for ecosystem service[s], and restrictions that complicate the ability to biodiversity in the region. *Id.* at 90. Alabama, for example—the state that “[a]voids] environmental problems through voluntary application of preventative techniques,” *id.* at 82—also happens to have the third highest number of listed threatened or endangered species under the ESA of any state in the U.S., only trailing Hawaii and California, U.S. FISH AND WILDLIFE SERVICE, SPECIES REPORTS, http://ecos.fws.gov/tessa_public/pub/stateListingAndOccurrence.jsp (last updated October 17, 2011); see also McDERMOTT, supra note 13, at 94 fig.3.5 (showing number of endangered and threatened animal species in Canadian provinces and U.S. states).

\(^{134}\)Wear, supra note 24, at 4. The report studied thirteen states, including: Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, Mississippi, Arkansas, Louisiana, Oklahoma and Texas. *Id.* at 4 fig.1.

\(^{135}\)Id.

\(^{136}\)Average annual temperatures are expected to increase in the region 2.5 to 3.5 degrees Celsius by 2060. *Id.* at 27.

\(^{137}\)Id. at 4.

\(^{138}\)Id. Since the 1970s total forest area has been stable, but this stability is a result of agricultural lands being reforested at the same rate that urbanization has reduced forest cover. *Id.* at 15. While urbanization is expected to increase at even higher rates, conversion of agricultural lands to forests is not expected to continue. *Id.* at 31.

\(^{139}\)The report notes that:

Strong population growth and associated urbanization has increased demand for water and challenged water availability in several areas . . . . Conversion of forests to urban and other land uses has resulted in a loss of natural buffering, increasing water pollution loads, elevating peak flows, and reducing base flows in affected watersheds. The consequences are more frequent and more severe flooding, lower stream flows during drought conditions, and water quality that is degraded—sometimes to the point of threatening public health. . . . [T]he link between conversion of forest land to urban uses and degraded water quality in affected watersheds is well accepted.

Wear, supra note 24, at 24.
manage forests for the full spectrum of uses.140 Both population and economic growth have increased at higher rates in the Southeast than anywhere else in the United States, “with the resulting urbanization steadily consuming forests and other rural lands.”141 The Futures Project estimates that thirty to forty-three million acres of southern land will succumb to urban development by 2060, with total forest losses projected to be as high as twenty-three million acres, or approximately thirteen percent of all forestland in the south142—an amount equal to nearly all the forest acreage in the states of Georgia or Alabama.143 The negative impacts of these forecasts go beyond pure environmental concerns, as the timber production sector in the South contributed more than one million jobs and fifty-one billion dollars in employee compensation in 2009.144 Indeed, “southern forests are the most intensively managed forests in the U.S.,”145 and a majority of the United States’ lumber is harvested from southern forests.146 Remarkably, “since 1986, if the South were compared with any other country, none would produce more timber than this one region of the United States.”147

As noted above, in the context of climate change, urbanization of the south is expected to have direct negative impacts on the carbon storage capacity of southern forests.148 The amount of carbon fixed in southern forests and their soils is projected to reach a maximum in 2020,149 and then decline by as much as five percent by 2060.150 This “potential decline in carbon storage would be a challenge for carbon mitigation policies, presenting a dynamic baseline where a first order policy objective would be to stabilize rather than expand forest carbon stocks.”151 In other words, even if climate change mitigation policies related to forest management could be enacted by subnational governments, they would not only be unable to sequester additional amounts of carbon to combat climate

140 Id. at 26 fig.2. From 1970 to 2010, population in the South grew by eighty-eight percent, and disposable personal income more than doubled. Id. at 6. Further, from 1990 to 2008, population in the South grew at a rate approximately one-third faster than the nation as a whole. Id. at 71. These pressures do not appear to show any sign of letting up. Population in the South is expected to grow yet another forty to sixty percent from 2010 to 2060. Id. at 12–13.
141 Id. at 5.
142 Id. at 35.
143 Id. at 31.
144 Id. at 17.
145 Id. at 29.
146 Id. at 5.
147 Id. at 17.
148 Id. at 34.
149 Id.
150 Id.
152 Wear, supra note 24, at 34 (emphasis added).
change, but it would be exceedingly difficult to prevent forest carbon stocks from dropping even further. Furthermore, given the completely voluntary nature of most southern forest management standards—standards that should be completely fundamental to good forestry practices—it is hard to imagine prescriptive climate mitigation policies even being put into place by southeastern states in the near future, much less being successful. The success of such policies would be undermined because countervailing land use policies facilitating rapid urbanization are also widespread.\(^{152}\)

The low forest management standards found in southeastern states arise directly out of the current lack of national constitutional authority to coordinate subnational forest policy, in conjunction with the southeastern United States’ governance philosophy regarding forests and land use and the high amount of forests privately owned in the Southeast. Alabama’s perspective on voluntary “best management practices” is emblematic of this governance philosophy.\(^{153}\) As McDermott et al. have recently highlighted, the Alabama Forestry Commission declares that it is the “lead agency for forestry in Alabama” but that it is “not an environmental regulatory or enforcement agency” and that it “[avoids] environmental problems through voluntary application of preventative techniques.”\(^{154}\) Yet when given the choice between preserving a forest, or managing it for the full range of ecological values, and cutting it down in the name of economic development and urbanization, voluntary choices do not lead to “preventative techniques” that benefit forests, as evidenced by rapid urban sprawl in the southeastern United States and the Forest Service’s projected loss of up to thirteen percent of the region’s forests over the next fifty years.\(^{155}\) Even so, most administrative agencies in the region operate similarly, as “[t]he implementation of BMPs [Best Management Practices] . . . generally involves agencies not directly responsible for environmental regulation.”\(^{156}\)

In short, the case of southeastern U.S. forest policy demonstrates the dramatic differences between U.S. and Canadian domestic legal standards for forest management, as well as the implications for failing to achieve greater federal inputs into subnational forest policy via Fail-safe Federalism. The next section provides hypotheses aimed at explaining the differences between U.S. and Canadian forest policy, providing a foundation for Part IV’s exploration of how the nuances in federal structure and forest ownership in the United States and Canada give rise to

\(^{152}\) Hudson, supra note 29 (manuscript at 29).

\(^{153}\) McDERMOTT, supra note 13, at 82.

\(^{154}\) Id.

\(^{155}\) Wear, supra note 24, at 35.

\(^{156}\) McDERMOTT, supra note 13, at 82.
different suggested mechanisms for forging Fail-safe Federalism that strengthens not only domestic forest policy but also the ability of the international community to effectively utilize binding treaties to combat climate change.

B. Explaining the United States-Canada Forest Policy Gap: Private vs. Public Forest Ownership

Ultimately, the gap between Canadian provincial forest policy—the uniformity of which somewhat approximates a national forest policy (though one driven solely by subnational interests)—and the widely divergent forest policies of the U.S. states is in large part explained by the respective splits in forest ownership in the two countries. As described below, in Canada the vast majority of forests are provincially owned, which facilitates greater uniformity, stringency, and adaptability of Canadian provincial forest policy. In contrast, the majority private ownership of U.S. forests thwarts uniformity across, as well as stringency and adaptability among, U.S. states. A variety of domestic governance nuances arise out of the private versus public forest ownership split in the United States and Canada, driving distinctions in subnational forest policy in the respective nations. For example, the nature of forest industry leaseholds in Canada is a key driver of the uniformity across provincial jurisdictions. In addition, a more stable regulatory environment in Canada, as well as a public forest management “spillover effect” in the western United States not seen in eastern states, each feed into the stringency of subnational forest policy in the two countries, as well as into the adaptability of subnational governments to respond to needed changes in forest policy.

1. A Formula for Uniformity: The Canadian Private-Industry/Provincial Interface as Quasi-corporatist Negotiations

The relative uniformity of high forest policy standards across subnational governments in Canada is a result of a fairly basic formula—a handful of provincial governments are negotiating with a relatively uniform industrial base for the management and extraction of forest resources. The Canadian forest sector is governed by eleven major provincial jurisdictions and historically has been Canada’s largest industry and employer.\(^\text{157}\) Due to seventy-seven percent of Canadian forests being owned by the provinces, scholars describe the current Canadian forest policy regime as one of “public forest management for private timber harvesting.”\(^\text{158}\) The Canadian provinces allocate harvesting rights on

\(^{157}\) Howlett, supra note 96, at 3.

\(^{158}\) Id. at 8.
government-owned forests through large-scale, long-term licenses.\textsuperscript{159} These licenses require the development of management plans that “align with strategic regional land use plans overseen by the province.”\textsuperscript{160}

Even though Canadian forest policy is extremely decentralized with complete, independent control maintained by each province, similar management challenges in the forest sector have led to “simultaneous legislative and regulatory responses across the country,”\textsuperscript{161} a result of the corresponding uniformity and small number of forest owners controlling a vast majority of forests (the eleven provinces), as well as the uniformity of the industrial profession operating on provincially owned forests. Forest industry professionals, though spread across various jurisdictions, “brought with them similar approaches to and ideas about appropriate solutions to common forest policy problems.”\textsuperscript{162} Consequently, there is a measure of continuity and a resulting institutional inertia for both the regulator/owner of the forests and the parties being regulated/using the forests, leading to a “tendency towards enacting similar policies in different jurisdictions.”\textsuperscript{163} These similar policies have led to “extensive management responsibilities” and “increasingly intensive government regulation of company harvesting practices” to both ensure timber supply and protect other environmental values of forests.\textsuperscript{164} Because of the intertwined nature of the regulator and the regulated, the process by which forest policy is formulated in Canada is typically one of private negotiation in a “quasi-corporatist” style, whereby the government readily establishes prescriptions for forest management, but with input from the regulated industry.\textsuperscript{165} Though this negotiative process might give rise to concerns of a type of institutionalized agency capture, and though some have been critical of the industry’s maintenance of “a strong bargaining position,”\textsuperscript{166} vast government ownership of forests actually gives the provinces “a special place over and above the usual roles available to a legitimate government”\textsuperscript{167} in directing forest policy standards in the face of industrial inputs.

The symbiotic relationship between the Canadian provinces and the forest industry also relieves provincial administrative burdens by providing a direct line of technical and professional forest management expertise.\textsuperscript{168} Indeed, as administration of forest policies has become increasingly

\begin{itemize}
  \item \textsuperscript{159} McDermott, supra note 13, at 76.
  \item \textsuperscript{160} Id.
  \item \textsuperscript{161} Howlett, supra note 97, at 30.
  \item \textsuperscript{162} Id.
  \item \textsuperscript{163} Id.
  \item \textsuperscript{164} Id. at 31.
  \item \textsuperscript{165} Id. at 32.
  \item \textsuperscript{166} Id. at 33, 43.
  \item \textsuperscript{167} Id. at 32–33.
  \item \textsuperscript{168} Id. at 33.
\end{itemize}
burdensome, the provincial governments have moved toward including basic forest management standards in the terms of timber licenses, which has caused “a gradual shift of responsibilities from overworked provincial forestry services to large corporations with their own professional forest staff.”  Though this does give rise to concerns about the monitoring of licensees to ensure compliance, at the very least the standards are in place. In addition, in recent years academics and consultants acceptable to environmental groups have become integrated into forest policy design committees, whereas in the past only industry and the provinces were represented at the negotiating table. Furthermore, where once “carrot[s]” were the preferred mechanism for attempts at achieving compliance, increased use of fines and stronger mechanisms of enforcement demonstrate that “the regulatory ‘stick’ has been wielded more frequently.”

Though the quasi-corporatist nature of the Canadian forest policy framework certainly leaves much to be desired regarding the protection of the full suite of forest resources and ecosystem services—especially the carbon sequestration value of forests—at a minimum it has helped forge fundamental, fairly uniform, and legally enforceable forest management standards across the Canadian provinces. This scenario is very much unlike the situation in the United States, where major industrial players are largely not negotiating with the government regarding the extraction of the government’s own resources (except, of course, on federal and state-owned forestlands). Rather, those industries and a vast array of non-industrial private forest owners are managing their own private lands, oftentimes without any inputs from governments hesitant to place restrictions on

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169 Id. at 42–43.
170 Id. at 43.
171 Id. at 50.
172 Id.
173 Scholars argue that “[t]he industrial-governmental interests constitute the principal promoters and users of Crown lands, and their dual goal is to extract as much fibre from the forest as possible while viewing other forest uses as mere constraints on extraction.” Jamie Lawson et al., ‘Perpetual Revenues and the Delights of the Primitive’: Change, Continuity, and Forest Policy Regimes in Ontario, in CANADIAN FOREST POLICY, supra note 96, at 279, 281. In other words, a focus on timber production detracts from standards protecting the full value of forests in the form of biodiversity, ecosystem services, recreational, and—most important for climate negotiations—carbon sequestration values. Rather, these robust standards are the very basics of responsible timber harvesting. Climate change regulation is perhaps the quintessential ecosystem service provided by forests, and the facilitation of this service would require perhaps the strictest forest management standard of all to be implemented on at least some portion of a nation’s forests—that timber simply not be harvested at all on, at least, some lands. Others have noted that Canadian forest companies benefit a great deal from the international trade in their products, they have been reluctant to commit to tough environmental standards posed internationally and Canada as a whole has been “as protective of its own sovereignty as are developing countries when it comes to binding commitments at home.” Bernstein, supra note 99, at 74.
private property rights. Thus, each state government in the United States manages, or fails to manage, forest practices in their own way—setting the stage for a tragedy of the commons in the forest policy arena, as state governments maximize their own citizens’ use of forest resources in their jurisdictions to the detriment of a forest base defined more broadly by national boundaries and that takes into account the value of forests across and beyond subnational boundaries.174 The large number of private property owners hamstrings the formulation of higher forest management standards, while the forest policy disparity across U.S. state jurisdictions makes anything resembling a national forest policy simply non-existent. As a result, it is also important to understand the nuances of the public-private forest ownership divide in Canada and the United States that give rise to different levels of stringency and adaptability among subnational governments in the two countries.

2. A Formula for Stringency and Adaptability: Greater Public Forest Ownership Leads to a More Stable Regulatory Environment and a Public Forest Policy “Spillover Effect” on Private Lands

McDermott et al. found a stark difference in the stringency of policy prescriptions on public forestlands versus private forestlands, not only in the United States and Canada, but among all of the developed countries reviewed. Indeed, whether forests are publicly or privately owned is a strong predictor of policy prescriptiveness, especially in North America, where “private property rights, including the requirement to compensate forest owners once a regulation has been deemed by the courts to infringe upon such rights, make it much more difficult for governments to regulate private rather than public forests.”175 Thus there is a marked difference in the stringency of forest policy on public versus private forestlands in Canadian provinces and U.S. states, though these differences are of far less consequence in Canada given the small amount of privately-owned forests.176 Correspondingly, when governments own most of the forest resource base, as in Canada, they are more likely to adapt to pressure to increase the stringency of forest policy standards, as “[g]overnments in developed countries respond to pressure from environmental activists and the community for high forest management standards by developing high levels of policy prescriptiveness, and high performance thresholds, for

175 McDERMOTT, supra note 13, at 346.
176 Similar to the United States, Canadian forest scholars note that “[b]oth legal and political considerations have discouraged provincial governments from aggressively regulating private forest lands.” Peter Clancy, Atlantic Canada: The Politics of Private and Public Forestry, in CANADIAN FOREST POLICY, supra note 96, at 205, 207.
Indeed, given the provincial status as what is effectively a “landlord” over forest resources, “provincial governments can set the terms for access to Crown forest resources, impose more onerous restrictions on harvesting activities, and use more intrusive policy instruments for regulation than would be tolerated if private forest lands were involved”—a situation very different than in the United States, where private property owners control sixty percent of forests and where there is a wide range of variability in subnational forest management policies. Nonetheless, McDermott et al. noted that even subnational governments with voluntary BMPs in the southeastern United States maintain monitoring procedures on state-owned forestlands that are well developed and “subject to greater scrutiny and perhaps higher performance expectations” than are private forests, which, of course, need no monitoring since there are no procedural or substantive requirements with which to comply. As described below, this public-private divide has many nuances, two of which play a role in explaining the stringency and adaptability gap in subnational forest management standards between the United States and Canada—a more stable regulatory environment in Canada and the public forest management “spillover effect.”

i. More stable regulatory environment in Canada

In the United States, the vast array of forest owners combined with fifty different state governments regulating (or not regulating) forests creates a very volatile regulatory environment, whereas Canada’s regulatory environment is far more stable. Provincial ownership of Canadian forests establishes continuity and stability regarding both the owner of forest resources and the primary regulated entity, the commercial forest industry in this case. As demonstrated in Section III.B.1’s discussion of Canada’s quasi-corporatist negotiations, it seems easier to construct and maintain similar regulatory approaches across subnational governments when there are relatively few forest owners (eleven provinces) and relatively few major industrial forest players. This is quite a contrast to the United States, where private ownership not only makes crafting regulatory standards more difficult due to constitutional concerns (such as Takings claims), but also makes it harder to establish consistent,

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177 McDermott, supra note 13, at 346. An example arose in the United States in the context of biodiversity protection, but directly implicated forests—the case of the Northern Spotted Owl in the states of Washington and Oregon. After the ESA was utilized to protect the owl in the early 1990’s, timber harvest on private lands remained relatively steady, whereas harvest on public lands dropped precipitously. Id. at 92–93, 93 fig.3.4. The government was more willing to respond with regulatory standard setting, was also more willing to enforce those standards on its own property than on private property, and was therefore able to adjust course more readily.
178 Howlett, supra note 97, at 33.
179 McDermott, supra note 13, at 110–11.
responsive forest policies due to volatility in forest ownership.

In the southeastern United States, large commercial interests have rapidly divested their holdings over the last few years, resulting in smaller private forest properties that are “subject to new dynamic forces that encourage parcelization and fragmentation.” Commercial forest owner divestiture of forestland between 1998 and 2010 is “the most substantial transition in forest ownership of the last century,” as industry divested itself of nearly three-quarters of its forest holdings. Much of the land has ended up in the hands of real estate investment trusts, which not only represent a voting block whose interests are diametrically opposed to high forest management/preservation standards, but whose ownership also only exacerbates the concerns regarding urbanization and reduction of forest cover over the next fifty years. Indeed, the Southern Forest Futures Project highlighted the truism that “[p]rivate owners continue to control forest futures” in the southeastern United States.

If then, as in Canada, large commercial forest interests negotiating with governments owning forest resources generally leads to higher and more consistent forest management standards across a nation—due to economies of scale in industry expertise and interactions with government regulators—then increased fragmentation of ownership in the United States may result in further negative consequences for forest management practices in general, not to mention forest loss by urbanization and land development activities. Indeed, eighty-six percent of southern forests are privately owned, and while sixty percent of privately owned forests are 100 acres or more, fifty-nine percent of all private forest owners own less than nine acres of forestland. Family forest holdings in the region average only twenty-nine acres in size. The result is a large number of individuals who may choose to act “rationally” regarding the appropriation of forest resources, maximizing personal gain to the detriment of the subnational, national, and global resource base—either through poor forest management practices or through replacement of forest resources with human-made capital in the form of urbanization.

Ultimately, the Canadian provinces have a far more stable regulatory environment within which to operate than do U.S. states, facilitated by more continuity in both the entities owning most of the forest resource base as well as with regard to the actors being regulated. As a result, the

180 Wear, supra note 24, at 58.
181 Id. at 60, 62.
182 Id. at 60.
183 Id. at 4–5.
184 See supra notes 157–74 and accompanying text.
185 Wear, supra note 24, at 62.
186 Id.
government may more readily adopt heightened and adaptable forest management standards applicable to the “known quantity” that is the Canadian forest industry. Even so, and as next described, public ownership of forests in the United States is not without effect, as it can actually help “ratchet up” forest management standards on private lands, providing further insights into the difficulty of crafting any discernible national forest policy in the United States via subnational government volition alone.188

ii. Southeast to Northwest Disparity Among U.S. States:
Public Forest Management Spillover Effect

Notably, McDermott et al. also found that a forest management “spillover” effect may occur whereby heightened standards on public lands can lead to higher regulatory standards on nearby private lands. This could be one factor explaining why more prescriptive forest regulations exist in western states in the United States—even on private forestlands—since there are far more public forests in the West than in the East.189 For example, California, Washington, Oregon, Idaho, and Alaska maintain an average sixty-seven percent of forests in public ownership190 and also maintain far more stringent forest policy standards for both public and private forests (a “6.7” average) than do states in the southeastern United States (a “1.2” average), where eighty-six percent of forests are privately owned.191 In other words, “[w]here there are substantial public and private lands within a given jurisdiction, greater regulation of public lands may, over time, result in increased pressures from civil society and environmental groups for greater regulation on private lands.”192

In fact, the United States Forest Service’s “9” score on the forest policy ranking does seem to have spilled over into western forest policy in a way not seen in the Southeast—perhaps no surprise since ninety-two percent of federally owned land is located in the western United States whereas less than five percent is located in the South.193 Though this spillover effect is important and can improve forest policy standards on private lands in states with large public forest holdings, its implications for U.S. subnational forest policy only provides another example of the arguable need for national level inputs into that policy. The southeastern

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188 See McDermott, supra note 13, at 346–47 (discussing hypotheses that may account for differences in public and private forestland regulation and why and how higher prescriptions on private lands emerge).
189 Id. at 346.
190 See id. at 80 tbl.3.3.
191 Wear, supra note 24, at 58. The eighty-six percent of forests in the South that are privately owned account for almost the entire amount of timber harvested in the south. Id.
192 McDermott, supra note 13, at 347.
193 Wear, supra note 24, at 71.
United States simply does not maintain the critical mass of publicly owned forests that would help facilitate a spillover effect, as again, eighty-six percent of forests are privately owned. Though other factors, such as overall governance culture and the limited administrative capacity of southeastern governments, may also contribute to the region's lax standards, it seems that the lack of a spillover effect further exacerbates continuation of the status quo.

Indeed, in a federal system of government without a national forest policy, a rise in standards in one area of the country is not without consequence for resource management in other areas. For example, heightened regulatory standards for forest management policies on U.S. federal lands in recent decades reduced timber harvests in western states while shifting demand to southern forests,

no doubt in part due to a spillover effect of public standards on private forestlands near federal forests. Timber production in the South, where federal forests are virtually non-existent, increased from forty percent of the national total in 1952 to almost sixty percent in 1996. This again reflects how policy change may be more readily achieved for forests owned by the government than when the government must regulate private property owners to achieve those same results.

To be clear, this is not to say that enhanced regulatory standards on public lands or those “spilling over” onto private lands necessarily means less timber production in those jurisdictions. Indeed, a race-to-the-bottom may partially explain the shift to southeastern forests as forest interests likely moved to an area that imposed fewer monetary and regulatory costs on forest operations. In this way, sudden changes in publically owned forest policy can not only spill over to private forestlands in the form of heightened forest management standards, but can also shift resource extraction to another area of the country with less stringent standards. It is certainly true that this market shift to southeastern forests resulted in increased economic growth and prosperity for the region—a region in need of jobs and increased revenues. Even so, the region remains one with some of the weakest forest management standards in the United States, and indeed in the world. It also, not coincidentally, is the region projected to experience potentially precipitous drops in forest cover over the next fifty years due to that same push toward economic growth and development.

In the end, this spillover effect demonstrates an increased likelihood of higher forest policy standards wherever the public forests are—and public forests are decidedly in short supply in the most intensively managed part of the United States, the southeastern United States.

194 Id. at 5.
195 Id. at 17.
196 See supra note 24.
Ultimately, the public-private forest divide in the United States and Canada affects the stringency and adaptability of subnational forest policy in the two countries, due primarily to: (1) governments being able to set more stringent standards on their own lands; (2) governments adapting more readily to pressure from civil society; and (3) a more stable regulatory environment and the public forest “spillover effect.” In addition, the quasi-corporatist nature of Canadian forest policy gives rise to greater uniformity across subnational jurisdictions. These distinctions in uniformity, stringency, and adaptability of subnational forest policy in the United States and Canada contribute to Part IV’s different suggested mechanisms for forging Fail-safe Federalism in the two countries.  

In addition, remaining constitutional nuances provide insights into suggested mechanisms for forging Fail-safe Federalism. Part II already discussed a variety of constitutional nuances distinguishing the United States and Canada from each other on forest policy and indicating that Canadian forest policy is even more stringently decentralized than is U.S. forest policy. In other words, the United States has more powers at the federal level that it simply has yet to utilize to test whether it could gain greater inputs into subnational forest policy. Another nuance remains, however, once again arising out of the public-private forest ownership divide. Though public forest ownership in Canada may give rise to greater levels of uniformity, stringency, and adaptability of forest policy across subnational governments, these public forests are almost entirely provincially owned. In contrast, while private forest owners do own a majority of forests in the United States, the U.S. federal government retains control over a much larger proportion of forests, thirty percent, than does the Canadian federal government. The push toward “ecosystem management” in the 1980s and 1990s demonstrates how federalism even affects different nations’ abilities to manage their respective public forests. At least theoretically, ecosystem management takes into account a variety of natural resource protection measures when considering forest management standards, including protection of a far wider array of forest services than those provided by timber harvest alone. For the thirty percent of forests managed by the U.S. Forest Service, ecosystem management was implemented fairly quickly because civil society utilized the ESA, judicially enforceable at the federal level, as a hammer for changing forest policy on public lands. They did so during the spotted owl controversy of the early 1990s that led to dramatic shifts in forest policy on federal lands. Due to the constitutional limitations on federal power discussed in earlier sections of this Article, however, Canada does not have a corollary to the ESA, and therefore maintains no judicially enforceable statutory standard at the federal level requiring the protection of species on public forests. Howlet, supra note 97, at 47. Indeed, “the procedural rights of environmentalists [in Canada] still pale in comparison to their U.S. counterparts. Environmentalists south of the border can directly appeal administrative decisions, and when they go to court, they have far more formidable tools to bring to bear” than do Canadian environmentalists. 

George Hoberg, The British Columbia Forest Practices Code: Formalization and Its Effects, in CANADIAN FOREST POLICY, supra note 96, at 348, 362. So even though “ecosystem management” has gained a “prominent place in new legislation, policy statements, and planning manuals” in Canada, these decisions arise solely out of provincial initiative, rather than because of some external coordinating authority at the federal level. Jeremy Wilson, Talking the Talk and Walking the Walk: Reflections on the Early Influence of Ecosystem Management Ideas, in CANADIAN FOREST POLICY, supra note 96, at 94, 94. So ultimately, though this section has focused primarily on nuances of subnational forest management in the United States and Canada, U.S. citizens’ ability to harness procedural rights arising out of greater constitutional authority for the U.S. federal government provides an important insight into the types of Fail-safe Federalism that might be most effectively employed in the United States versus Canada.
C. Implications of the Private-Public Forest Ownership Divide for Suggested Mechanisms of Fail-safe Federalism

The United States and Canada are in very different positions with respect to fundamental forest management policies at the domestic level—such as those related to riparian buffer zones in forested watersheds, forestland roads, clearcutting, reforestation, and annual allowable cut limits. Canadian provinces maintain high legal standards for these types of policies on the vast majority of Canada’s forests. The vast public ownership of Canadian forests gives rise to a great degree of uniformity across provincial forest policies as well as more stringent standards and the ability to adapt to newly recognized mechanisms for achieving sustainable forest management. U.S. states, on the other hand, maintain a wide range of legal standards for forest management, from high standards in some states to standards less stringent than those in developing countries in southeastern states.

Though the United States and Canada are in different positions domestically, they face a similar challenge internationally, as their constitutional structures do not currently allow significant or direct, national-level regulatory inputs into domestic forest policy on a majority of the forestland within their borders. More specifically, these nations’ federal governments would be limited from participating in any forest preservation/carbon sequestration mandates arising out of international efforts to harness the power of forests to combat climate change. For example, if an international treaty were to require the United States to curb the projected destruction of twenty-three million acres, or approximately thirteen percent, of all forestland in the South over the next fifty years, or require Canada to halt the destruction of over eleven million acres of boreal forest during the same time period, then these countries’ national governments would be unable to ensure compliance. It would be up to individual states and provinces to preserve those forestlands. Yet these subnational governments face incentives diametrically opposed to preserving their forests in the form of urbanization driven by economic development and growth.

As a result, the U.S. and Canadian national governments need to work with subnational governments to develop fail-safes for their particular forms of federalism that trigger in the absence of subnational climate policies related to forests, if they are to effectively participate in the full suite of options available to the international community to effectively address climate change. In Canada, such fail-safes are needed mostly to allow the Canadian national government greater flexibility in participating in international negotiations related to climate change and forests, though clearly the national government may also need to develop inputs into domestic forest policy to curb projected losses of provincial forests due to urban sprawl and agricultural growth. The United States, on the other
hand, needs a fail-safe not only to allow greater flexibility in international negotiations, but perhaps more fundamentally to improve the overall quality of the highly variable and often inadequate domestic subnational forest management standards in the United States. So the United States’ need for a federal fail-safe operates on both the domestic and international planes.

Based upon the above review, however, different mechanisms for developing federal fail-safes may be more appropriate as between the two countries. The vast public forest ownership in Canada, the far more limited constitutional power at the federal level, and the resulting limitations on civil society’s procedural rights at the federal level render a federal fail-safe in Canada far more likely to arise out of transnational pressures from civil society, discussed in Section IV.D. Correspondingly, the greater constitutional powers afforded the United States federal government as a general matter and the greater amount of forests in federal ownership in the United States make forging Fail-safe Federalism out of constitutionally validated top-down and bilateral mechanisms, or by horizontal arrangements among the states, far more efficacious, as discussed in Sections IV.A.–C.

IV. FORGING FAIL-SAFE FEDERALISM BY FORTIFYING KEYSTONE CONSTITUTIONS

A variety of mechanisms are available to the U.S. and Canadian governments for adjusting their respective constitutional structures to allow a national government fail-safe in the event subnational governments fail to act on forests and climate change. These mechanisms are aimed at

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198 See supra note 197 and accompanying text.
199 Id.
200 A point of clarification should be made regarding the suggested mechanisms of forging Fail-safe Federalism discussed in this Part. Specifically regarding the United States, the analysis of these mechanisms is undertaken in the context of a recently developed theory of “Bimodal Federalism.” See Blake Hudson, Reconstituting Land-Use Federalism to Address Transitory and Perpetual Disasters: The Bimodal Federalism Framework, 2011 BYU L. REV. (forthcoming 2012) (manuscript at 31). There is currently a disconnect in the scholarly literature about how U.S. federalism in fact operates or should normatively operate regarding certain regulatory subject matter and how it actually operates regarding other subject matter. This disconnect is illustrated by the two different modes of federalism in operation in the United States today: “dynamic federalism” and “dual federalism.” Theories of dual federalism posit that “the states and federal government inhabit[] mutually exclusive spheres of power.” Kirsten H. Engel, Harnessing the Benefits of Dynamic Federalism in Environmental Law, 56 EMORY L.J. 159, 175 (2006). On the other hand, theories of dynamic federalism “reject[] any conception of federalism that separates federal and state authority under the dualist notion that the states need a sphere of authority protected from the influence of the federal government” and posits that “federal and state governments function as alternative centers of power and any matter is presumptively within the authority of both the federal and the state governments.” Id. at 176 (emphasis added). Yet, neither of these theories alone provides an accurate descriptive picture of the actual operation of U.S. federalism today. While dynamic federalism might be the status quo on many
fortifying the “keystone constitutions” guiding these federal systems. All federal systems maintain written constitutions from which the legal authority to govern emanates. These constitutions provide governance stability on many levels, and “stability is protected in many nations, especially those with federal structures, by a special status for the constitution that makes it of a higher order than other laws and subject to more rigid rules for change than any statute. A constitution should not be easy to change . . . .”

Even though the difficulty of amending constitutions is important for providing stability in the social construct of governance, when stability becomes rigidity in the face of a changing environment and the resultant changing needs of society, reassessment of constitutional structure is warranted. This is especially the case when society also depends upon the stability of non-social constructs for its success, such as the “natural” construct of a stable environment—stability that is the antithesis of an abruptly changing climate. In this way, keystone constitutions in federal governments lie at the very center of an arch of resource governance. In this arch, one can conceptualize one column as subnational resource governance and the other column as global resource governance. National regulatory subject matters, remnants of dual federalism remain. Direct land use regulatory authority, including private forest management, is one such remnant, as the federal and state governments do operate as if there are separate spheres of governance. As a result, the federal government is perceived as having no constitutional authority to direct subnational land use planning. To the extent that remnant dualist notions remain in the United States the remainder of this Article assesses which types of legislative mechanisms most readily provide viable policy responses, including an assessment of the constitutional viability of those responses. In doing so, it borrows arguably relic-like terminology of previous theories of federalism such as “top-down,” “bilateral,” and “horizontal.” These terms must be utilized because regarding subject matter where dualist notions remain, like subnational forest management, there may be no top-down federal regulatory approach available, leading to the need to explore other approaches. Consistent with dynamic federalism theory, however, these mechanisms may be operating simultaneously at all levels of governance. The dynamic-dual federalism debate is a moot point in the context of Canadian forestry because dual federalist notions are explicitly delineated in the Canadian Constitution. In other words, whereas the arguable scope of U.S. Commerce Clause authority facilitates a dual versus dynamic federalism debate for subnational forest management, the explicit constitutional grant of authority over subnational forest policy to the provinces in Canada makes dual federalism the unequivocal constitutional status quo. So the discussions of top-down, bilateral, and horizontal in this Part are especially warranted in the Canadian context.

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201 See generally Hudson, supra note 29.
202 See Martin Edelman, Written Constitutions, Democracy and Judicial Interpretation: The Hobgoblin of Judicial Activism, 68 ALB. L. REV. 585, 587 (2005) (discussing the importance of a constitution for the purposes of regulating the state and laying the framework for governmental power).
204 This reassessment of constitutional structure focuses on the institutional capacity of a government to formulate policy, separate and apart from considerations of political will, and occurs within a new theoretical framework of policy success first presented in Hudson, Federal Constitutions, supra note 2 (manuscript at 59).
205 Hudson, supra note 29, at 3 fig.1.
resource governance is at the top of the arch. The constitution in federal systems acts as a keystone in this arch, providing the governance framework that dictates the rules for resource management on both the subnational and global levels. If these keystone constitutions allow national level inputs into resource management on subnational scales, which in turn allows unfettered national involvement in resource management on global scales, then they maintain a strong arch of resource governance, the integrity of which is stable and adequately addresses resource management across scales. If keystone constitutions do not allow national level inputs into subnational resource management, and consequently allow subnational governments to constrain national involvement in global resource governance—as with forest management in the United States and Canada—then they contribute to a weak and vulnerable arch of resource governance that is likely to crumble due to the legal entrenchment of a resource commons not only within national boundaries but also internationally.\footnote{Id. at 6.}

As a result, fortification of the U.S. and Canadian constitutional structures is needed in the context of forestry and climate change. As discussed in Section A, some of the mechanisms for doing so arise directly out of national or subnational initiative and utilize existing constitutional processes. Other mechanisms, as discussed in Section B, arise from pressures civil society places on governments to take action. Certain of these mechanisms are more viable in the United States than in Canada, and vice versa—a circumstance driven largely by the earlier explored differences in domestic constitutional structure and the split of forest ownership in the two countries.

A. Fortification From Within: Top-Down, Bilateral, and Horizontal Governance

1. Top-down

The first mechanism for forging Fail-safe Federalism is a “top-down” approach, whereby the national government in a federal system attempts to use its current constitutional powers to gain legal inputs into subnational forest policy.\footnote{The structure of Section IV.A, as well as related concepts of top-down, bilateral, and horizontal approaches to adjusting the federal state balance of constitutional federalism, was presented in Hudson, supra note 200, at 28–29, though that analysis focused only on the U.S. Constitution and was within the context of land use planning related to disaster prevention and mitigation rather than forestry.} The top-down approach would either require a direct amendment to a country’s constitution allowing the national government constitutional authority, or it would necessitate expanded judicial
interpretation of current constitutional provisions granting the national government such authority.

i. Constitutional Amendment

A variety of scholars have assessed both the need for, and the effectiveness of, amending the U.S. Constitution to either provide citizens a fundamental constitutional right to environmental protection or to allow the federal government to constitutionally regulate the environment with greater scope than it currently employs. Far less has been written about the viability of amending the Canadian Constitution, primarily for two reasons, discussed in greater detail below. First, Canada’s ability to amend its own constitution only recently became a reality, as Great Britain granted exclusive amendment rights to the Canadian government only thirty years ago. One consequence is that Canada’s procedures for amending its constitution are arguably unsettled, with some scholars raising doubts about their efficacy. Second, and related to the amending procedures themselves, amending the Canadian Constitution in a way that ensures provincial adherence is exceedingly difficult and is so unlikely in areas of explicit constitutional grants of exclusive provincial regulatory authority that scholars have simply ignored the question in the forest management context. Ultimately, for the reasons discussed below, this mechanism of forging a fail-safe on forest policy is not the most viable in either the United States or Canada.

There have been over ten thousand proposed amendments to the United States Constitution, and only a few have passed—no doubt due to

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211 See Richard B. Bernstein & Jerome Agel, Amending America: If We Love the Constitution So Much, Why Do We Keep Trying to Change It? 169 (1993) (discussing the likelihood of an amendment to the United States Constitution being ratified); John R. Vile, Encyclopedia of Constitutional Amendments, Proposed Amendments, and Amending
the difficulties of passing an amendment via the Article V process. J.B. Ruhl has provided an analytical tool for assessing the efficacy and desirability of amending the U.S. Constitution with an “environmental quality amendment” (EQA). The calls for such an amendment have been on the rise in recent decades. Proposed EQAs tend to be aspirational and generalized, as Ruhl describes, including 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.”

Ruhl developed a matrix to assess the viability of proposed constitutional amendments along two axes: a function axis and a target axis. The function axis describes the institutional purpose of the amendment, such as whether it: (1) alters the operational rules of government; (2) prohibits specified government action; (3) creates or affirms individual rights; or (4) expresses aspirational goals. The target axis describes the societal interaction adjusted by the functional change, such as: (1) intra- and intergovernmental relations; (2) relations between the government and its citizens; or (3) relations between citizens. EQAs tend to fall into a category that no existing amendment to the Constitution does—that of an amendment establishing aspirational goals (function 4) for citizen-citizen relations (target 3). Ruhl believes the Constitution is not meant to include these types of aspirational dictates largely because they must necessarily be drafted either ambiguously or so narrowly as to make implementation nearly impossible.

The amendment that would allow U.S. federal government inputs into subnational forest policy, however, would fall into a category far more likely to be efficacious according to Ruhl’s matrix, assuming it could be passed in the first instance. Such an amendment might simply declare: “The federal government of the United States maintains the authority to regulate the management of the nation’s forest resources; federally-owned, ISSUES, 1789–1995, xi, 363–80 (1996) (collating proposals by year); Ruth B. Ginsburg, On Amending the Constitution: A Plea for Patience, 12 U. ARK. LITTLE ROCK L.J. 677, 679 (1990).

212 An amendment must be proposed by either two-thirds of both houses or two-thirds of state governments and ratified by three-quarters of state governments. U.S. CONST. art. V.

213 Id. note 208, at 248–49.

214 Id. at 248.

215 Id. at 253.

216 Id.

217 Ruhl states that “any EQA attempting to capture a normative statement about the environment and plug it into the United States Constitution is simply a bad idea.” Id. at 252. 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.

218 The same would also be true for an amendment that sought to allow federal involvement in land use policy-making generally.
state-owned, and privately-owned.” This amendment would function to alter the operational rules of government (function 1) in order to adjust the target of intergovernmental relations (target 1). In fact, nine amendments currently fall under this category of the matrix. 219 If United States federal and subnational governments one day agreed to change the operational rules of government and the current status of intergovernmental relations by rebalancing federal-state roles in regulating forest management via amendment, it would fall into the category described by Ruhl as far more likely to be viable than aspirational/citizen-citizen relation amendments. Furthermore, though the legislative process is preferable to constitutional amendment a vast majority of the time, lest the constitution become diluted and take the form of a legislative instrument, society may be unable to achieve some policies in the absence of an amendment. 220 Ruhl argues 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. . . . Some 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. 221

There is arguably an institutional barrier to certain federal regulatory inputs into subnational forest policy—a barrier in the form of current understandings of U.S. constitutional law. Furthermore, the absence of responsible state government management of forest resources, as illustrated by the current lack of management standards for the highly threatened forests of the southeastern United States, confirms that an amendment remedying exclusive state regulatory authority over subnational forest policy could be a last resort to overcoming that barrier with the most effective social policy.

Other scholars have also argued for constitutional amendments that

219 Ruhl, supra note 208, at 261 fig.1.
220 Id. at 270–71.
221 Id. at 271.
rebalance the relationship between the U.S. federal government and the states to allow greater federal inputs into environmental policy-making in the absence of state action. These types of amendments would be “purely structural,” unlike a substantive constitutional amendment providing a fundamental right to a clean and healthy environment, and would simply “empower[] Congress to legislate regarding the environment” if it chose to do so. In other words, nothing would compel the federal government to legislate pursuant to its authority nor would any new fundamental constitutional rights be created for U.S. citizens.

The likelihood of an amendment being effective, however, is a different question from whether such an amendment is likely to be passed in the first place. The U.S. Congress has never attempted to harness current constitutional powers to address subnational forest policy, much less placed a constitutional amendment on its agenda. So even though this type of structural amendment may be of the kind most likely to be workable if enacted, and remains an option that should certainly continue to be studied, it remains perhaps the least viable mechanism for forging Fail-safe Federalism in the United States on forest policy—especially given the difficulty of convincing three-quarters of the states to ratify an amendment that intrudes on state regulatory powers and given that any kind of “constitutional environmental amendment is unlikely in the current political climate . . . .”

A similar state of affairs exists in Canada. The Canadian Constitution has only been amended ten times since Canada officially received the power to amend its own constitution from the British in 1982—and most of the amendments that have been passed are province-specific. Though Canada has a formal amendment procedure, it was not unanimously agreed to by the provinces—Quebec voiced resistance to its legitimacy.

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222 See, e.g., Craig, supra note 208, at 11018. 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.

223 Gildor, supra note 208, at 823.

224 Craig, supra note 208, at 11018.

225 The Supreme Court of Canada held in the Patriation Reference case that the Canadian federal government could gain exclusive authority to amend the Canadian Constitution, though it could only do so with a “substantial degree” of provincial support. The federal government was able to do so in December of 1981. Kevin Sneesby, National Separation: Canada in Context-Legal Perspective, 53 LA. L. REV. 1357, 1366 (1993).

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

227 Constitution Act, 1982, pt. V, being Schedule B to the Canada Act, 1982, c .11 (U.K.) (requiring different procedures for different types of amendments, such as those relating to the composition of the Supreme Court of Canada or that are province specific).

228 Choudhry, supra note 210, at 222.
In fact, the rules governing constitutional amendment in Canada have been described by at least one scholar as a “failure.”\textsuperscript{229} Fears regarding the perceived illegitimacy of these amending procedures have caused courts to actually ignore their interpretation, and even their existence, on some constitutional questions\textsuperscript{230}—lending evidence regarding not only the difficulty of amending the Canadian Constitution but also the legitimacy of such amendments in their own right.

Even if the amending procedures are accepted as legitimate, it is exceedingly difficult to pass an amendment that effectively binds the provinces, once again demonstrating the far more robust constitutional decentralization presented by the Canadian brand of federalism relative to that in the United States. The amending procedure that would be relevant to a forest policy amendment would require two-thirds of the provinces, including at least fifty percent of the population, to approve the amendment.\textsuperscript{231} Once passed, however, provinces may opt out merely by passing a resolution opposing the amendment within one year.\textsuperscript{232} In addition, an amendment fails altogether if the amendment procedures are not finalized within three years of the beginning of the process.\textsuperscript{233} Some have criticized this lengthy time limit as allowing ever-shifting changes in political will, increasing opposition, and election-driven changes in the provinces’ political make-up to lead to amendment failures.\textsuperscript{234} Indeed, the failure of one such amendment in the late 1980s was “particularly distressing” because at the time the proposed amendment died it “had the support of resolutions of the House of Commons and of eight provincial legislatures representing approximately ninety-four percent of the national population. That an amendment could fail in such a situation, with such widespread support from popularly elected legislatures, does suggest a problem with the amending formula.”\textsuperscript{235}

Ultimately, the questions surrounding the soundness of Canada’s amending procedures, coupled with the fact that provinces can simply opt out of any amendment that sought greater federal involvement in subnational forest policy, renders this mechanism for forging Fail-safe Federalism unpromising. In addition, the political trend in Canada regarding constitutional amendment has trended in the opposite direction from granting greater federal power, as “proposed constitutional amendments, particularly since 1982, have uniformly sought to vest more
power in the provinces at the expense of the central government.” 236 Not only would it be politically difficult to persuade the provinces to divest their current, explicit constitutional authority over forest policy on eighty-four percent of Canada’s forests, but it would, potentially, also be legally insufficient if some provinces opted out. This legal insufficiency would fail to change the status quo regarding the Canadian federal government’s inability to ensure that international obligations related to subnational forest management are met. An amendment, however, is not the only top-down mechanism available to the United States or Canada. Current constitutional provisions may provide the respective federal governments authority over subnational forest policy that they have not yet claimed or that has not yet been validated by courts interpreting their respective constitutions.

ii. Constitutional Interpretation

A more viable mechanism for top-down forging of Fail-safe Federalism on forest policy, at least in the United States, is expanded interpretation of current constitutional provisions. While the United States currently maintains constitutional provisions that may be well-suited for allowing federal inputs into subnational forest policy, Canada’s options are not only more limited, but as discussed above, the explicit constitutional grant of forest policy-making authority to the provinces makes expanded constitutional interpretation of federal powers virtually unattainable.

In the United States, the Commerce Clause is the primary constitutional provision pursuant to which most environmental legislation is passed. 237 The United States Congress could certainly pass a “Carbon Sequestration and Forest Management Act” that tests the waters of judicial interpretation regarding the scope of Congress’ authority under the Commerce Clause and that establishes mechanisms for utilizing forests to sequester carbon to combat climate change. To that end, the act could establish a variety of forest management standards, such as restrictions on clearcutting, afforestation and reforestation requirements, annual allowable cut, and stand density requirements, among a variety of other standards. If such an act were found constitutional, then the federal government would no longer be constrained by subnational governments in international negotiations related to climate and forests. Even though private forest management has long been the constitutional purview of state governments, there is a distinct possibility that such an act would be found constitutional as part of the federal government’s suite of Commerce Clause powers. The interstate markets into which timber resources directly

236 Friesen, supra note 106, at 1439.
237 Nicholas A. Robinson, Environmental Regulation of Real Property § 3.02(1) (2011).
flow are quite robust. As noted above, timber production in the South alone, which happens to be the region containing the highest proportion of private forestland subject predominantly to state jurisdiction, contributed more than one million jobs and $51 billion of employee compensation in 2009.\textsuperscript{238} Southeastern forests are “the most intensively managed forests in the United States,”\textsuperscript{239} and a majority of the United States’ lumber is harvested from southeastern forests.\textsuperscript{240} Furthermore, eighty-nine percent of U.S. timber is harvested from private lands\textsuperscript{241} subject to state governments’ land use regulatory authority. In other natural resource contexts, private lands may be reached by federal regulation of resources appropriated in a way that has substantial effects on interstate commerce. A variety of federal statutes regulating natural resources have been upheld under this test,\textsuperscript{242} including the Endangered Species Act—held valid even for the regulation of entirely intrastate species with arguably tenuous connections to interstate commerce.\textsuperscript{243} How much more so, then, might a robust industry like the timber industry be found to substantially affect interstate commerce? Unlike endangered species, after all, timber is a commodity that is exchanged on the open market.

Recent research establishes a unified theory for assessing the validity of Congressional authority to regulate the environment, utilizing commons analysis to do so.\textsuperscript{244} Commons analysis demonstrates that the federal government maintains constitutional authority to regulate two categories of

\begin{footnotesize}
\begin{enumerate}
\item Wear, supra note 24, at 17.
\item Id. at 29.
\item Id. at 5.
\item Rancho Viejo v. Norton, 334 F.3d 1158, 1158 (D.C. Cir. 2003) (Sentelle, J., dissenting); id. at 1160 (Roberts, J., dissenting).
\item Blake Hudson, Commerce in the Commons: A Unified Theory of Natural Capital Regulation Under the Commerce Clause, 35 HARV. ENVTL. L. REV. 375, 379 (2011).
\end{enumerate}
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environmental resources that have substantial effects on interstate commerce: “(1) natural resources contained on land (wetlands, endangered species, or other natural capital) that are appropriated by economic development (retail, housing, industrial, agricultural, etc.), and (2) resources appropriated by individuals and tied to an interstate market (wheat, marijuana, or other natural capital commodities).”

Timber commodities clearly fall into this latter category. Though it seems clear that timber production on private lands can be constitutionally regulated by the federal government under this second category, federal preservation of forests threatened by urbanization—such as the forests in the Southeast—may even be constitutionally viable under the first category. Any time commercial development replaces forest resources, there is an appropriator of the resource tied to interstate markets (the developer) and a resource that is being appropriated (the forest). These are the constituent components of a commons, and it is the act of “appropriation” by the developer of the forest resource that substantially affects interstate commerce and that gives the federal government constitutional authority over resource management.

Either way, if the federal government sought input into subnational forest policy pursuant to its Commerce Clause power, there are strong arguments that it may do so—either to provide standards for timber production or to preserve forests and their corresponding carbon sequestration/climate change mitigation values in the face of threatening urbanization. This mechanism is not without complication, however. While subnational forest management may more readily be considered to have a substantial effect on interstate commerce than, say, endangered species protection, it also falls more squarely within the category of a direct land use activity traditionally regulated by state and local governments. This is because regulation of endangered species may only indirectly impact land use activities otherwise subject to state regulatory authority. As a result, passage of federal private forest legislation is more difficult as a political matter, especially given the current political climate. The federal government may perceive that it is just as limited in enacting private forest legislation as it would be setting growth boundaries around major U.S. cities, a zoning-driven mechanism of land use regulation currently the responsibility of the states. Therefore, “legal perception becomes political reality,” as the government politically views its hands as tied due to perceived legal constraints. In addition, such an act, even if passed, would be subject to other legal protections afforded to

245 Id. at 382.
246 See id. at 423–27 (providing a “clear framework within which to analyze the ‘object’ of natural capital regulation”).
247 Hudson & Weinthal, supra note 2, at 392.
private forest owners, such as the Fifth Amendment Takings Clause.\footnote{248} Even so, it certainly seems that regulation requiring a minimum level of carbon density on forested lands could be crafted to avoid such constitutional complications and could further be structured to maintain the benefits provided by decentralized forest governance. Ultimately, the constitutionality of federal subnational forest management legislation has yet to be tested by the U.S. Congress or within U.S. courts—despite the fact that there are good arguments supporting its legitimacy.\footnote{249} As a result, a top-down, expanded constitutional interpretation mechanism may be a viable option for forging Fail-safe Federalism on subnational forestlands in the United States.

Canada, on the other hand, maintains a far less firm foundation of federal constitutional authority upon which to potentially expand. As noted, while the Canadian Constitution grants exclusive regulatory authority over forest management to the provinces, Section 91 of the Canadian Constitution allows the national government exclusive regulatory authority over “trade and commerce” and residually over “peace, order and good government” (POGG). The Canadian Supreme Court has construed these provisions as including the implementation of treaties concerning trade and commerce and other matters of “national concern.”\footnote{250} As asserted in Section II.C, it would seem that climate change would affect both trade and commerce in Canadian forest products, and it is certainly a matter of national and global concern. The Canadian national government, however, has not yet invoked these constitutional powers to justify the implementation of international climate and forest agreements.\footnote{251}

Scholars have debated the efficacy of utilizing the trade and commerce and POGG clauses to allow greater federal inputs into provincial

\footnote{248} U.S. CONST. amend. V, cl. 4 (“[N]or shall private property be taken for public use, without just compensation.”).

\footnote{249} See generally Hudson, supra note 244, at 430.

\footnote{250} Kibel, supra note 83, at 248.

\footnote{251} It is true that exclusive federal power in the areas of trade, commerce, and taxation has “limited the thrust of provincial constitutional supremacy in many resource matters,” especially given the great number of natural resources that enter interprovincial or international markets. Howlett, supra note 97, at 39. This was noted above with regard to agriculture and fisheries. See supra Section II.C. Even though forest products certainly enter into those same markets, they remain separate and apart from these other natural resources—due primarily to the explicit nature of the constitutional forest mandates—and the federal government’s use of constitutional powers in the forest context has largely been limited to mitigating forest management impacts on fisheries or agriculture. Howlett, supra note 97, at 40. For example, the forest practice standards along the British Columbia coast have been governed by the British Columbia Coastal Fisheries Forestry Guidelines, which “were established in a classic bargaining process between the federal Department of Fisheries and Oceans, the B.C. Ministry of Forests, the B.C. Ministry of Environment, and the industry trade group, the Council on Forest Industries.” Hoberg, supra note 197, at 354. These guidelines established standards for maximum cut and watershed buffer zones in coastal forested areas, though they were non-binding. See id. (discussing specifications in the British Columbia Coastal Fisheries Forestry Guidelines).
environmental policy.252 The trade and commerce power operates quite differently in Canada than does the Commerce Clause in the United States, and “[w]hile American courts have had no trouble reading into their federal interstate commerce power the power to regulate the environment, Canadian courts have read Canada’s federal trade and commerce power restrictively,”253 thus limiting its application to environmental law. The POGG clause, in turn, has been described as “the poor Canadian cousin of the American commerce clause,”254 has historically been controversial, and “its full extent is a matter of considerable dispute.”255 The clause was “reduced during the middle years of constitutional interpretation to little more than a basis for federal action in national emergencies”256 and as an occasional basis of federal authority over matters of “national concern.”257 Over time, “the Supreme Court has continued to seek limits on the national concern branch of the POGG power,”258 and national concern has been subsumed by the doctrine of “provincial inability.”259 Though two cases in the late 1980s and early 1990s narrowly applied the doctrines to allow federal intrusion into arguably provincial matters,260 more recently the Canadian Supreme Court “seems to have purposely turned away from POGG justifications for federal jurisdiction . . . [and] has preferred to channel justifications into other enumerated powers . . . [B]y ignoring POGG justifications almost entirely, the Court is clearly expressing some reservation about working under the national concern heading.”261

Indeed, as a textual matter, the POGG clause is qualified by a subsequent clause stating that the federal government may regulate “in


253 Northey, supra note 252, at 139; accord Fiore, supra note 252, at 160.


256 Id.

257 Baier, supra note 254, at 12.

258 Id.

259 Id. For a thorough discussion of this test, see id. at 13, and Fiore, supra note 252, at 161–62.


261 Baier, supra note 254, at 15.
relation to all [m]atters not coming within the [c]lasses of [s]ubjects... assigned exclusively to the [l]egislatures of the [p]rovinces.” Given that the clause is meant to bridge gaps between federal and provincial constitutional authority where a matter of national concern cannot be addressed by the states, the exclusive grant of authority to the provinces over forest policy could very well lead to a view that there is no “gap” in forest policy at all. The question would likely turn on whether global concerns over climate change trigger a strong enough national concern that the provinces alone would be unable to adequately address—a potentially difficult argument to make given the weakness of the POGG clause.

Even so, some scholars have argued that the POGG clause could be utilized to justify federal regulation of resources over which the provinces typically maintain exclusive authority, such as wildlife resources, and “on problems having such unique significance for the nation as a whole that they cannot appropriately be dealt with at the provincial level” as is arguably the case with ensuring Canada’s forest resources are adequately utilized to combat climate change. Yet it remains that in order to invoke the POGG power, “the issue in question must have some ‘ascertainable and reasonable limits,’ so as not to impair provincial constitutional jurisdiction unreasonably.” Ultimately, the Canadian constitutional provisions that would be looked to for expanded federal authority over subnational forest policy are exceedingly weak, and their interpretation has been purposefully narrowed by Canadian courts over time. As a result, a top-down, expanded constitutional interpretation mechanism for forging Fail-safe Federalism in Canada is not nearly as promising as it is in the United States.

Though a top-down approach for achieving federal inputs into subnational forest policy via constitutional amendment is equally difficult in the United States and Canada, it appears doing so via expanded interpretation of current constitutional provisions is far more likely in the United States than in Canada. Even so, a top-down approach for forging Fail-safe Federalism is not a necessary or inevitably preferable mechanism. While top-down inputs can certainly be crafted in a way that preserves decentralized forest governance and the role of subnational governments in crafting either their own policies or policies supplemental to federal policy, top-down approaches are not without risk. Improperly crafted top-down

262 Constitution Act, 1867, 30 & 31 Vict., c.6, § 91 (U.K.) (consolidated with amendments).
263 Fiore, supra note 252, at 164.
264 Gibson, supra note 255, at 62, 65.
265 Fiore, supra note 252, at 164; see also Peter W. Hogg, Canada: From Privy Council to Supreme Court, in INTERPRETING CONSTITUTIONS: A COMPARATIVE STUDY 55, 63 (Jeffrey Goldsworthy ed., 2006) (noting that early court interpretations of the POGG clause demonstrated a “relentless refusal to give significant content to the federal peace, order, and good government power whenever it came into potential conflict with the provincial power over property and civil rights.”).
 prescriptive regulation

often leads to an increasing spiral of tightening regulations, which progressively jeopardise the viability of forest management systems through excessive bureaucratic processes. Such processes impose considerable costs on both industry and government, and often result in systems that achieve only the minimum standards necessary to avoid penalties, rather than the pursuit of excellence.\textsuperscript{266}

As such, bilateral and horizontal mechanisms should also be considered.

2. \textit{Bilateral}

A bilateral approach to forging Fail-safe Federalism involves the federal government incentivizing subnational governments to take action on climate policies related to forest management, which can be accomplished in two basic ways. The first is a cooperative federalism approach, whereby the national government passes an act establishing minimum forest management standards to which subnational governments can voluntarily bind themselves, while at the same time receiving “carrots” in the form of financial payments or authority to dictate policy over matters that might otherwise be the purview of the federal government. The second approach is one of “uncooperative federalism,” whereby the federal government uses other constitutional “sticks” at its disposal, such as the spending power, by refusing to fund projects within subnational jurisdictions or refusing to provide some other economic entitlement subnational governments normally receive. Under either approach, the national government “encourages” the states or provinces to develop minimum forest management standards aimed at capturing forests’ climate change mitigating potential. Once accomplished, the federal government would be free to commit to those standards on an international level. Unlike the top-down approaches discussed in the previous section, which are dependent on the respective and distinct constitutional orders of the United States and Canada, the bilateral mechanisms discussed here are political or legislative in nature and thus would operate very much the same in both the United States and Canada.

\textsuperscript{266} Graham R. Wilkinson, \textit{Codes of Forest Practice as Regulatory Tools for Sustainable Forest Management} 2–3 (Paper Presented to the 18th Biennial Conference of the Institute of Foresters of Australia (1999)) (noting that, “[i]n contrast, a self-regulatory approach can avoid unnecessary bureaucratic costs and provide greater flexibility and autonomy for industry, in return for improved environmental performance”).
i. Cooperative Federalism

Under a cooperative federalism approach, the U.S. or Canadian federal governments can pass a “Carbon Sequestration and Forest Management Act” (CSFMA) that establishes the forest management standards outlined above to combat climate change, such as restrictions on clearcutting, afforestation and reforestation requirements, annual allowable cut, and stand density requirements, among a variety of other standards. The states and provinces would develop their own forest carbon sequestration plans and would voluntarily opt into the program based upon a variety of financial, political, and legal incentives. Not only might subnational governments receive funds to implement the program on state/provincially- and privately-owned forests, but they might also gain a degree of authority over the actions of both the federal government and adjacent subnational governments—to ensure that those actions are consistent with the state/provincial plan. Once a state or province voluntarily opted in, however, their forest management policy would be subject to the federal standards established in the act. Finally, as discussed in Section IV.A.2.ii below, subnational governments refusing to opt into the act might be induced to do so based upon a variety of disincentives, such as pulling federal funds for projects within the jurisdiction if they do not opt in within a certain time frame.

The CSFMA could operate like a combination of the proposed National Land Use Policy Act (NLUPA), which the U.S. Senate passed twice in the early 1970s but which was never enacted, and the more narrow but ultimately (and relatively) successful Coastal Zone Management Act (CZMA).

The purpose of the NLUPA was to establish

a national policy to encourage and assist the several States to more effectively exercise their constitutional responsibilities for the planning, management, and administration of the Nation’s land resources through the development and implementation of comprehensive ‘Statewide Environmental, Recreational and Industrial Land Use Plans’ . . . and management programs designed to achieve an ecologically and environmentally sound use of the Nation’s land resources. 267

NLUPA would have provided economic support to states for the development of land use management plans in accordance with federal standards and would have further provided data to assist in developing

such plans. Furthermore, the NLUPA would have established a federal agency to ensure that all other federal agencies were complying with state plans.\(^{268}\) States, in turn, were to designate areas of conservation and areas of development.\(^{269}\) States with approved plans would have been required to establish management standards for five types of land-use activities that were of “more than local concern:”\(^{270}\)

1) all development in areas of “critical environmental concern,” e.g., beaches, wetlands, important wildlife habitats, and historic sites;

2) key facilities, such as major airports, highway interchanges, and recreational facilities;

3) large scale developments, such as industrial parks, shopping centers, and major subdivisions;

4) regional public or private facilities, such as solid waste disposal or sewerage systems that significantly affect surrounding land uses; and

5) major recreational or second-home development of rural land.\(^{271}\)

The NLUPA was intended to “establish[] a clear role for each level of government and insure[] that their activities would be coordinated.”\(^{272}\) Perhaps most importantly, “[i]t would have integrated local, state and federal systems.”\(^{273}\) John R. Nolon has argued that “had such a law been adopted before the complex structure of environmental law was cobbled together, the cost, complexity and confusion of the current system could have been lessened.”\(^{274}\) The voluntary approach of NLUPA, which “favored incentives to cooperate over mandates to conform to rigid standards,” was intended to “lessen the ‘needless and costly conflicts between agencies and departments of the Federal Governments, between State and Federal Government, and between State and local government and insure[] that their activities would be coordinated.”\(^{272}\)

\(^{268}\) Patricia E. Salkin, American Law of Zoning § 3:2 (5th ed. 2011).


\(^{271}\) Id.

\(^{272}\) Id.

\(^{273}\) Nolon, supra note 269, at 724.

\(^{274}\) Id. at 718.
government. In other words, this approach could alleviate the problems created by an overly zealous top-down approach, though it might also have less bite in achieving results since there is no legal mechanism to ensure the standards are put into place.

Though NLUPA was never passed, the United States has already succeeded in establishing a bilateral approach in the land use context with its Coastal Zone Management Act (CZMA), passed to gain greater federal inputs into the protection of the coastal zone. Many had hoped the CZMA would be part of a larger land use management act, such as the NLUPA, but the CZMA succeeded where the NLUPA failed in part “due to the fact that it both aided development while preserving the environment.”

The CZMA program is voluntary, but federal incentives induce states to opt in. The first incentive is simply funding the program’s implementation, the aims of which are:

- to preserve or restore specific areas of the state because of their conservation, recreational, ecological, or aesthetic values, or contain one or more resources of national significance; to redevelop a deteriorating or underutilized urban waterfront[] or port[]; to provide public access to public beaches, coastal waters and areas of recreational, historical, aesthetic, ecological or cultural significance; or to develop a coordinated process for regulating permits for aquaculture facilities.

The second incentive is perhaps more enticing from a state or provincial point of view. Subnational governments effectively gain authority over the actions of both the federal government and other subnational governments that it otherwise would not have. After the federal government has approved a state plan, it cannot undertake any action or issue any permits for action within the state’s coastal zone unless those actions are found by the state to be “consistent” with the state’s plan. So, for example, if the U.S. Coast Guard wants to build a new facility within a state’s coastal

276 See 1 Salkin, supra note 268, § 3:3 (discussing how the NLUPA failed and the CZMA succeeded in providing the federal government the opportunity to protect the coastal zone with increased state involvement).
278 Id. Salkin, supra note 268, § 3:3.
279 Id.
zone, though the agency previously had the authority to do so at its discretion, it now must obtain approval from the state in which the facility is to be located that siting of the facility will be consistent with the state’s CZMA implementation plan. The same holds true for federal actions in adjacent states in the coastal zone—there is a reciprocal responsibility for federal agency action or permitting in adjacent states to be consistent with neighboring state plans. Currently thirty-four states and U.S. territories maintain federally approved management plans implementing the CZMA.

Though Congress failed to enact the NLUPA, and the CZMA has been criticized as inconsistent and lacks the “bite” that it perhaps could have, these examples of bilateral approaches to forging Fail-safe Federalism provide models for how a similar act might be structured for forests and climate regulation in the United States and Canada. Though these bilateral mechanisms would operate similarly in the United States and Canada, emanating from a legislative act by their respective national legislative bodies, it is important to note that the probability of achieving bilateral mechanisms in the United States and Canada is not the same. While the United States seriously considered the NLUPA and currently maintains one such successful program, the CZMA, Canada has had a more difficult time even attempting to craft bilateral approaches, especially in the forest context.

The Canadian federal government established a Model Forests Program (MFP) that, while not a holistic bilateral approach—since it operates on a project-by-project basis—is nonetheless a multi-stakeholder mechanism of forest policy formation that attempts to encourage the Canadian forest sector to “shift the management of Canada’s forests from sustained yield to sustainable development.” The program’s purposes are to further “create, by national competition, working-scale model management areas where a partnership of stakeholders would put ecological forestry into practice, develop integrated resource management tools to help commercial forestry coexist with other natural resources, conduct research, and apply the most advanced forest management practices.”

Given the historically closed nature of the private-industry/provincial quasi-corporatist negotiations, the MFP is aimed at opening up the forest policy-making process to parties other than the

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281 Kristen M. Fletcher, Managing Coastal Development, in OCEAN AND COASTAL LAW AND POLICY 147, 159–60 (Donald C. Baur et al. eds., 2008).
282 1 SALKIN, supra note 268, § 3.3.
284 Joanna M. Beyers, Model Forests as Process Reform: Alternative Dispute Resolution and Multistakeholder Planning, in CANADIAN FOREST POLICY, supra note 96, at 172, 177.
285 Id.
provinces and the forest industry. MFPs, however, have been met with varying success, with provinces maintaining low enthusiasm for the program, in part “because of the federal nature of the model forest project and its potential threat to provincial authority.” Indeed, provinces have been described as “reluctant” to participate in the programs. Any absence of the policy-making branch of government from negotiations understandably renders those projects ineffectual, and “[a]lmost certainly the federal nature of the model forest initiative is to blame.” As a result, “the experience of the Model Forest Program gives little reason to believe that such partnerships, just because they are based in the consensus process, are much more than advisory.” Even so, “[w]hile the Model Forest Program has not led to fundamental regime change, it does underwrite innovative experiments which, however incremental in impact, may provide examples of how to govern future forest management.” Despite the MFP being a creative attempt by the federal government to gain inputs into case-by-case forest projects, it seems clear that “[i]f long-term solutions are wanted . . . then process reform will need to be embedded in structural reform,” such as a change in Canada’s constitutional structure that facilitates more viable inputs by the federal government into Canadian forest policy.

Importantly, the MFP is emblematic of federal-provincial tensions in the area of forest policy as a general matter. The history of provincial pushback on federal involvement in subnational forest policy, even through non-regulatory bilateral arrangements, is quite deep. When the Canadian federal government commenced a “National Forest Congress” under the oversight of the federal Department of Forests in 1966, it “failed to secure provincial approval of federal leadership in the formulation of national forest policy . . . [and the] government had to acknowledge the limited direct role of the federal government in regulating an industry dependent on the exploitation of provincially owned resources.” The provinces even resisted conditional grant programs that would have funneled federal

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286 \text{See id. at 178 (discussing the non-compliance of partners in the original MFP and the inability of two to fulfill their mandate).}
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287 \text{Id. at 180.}
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288 \text{Id. at 184.}
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289 \text{Id.}
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290 \text{Id. at 193.}
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291 \text{Evert Lindquist & Adam Wellstead, Making Sense of Complexity: Advances and Gaps in Comprehending the Canadian Forest Policy Process, in CANADIAN FOREST POLICY, supra note 96, at 419, 425.}
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292 \text{Beyers, supra note 284, at 194.}
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293 \text{Michael Howlett, The Federal Role in Canadian Forest Policy: From Territorial Landowner to International and Intergovernmental Co-ordinating Agent, in CANADIAN FOREST POLICY, supra note 96, at 378, 387.}
\]
money their way in exchange for adjustments in forest policy. This resistance coupled with “an inability to overcome constitutional barriers to an increased direct federal role in forest regulation” resulted in the federal government ultimately dissolving the Department of Forestry.

Provincial resistance to even bilateral attempts by the federal government to gain a foothold in provincial forest policy has resulted in the aforementioned efforts by the federal government either to harness international trade, or to utilize a number of international environmental agreements to gain a foothold, but these initiatives, of course, “have had a limited impact on actual forestry practices in Canada.” Ultimately, “the new role of the [Canadian] federal government as an agent of international and intergovernmental coordinator represents a significant decline from earlier eras,” and “the federal government has lost its ability to affect most aspects of Canadian forest policy and practices.”

Given the limited nature of the Canadian federal government’s influence on forest policy, this information is not surprising. Considering, however, that these statements are made in the context of attempts by the federal government to make bilateral inroads into forest policy, they indicate that even these types of voluntary mechanisms are not nearly as efficacious as they might be in the United States.

ii. Uncooperative Federalism

Uncooperative federalism is the “mostly stick” end of the bilateral spectrum. Rather than the federal government providing “carrots” in the form of positive incentives for cooperation, it provides disincentives through the threat of withholding federal funds from states or provinces. The federal government may withhold federal highway funds, for instance, as the United States Federal Government has successfully done in other contexts, or it could withhold funds that it normally funnels to the states to implement other federal statutes, such as the Clean Water Act in the United States.

To be most effective, an uncooperative federalism arrangement would most likely need to be tied to a cooperative bilateral statute. Interestingly,

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294 See id. at 397 (discussing the dissolution of the Department of Forestry in the face of provincial opposition to federal conditional grant programs).
295 Id.
296 Id. at 399.
297 Id.
298 See, e.g., Lynn A. Baker & Mitchell N. Berman, Getting off the Dole: Why the Court Should Abandon Its Spending Doctrine, and How a Too-Clever Congress Could Provoke It to Do So, 78 Ind. L.J. 459, 462–64 (2003) (discussing the litigation surrounding the federal government’s withholding of highway funds from those states that had not raised their minimum legal drinking age to at least twenty-one years of age).
though the NLUPA was designed as a voluntary program, it had bite in the sense that it blended cooperative and uncooperative federalism approaches. For instance, if a state failed to adopt a land use plan within four years after the act was passed it would no longer receive funding for other federal programs, such as highway construction or other public works. Such funding would be reduced by twenty percent a year until the state developed a land use plan comporting with NLUPA standards. Later amendments to the bill strengthened sanctions even further, providing that if a state did not submit a statewide plan within five years, then “no federal agency was permitted to undertake any new action or financially support any state action that may have a substantially adverse environmental impact.” In the United States, for example, such a provision would grind commercial development in certain wetland areas to a halt if states did not pass a state plan, since the United States Army Corps of Engineers must permit the filling of certain wetlands for development.

Canada has successfully utilized this approach in the context of fisheries and agriculture, where “constitutional conflicts over environmental jurisdiction have been resolved” by subnational governments utilizing “political and fiscal pressures to bring provincial practices in line with federal laws.” These pressures have “enabled the federal Canadian government to make significant jurisdictional in-roads into areas that were previously provincial. These developments suggest that Canada has been moving increasingly toward a de facto, policy of concurrent jurisdiction in the environmental field” — though this is clearly not yet the case for forest policy, again likely due to the explicit nature of the constitutional provisions related to forestry. Indeed, though the Canadian federal government has attempted to utilize its spending powers to promote reforestation and other practices on provincial forest lands, its ability to utilize the spending power to affect subnational forest policy has been relatively inconsequential.

As seems to be a pattern with the other “fortification from within” options discussed above, an uncooperative federalism approach might be a more viable option in the United States, especially when coupled with a cooperative federalism statute, than it would in Canada. In Canada, such approaches have failed to influence forest policy in any significant way due to persistent provincial opposition to federal involvement. To be clear,

301 Id. at 18.
302 See 33 U.S.C. § 1344(a), (d).
303 Kibel, supra note 83, at 250–51.
304 Id.
305 Howlett, supra note 97, at 40.
in the United States the federal government has not yet aimed cooperative or uncooperative mechanisms at subnational forest policy. But given that the U.S. Congress seriously considered such an approach in the land use context with NLUPA and has succeeded in a “soft” approach with the CZMA in the environmental and land use context without state resistance—and indeed with broad state participation—a bilateral statute aimed at subnational climate policy on forests might in fact be the best mechanism available for forging Fail-safe Federalism in the United States if crafted properly. This is especially so if a top-down, expanded constitutional interpretation approach does not prove viable.

3. Horizontal

A horizontal approach to forging Fail-safe Federalism would result if subnational governments agreed with other subnational governments to take collective action to address the role of forest management in climate change regulation—even in the absence of a top-down mandate or voluntary bilateral program. In this way, subnational governments might avoid constraining national action on global climate governance related to forests. For example, states or provinces could create regional forest management plans whereby each agreed to legislate minimum forest management standards related to carbon sequestration and climate change, such as clearcutting, afforestation and reforestation requirements, annual allowable cut, and stand density requirements. Such plans could conceivably create a de facto national forest policy. This would give the national government more flexibility during international negotiations related to forests since subnational governments would voluntarily bind themselves to a position that does not restrain the national government in international negotiations, but that rather reinforces the goals of the global governance regime.

If a top-down approach is a compulsory mechanism for federal governments to forge Fail-safe Federalism, and a bilateral approach operates by federal provision of incentives for Fail-safe Federalism, then horizontal approaches rely almost entirely on the volition of subnational governments (though horizontal approaches may themselves be induced by federal incentives). This is the same volition, notably, that currently facilitates a great degree of subnational government inaction on crafting fundamental forest management standards in the United States. In this way, horizontal approaches in either the United States or Canada are likely low on the list of options for forging Fail-safe Federalism. This is because the U.S. and Canadian federal governments would have to “wait and see” if subnational governments forged horizontal forest policy arrangements before they could assure the international community that any global standards related to forest carbon sequestration standards would be implemented. Ultimately, it is unclear why subnational governments that
currently fail to maintain individual standards related to forest carbon sequestration would band together to craft standards with a group of other states or provinces. Even so, this approach should be briefly discussed, as it is not without precedent, and the regional carbon trading schemes discussed below demonstrate that states concerned about climate change do seem willing to enter into these types of arrangements under at least some circumstances.

There are a few reasons why states might band together to create “Regional Forest Management and Carbon Sequestration Standards,” whereby individual states would agree to establish standards that increase the carbon sequestration potential of private and state-owned forests. The first is simply federal inaction—which has spurred the creation of a number of carbon cap-and-trade initiatives aimed at curbing carbon emissions in the absence of a federal program. These include: the Regional Greenhouse Gas Initiative, including the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont; the Midwestern Regional GHG Reduction Accord, including the states of Illinois, Iowa, Kansas, Michigan, Minnesota, and Wisconsin, and the Canadian province of Manitoba; and the Western Climate Initiative, including the states of Arizona, California, Montana, New Mexico, Oregon, Utah, and Washington, and the Canadian provinces of British Columbia, Manitoba, Ontario, and Quebec. Indeed, states or provinces may be motivated to tie forest offsets to their carbon trading schemes in a way that fundamentally alters forest management standards in order to take account of carbon sequestration potential. Importantly, however, no regional arrangement on carbon has appeared in certain regions, such as the U.S. South, indicating that the initiative to forge these arrangements is still likely to vary across the United States in the same way that current forest management standards do.

Additionally, if states or provinces are truly concerned with federal inaction on climate change, as evidenced by the formation of these regional cap-and-trade schemes, then presumably they would be interested in the significant loss of forest carbon sequestration capabilities that rapid urbanization is projected to cause in regions such as the southeastern United States and parts of the boreal forest in Canada. After all, it seems that preserving forests in order to sequester carbon may potentially be less politically contentious than reducing industrial emissions—though certainly there are private property rights to consider in the United States, as well as the forest sector lobby in Canada. Even so, if states and provinces get serious about the threats to forests from urbanization, then

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there are strong incentives to create regional forest preservation compacts in order to head off concerns of a race-to-the-bottom, whereby urban development interests might flee to other jurisdictions due to forest carbon preservation statutes in the jurisdiction in which they wish to develop. By developing regional forest policy agreements, individual states and provinces can preserve economic growth and development while also tackling climate change via forest carbon sequestration.

Ultimately, there is little precedent in the United States or Canada for subnational horizontal approaches to issues related to land uses, especially in the forest context. As a result, the availability of horizontal approaches provides little assurance to the U.S. and Canadian federal governments that they can commit to international standards. The drivers for such arrangements, however, are certainly in place, with states and provinces already taking action on carbon cap-and-trade and facing similar threats to forests from urbanization.

The United States and Canada face similar difficulties in relying on top-down amendment of their respective constitutions and on horizontal approaches to ensuring Fail-safe Federalism on climate and forests. It seems that expanded constitutional interpretation and bilateral approaches, whether cooperative or uncooperative, are far less viable in Canada than in the United States, where such approaches would seem to be viable and to have a relatively good chance of success if the United States Congress can garner the requisite political will to pass legislation. The next section discusses a mechanism for forging Fail-safe Federalism that does not arise from current, internal volition to adjust constitutional structure, but rather that is created due to external forces arising from civil society.

B. Fortification in Response to External Forces: Pathways of Transnational Impacts on Domestic Governance

This Section will build entirely off of Bernstein and Cashore’s framework for assessing various “pathways” by which civil society can influence domestic and global forest policy via external pressures when governments refuse to take initiative from within current governmental systems and processes. Specifically, these pathways arise from increasing international pressures on domestic policies that have global

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307 Hudson, supra note 29, (manuscript at 36–40).
308 See North American Cap-and-Trade Initiatives, supra note 306.
implications, like forest management, as “[t]ransnational actors and international institutions influence policies by bringing norms generated or promoted in the international sphere into the domestic political arena.”\textsuperscript{310} Bernstein and Cashore identify four pathways by which international pressures shape and change domestic policy. These include: (1) market dependence, (2) international rules, (3) international normative discourse, and (4) infiltration of the domestic policy-making process.\textsuperscript{311}

Pathway 1, “market dependence,” is when transnational actors “use global markets to force policy responses.”\textsuperscript{312} The most common example is boycott campaigns, where “a company or government faces market loss and economic hardship if it does not bow to demands of consumers in other countries.”\textsuperscript{313} This pathway may directly bypass domestic politics since consumers drive the government’s choice to change its policies. In other words, though “domestic politics influence the specifics of the policy response, the relationship among the state, business and nonbusiness interests (the policy network) is relatively unimportant for success because the coercive force of the market dependence path affects business interests as much as the state.”\textsuperscript{314} The emergence of market-driven institutions, like forest certification schemes, has also created economic pressures in favor of more stringent forest management standards\textsuperscript{315} and has “effectively bypass[ed] domestic regulatory and land-use policies”\textsuperscript{316} inconsistent with those standards.

Pathway 2, “international rules,” includes the legally-binding treaties that are the focus of this Article as well as trade agreements or other policies crafted by international organizations such as the International Monetary Fund and the World Bank—which might require countries receiving funds to adopt environmental standards as a condition of the loan.\textsuperscript{317} NGOs or other non-governmental institutions like forest certification systems can influence the international rules pathway as well.\textsuperscript{318} International rules often affect domestic policy, of course, when “rules and regulations commit signatory countries to change their domestic regulations.”\textsuperscript{319} As a result, of all the pathways raised by Bernstein and Cashore, this is the one most likely to be adversely impacted by constitutional federalism since “[d]omestic policy-making structures are

\begin{thebibliography}{99}
\bibitem{310} Bernstein & Cashore, \textit{supra} note 309, at 71.
\bibitem{311} \textit{Id.} at 75.
\bibitem{312} \textit{Id.} at 76.
\bibitem{313} \textit{Id.}
\bibitem{314} \textit{Id.} at 77.
\bibitem{315} Bernstein et al., \textit{supra} note 309, at 113.
\bibitem{316} \textit{Id.} at 112.
\bibitem{317} Bernstein & Cashore, \textit{supra} note 309, at 121.
\bibitem{318} Bernstein et al., \textit{supra} note 309, at 79.
\bibitem{319} Bernstein et al., \textit{supra} note 309, at 79.
\end{thebibliography}
also important when states require domestic ratification of international agreements or implementing legislation. \[^{320}\]

Nonetheless, despite domestic governance structures that may limit direct participation at the federal level, assuming these agreements are legitimately negotiated and arranged at the international level, they may create a “pull toward compliance” by subnational governments. \[^{321}\]

In fact, a variety of international negotiations have failed to result in a legally binding global forest treaty, these fora have indeed provided a “pull toward compliance” with heightened forest management standards, as have a variety of non-forest-specific agreements, such as the Convention on Biological Diversity. \[^{322}\]

Pathway 3, “international normative discourse,” effectively involves transnational actors engaging in symbolic or information campaigns at the international level for the sole purpose of changing domestic governance. \[^{323}\]

An example would be increased international focus on the inclusion of aboriginal rights in forest policy creating pressure for domestic change. Such norms, “even when they are not binding on states, can alter state identities and interests” and “even if an institution appears weak along one dimension, such as providing binding rules, it may still play a powerful normative role . . . primarily through moral suasion and communicative action rather than coercion or enforcement.” \[^{324}\]

The problem with this pathway for the United States and Canada, however, is that it depends on the “moral vulnerability” of the target state \[^{325}\] and its domestic ideology and culture. Countries most reachable by this pathway are those that “aspire to belong to a normative community of nations.” \[^{326}\]

Oftentimes the culture of powerful federal nations is a bit self-fulfilling in this regard, in that the domestic ideology of federalism may trump other moral pressures as the values of federalism are seen as moral imperatives in their own right. Even so, one of the most prominent examples of successful norm influence on domestic policy is sustainable forest management (SFM), which has been widely accepted (at least on paper) by governments globally, and includes protection of indigenous rights and protection from illegal logging. \[^{327}\]

Another example is the direct impact international norms have had on forest policy reform in Brazil, as international interest in the Amazon and its global value have directed

\[^{320}\] Id. at 80.
\[^{321}\] Id.
\[^{322}\] Bernstein et al., supra note 309, at 114. In addition, Bernstein et al. note that REDD programs are “likely to lead, eventually, to one of the first sets of rules in international forest governance to have a binding impact on domestic practices such as land-use change and logging.” Id.
\[^{323}\] Bernstein & Cashore, supra note 309, at 81.
\[^{324}\] Id. at 82–83.
\[^{325}\] Id. at 83.
\[^{326}\] Id. at 81–82.
\[^{327}\] Bernstein et al., supra note 309, at 119.
pressure on Brazil’s domestic forest policies.\textsuperscript{328}

Pathway 4 is the “infiltration of the domestic policy-making process” by transnational actors, which “internaliz[es] the external influence[s]” of civil society.\textsuperscript{329} This is basically a scenario where the policy-making process is open to a broad swath of civil society, rather than just, say, business interests. When the process accommodates new and additional organizations within deliberations, governing officials are autonomous and free to consider a wide variety of societal needs, and the government can successfully implement policy choices, this pathway may lead to domestic change through direct participation of transnational actors. These actors can “provide resources, knowledge, training and financing to existing domestic groups, or help organize or finance new domestic-based groups or coalitions.”\textsuperscript{330}

These four pathways of transnational influence have had direct impacts on subnational forest policy in Canada, with British Columbia (B.C.) providing a compelling case study. For example, logging of old-growth forests in B.C. created a public and media backlash both in Canada and abroad and, coupled with international pressure concerning the status of the world’s forests, contributed to a shift toward heightened forest management standards in B.C. Indeed, the high legal standards discussed in Part III for clearcutting, riparian buffer zones, and annual allowable cut limits arose in part out of these pathways,\textsuperscript{331} which further had a hand in shifting provincial management to an ecosystem-based approach for particular forests of interest to civil society.\textsuperscript{332} Boycott campaigns were successfully utilized along the “market dependence” pathway and were especially vigorous in targeting clearcutting policies (or the lack thereof). B.C. was effectively branded by environmental groups as the “Brazil of the North” on forest policy.\textsuperscript{333} In the United States, legislation was proposed in the state of California to ban B.C. forest products and the \textit{New York Times} was under pressure to stop printing on paper from B.C. forests.\textsuperscript{334} In fact, due to the United States accounting for fifty-nine percent of B.C.’s forest products export market, the influence of U.S. transnational actors was significant.\textsuperscript{335} Similar pressure arose from other countries abroad, ultimately contributing not only to heightened standards for subnational forests, but also to the strict protection of over thirty-eight million hectares.

\textsuperscript{328} \textit{Id.} at 120. Whether Brazil’s domestic forest policies are successfully implemented is another matter. \textit{See supra} note 48 and accompanying text.

\textsuperscript{329} Bernstein & Cashore, \textit{supra} note 309, at 83.

\textsuperscript{330} Id. at 85.

\textsuperscript{331} Id. at 87–88.

\textsuperscript{332} Id. at 88.

\textsuperscript{333} Hoberg, \textit{supra} note 197, at 357.

\textsuperscript{334} Bernstein & Cashore, \textit{supra} note 309, at 89.

\textsuperscript{335} Bernstein et al., \textit{supra} note 309, at 121.
of boreal forest between 1999 and 2005. Millions more hectares have been protected since that time, resulting in a truce of sorts between groups boycotting provincial forest products and the forest sector. Ultimately, because of the market dependence pathway, “[p]rovincial governments and industry have been forced to consider new forest management issues and values such as biodiversity, landscape scale management, wildlife, recreation, subsistence, aesthetic and watershed management, recycling, and climate change.”

Trade laws were utilized along the “international rules” pathway, though the effects of this pathway on B.C. forest policy are less clear. In addition, the possibility, however unlikely, of a global forest convention provides another potentially powerful mechanism along this pathway, and international negotiations on global forest standards may have created a “pull toward compliance” on the B.C. government. Transnational actors utilized the “international normative discourse” pathway to inject new concerns over biodiversity, ecosystem management, aboriginal rights, and tropical deforestation into B.C. forest policy. Finally, along pathway 4, transnational actors were able to infiltrate the domestic policy-making pathway through a variety of resource-sharing and coalition-building efforts among numerous environmental groups—including those established specifically for the purpose of engaging in domestic forest policy-making. Some of these groups had a direct role in the establishment of more stringent riparian buffer zone requirements. This pathway has “arguably had the biggest impact on domestic policymaking” in B.C.

To be clear, Bernstein and Cashore note that durable and lasting policy change requires more than just one pathway, as the market dependence pathway alone, for example, will only result in change as long as market pressures remain in place. Thus, synergies among pathways are of utmost importance. In addition, a variety of other factors drive specific policy outcomes, and pathways of transnational pressure is just one such set of factors. Even so, the case of British Columbia demonstrates that pathways can be a significant contributor to domestic forest policy change.

336  Id.
337  Id. at 122.
339  Bernstein & Cashore, supra note 309, at 91.
340  Id. at 92.
341  Id. at 96–97.
342  Id. at 97.
343  Bernstein et al., supra note 309, at 126.
344  Bernstein & Cashore, supra note 309, at 90.
345  Id. at 98.
at the federal or provincial level, or both.\textsuperscript{346}

The pathways approach has proven to be a valuable mechanism for changing subnational forest policy in Canada, and if appropriately utilized, would seemingly be a viable approach for facilitating subnational climate policies related to the preservation of forest carbon-sequestration values. These changes at the subnational level may either allow the federal government to assure the international community that binding global standards will be honored by subnational governments already engaged in such standard-setting, or pathways may be utilized to rebalance federalism related to Canadian forest policy in a way that allows the federal government to directly implement international standards. In fact, this cursory overview of mechanisms for forging Fail-safe Federalism in Canada indicates that the severely limited nature, if not the effective non-existence of federal government constitutional authority over subnational forest policy, leaves a pathways approach as perhaps the only viable mechanism for forging climate policies related to forest carbon-sequestration in Canada—a mechanism initially arising not from the constitutional authority of the federal government or the benevolent volition of subnational government legislatures, but rather from external forces that necessarily synergize to create pressures that contribute to domestic policy change.

Interestingly, one of the facilitators of transnational pathways affecting subnational forest policy in Canada arose out of successful efforts by U.S. environmental groups in the Pacific Northwest to increase forest preservation and management standards in the early 1990s.\textsuperscript{347} This once again indicates how civil society’s influence on public forest management standards, through the wielding of procedural rights such as citizen suits under the ESA, can have immediate and significant impacts—a far more difficult task on private forestlands like those in the southeastern United States. Indeed, U.S. environmental groups successfully shifting focus from the Pacific Northwest, with its high proportion of government-owned forests, to Canada, with its exceedingly high proportion of provincially owned forests, and having a direct role in increasing the stringency of provincial forest standards, provides further evidence that such pressures

\textsuperscript{346} Of course, one of the greatest ironies of transnational impacts on domestic governance is the circular nature of their interaction with binding legal standards on national and global scales. The lack of binding global governance has been one of the primary causes of increased transnational approaches to governance formation, yet these transnational approaches may have impacts on domestic governance in a way that actually makes binding global governance more likely. In other words, global treaty-making is complicated by domestic federalism and other legal and political conflicts, giving rise to action by transnational actors, which in turn actually effect change within federal nations that may remedy the very federalism constraints that were previously prohibiting full interaction by federal systems in global governance.

\textsuperscript{347} Bernstein & Cashore, supra note 309, at 86, 97.
are more efficacious when the government is the owner of the resource—

further illustrating the importance of the private-public forest ownership
divide explored in Sections III.B and C. These groups have yet to

successfully target forest policy in the southeastern United States, with its

exceedingly high proportion of private forests.

Even so, in the United States a pathways approach might also be a

viable mechanism for forging Fail-safe Federalism for forest policy. In the

western United States, pathways might succeed for similar reasons as they

would in Canada—as the high proportion of government-owned forests

may allow for more sudden and stringent policy-change with a resulting

spillover effect for private forests. Indeed, for the reasons discussed in Part

III, all four of the pathways seem likely to more readily impact forest

policy on government-owned forestlands, as governments are more

responsive to each of the pressures/inputs presented by each pathway.

Similarly, in the southeastern United States, where pathways 2 through 4

are far less likely to be efficacious in spurring stringent private forest

management standards, pathway 1, market dependence, could result in a

shift in subnational forest policy. The huge economic importance of the

forest industry to southeastern U.S. states makes subnational governments

and citizens in the region far more susceptible to market pressures, which,

if properly focused, could theoretically drive climate policies aimed at

preserving forests’ carbon sequestration values. Even so, given the greater

amount of constitutional power available to the U.S. federal government

relative to the Canadian federal government, a pathways approach is more

appropriately left as a reserve option in the United States. Pathways are

more of a “wait-and-see” option in the absence of fortification from within,

as discussed in Section IV.A. While a pathways approach may be a

necessity in Canada due to the lack of any other realistically viable

mechanisms for forging Fail-safe Federalism, the U.S. government

maintains other tools it should first attempt to utilize, such as those

presented in Section IV.A.

V. CONCLUSION

Both the U.S. and Canadian Constitutions allot treaty-making authority
to the federal government for the specific purpose of allowing these
countries to arrange their international obligations. When the U.S.
Constitution was drafted, for example, it was designed to allow the federal
government supreme authority in all international treaty matters because

“state interference in foreign affairs had nearly driven the country to war


348 Id. at 97–98.
under the Articles of Confederation."349 The U.S. and Canadian Constitutions, however, also provide federalism protections by reserving certain powers, such as subnational forest policy-making authority, exclusively to the states and provinces in order to gain the benefits of decentralized policy formulation. Though federalism principles are valuable, they arguably place a disproportionate burden on the treaty power of the U.S. and Canadian federal governments when and if those governments garner the political will to address climate change by fully utilizing each nation’s forests.

As a result, mechanisms for forging Fail-safe Federalism should be developed to allow greater federal inputs into subnational forest policy so that federal governments can more freely arrange their international affairs and can preserve all of the legal and policy tools needed to combat climate change. Importantly, the United States and Canada maintain very different domestic forest governance systems, due primarily to disparities in the entities owning most of the forest resources in the respective jurisdictions and far less constitutional authority at the federal level in Canada than in the United States. Accordingly, the top-down approach of expanded interpretation of existing constitutional provisions and a bilateral cooperative/uncooperative federalism approach to forging Fail-safe Federalism would be most effective in the United States, whereas the external influences of transnational pathways would be most effective at spurring Fail-safe Federalism formation in Canada.

Fail-safe Federalism is not intended to completely supersede the benefits provided by subnational regulatory authority over forest policy. Nor should that policy be completely controlled by the federal government. Instead, to the extent that constitutional grants of treaty authority are valued as a means of federal governments arranging their international affairs related to combating climate change, approaches to forging Fail-safe Federalism should be pursued. In other words, federal systems like the United States and Canada must adjust constitutional structure if they are to most effectively and flexibly participate in global governance related to forests and climate. The ability of federal nations to enter into global governance arrangements to address perhaps the most important global environmental issue of our time should not be hampered by otherwise valuable principles of federalism.