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Constitutional Resilience

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Constitutional Resilience

Shannon M. Roesler*

Abstract

Since the New Deal era, our system of constitutional governance has relied on expansive federal authority to regulate economic and social problems of national scale. Throughout the twentieth century, Congress passed ambitious federal statutes designed to address these problems. In doing so, it often enlisted states as regulatory partners—creating a system of shared governance that underpins major environmental statutes, such as the Clean Water Act and the Clean Air Act. These governance structures remain important today as we seek to adapt our laws and institutions to the serious disruptions of climate change. But recent Supreme Court decisions challenge this long-established vision of governance. This raises a critical question: How resilient is our current system of constitutional governance?

Originally applied to the natural sciences, resilience theory has since inspired scholars across disciplines to think about how social-ecological systems respond to disruptive change. At the heart of resilience thinking is an attempt to balance stability with change. But as legal scholars of adaptive governance have argued, if our normative goal is to promote the resilience of ecosystems and natural resources, our system of governance must also encourage an ecological resilience that supports the

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flexibility and adaptive capacity of our governing institutions and laws. Not surprisingly, the adaptive governance literature focuses on democratic processes and institutions at all levels of government. Constitutional design is a background condition rather than a feature of adaptive governance or decision making.

But background conditions may impede or facilitate the emergence of adaptive laws. Moreover, the judicial interpretations of these conditions are less static and therefore capable of either facilitating or hindering the adaptive capacity of institutions and laws. The premise of this Article is that constitutional governance doctrines can and should balance the stability of static rule-of-law resilience with the flexibility required for adaptive governance in a climate-disrupted world. Judicial doctrines can enhance adaptive capacity by fostering shared, overlapping governance and regulatory flexibility. Unfortunately, recent doctrinal trends threaten to hinder adaptive capacity. This Article examines some of these constraining threads, including the narrowing of Congress's authority under the Commerce Clause, the resurgence of the nondelegation doctrine, and doctrines governing state authority under the Dormant Commerce Clause.

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INTRODUCTION

For nearly one-hundred years, regulatory agencies at the federal level have implemented policies to correct market failures with detrimental impacts to the public welfare.¹ Since the New Deal era, the U.S. electorate has supported this expansive federal power to regulate interstate markets.² Moreover, the Supreme Court has helped consolidate this view of constitutional governance by crafting and refining doctrines that allow regulatory agencies to address new social and

1. See I BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS 40 (1991) [hereinafter I ACKERMAN, FOUNDATIONS] (“All of us live in the modern era that begins with the Supreme Court’s ‘switch in time’ in 1937, in which an activist, regulatory state is finally accepted as an unchallengeable constitutional reality.”).

2. See *id.* at 50.

economic problems under old statutes.³ Doctrines that give agencies discretion and encourage shared federal-state governance support necessary regulatory flexibility and innovation in a changing world.⁴ Recent polls suggest that most of the electorate still endorses this constitutional vision.⁵

But last term a majority on the Supreme Court made clear that they wish to undermine this system of governance. In *West Virginia v. EPA*,⁶ six Justices struck down an approach to reducing greenhouse gas emissions from power plants because, in their view, the language of the Clean Air Act⁷ did not clearly authorize what was, in fact, the most effective system of emissions reduction: shifting energy generation from coal to natural gas and renewables using tools such as emissions trading.⁸ The Court's majority opinion and Justice Gorsuch's concurrence reflect long-repudiated views regarding congressional delegations of authority to agencies.⁹ Moreover, instead of using conventional tools of textualism to interpret the

3. See *id.* at 119 (“[T]he President and Congress left it to the Justices themselves to codify the New Deal revolution in a series of transformative judicial opinions . . .”).

4. See *infra* Parts IV and V.

5. See Sidney A. Shapiro, *Attention, Lawmakers—Regulation Is More Popular Than You Think*, HILL (Mar. 2, 2021), <https://perma.cc/9ZSX-JB5E> (reporting poll results on the percentage of Americans that support regulation in a variety of areas, including 74% in favor of regulations on drinking water, 71% for consumer product safety, 70% for data privacy, 68% for air pollution, 67% for workplace safety, 56% for climate change, and 54% for financial institutions).

6. 142 S. Ct. 2587 (2022).

7. 42 U.S.C. §§ 7401–7671.

8. See *West Virginia*, 142 S. Ct. at 2610 (determining that the EPA “located . . . newfound power in the vague language of an ‘ancillary provision,’” that it then used to “adopt a regulatory program that Congress had conspicuously and repeatedly declined to enact itself” (quoting *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 468 (2001))).

9. See *id.* at 2609 (discussing the allocation of authority to agencies by Congress and declaring that “enabling legislation is generally not an open book to which the agency [may] add pages and change the plot line” (internal quotation omitted)); see also *id.* at 2618 (Gorsuch, J., concurring) (“Permitting Congress to divest its legislative power to the Executive Branch would ‘dash [the] whole scheme.’” (quoting *Dep’t of Transp. v. Ass’n of Am. R.R.*, 575 U.S. 43, 61 (2015))). *But see id.* at 2634 (Kagan, J., dissenting) (“The majority claims it is just following precedent, but that is not so. The Court has never even used the term ‘major questions doctrine’ before.”).

statute, the Court majority focused on the economic and political significance of the regulation.¹⁰ Given that many regulations have significant political and economic impacts, the decision signals a willingness to redesign the regulatory state in a way that seriously limits the authority of executive agencies under numerous statutes with similarly broad language.¹¹

What is more concerning is that the Court is willing to issue these transformative opinions even when it lacks political or public support. As the Supreme Court released its final decisions in June 2022, the news headlines sent a clear message: the Court will break with tradition and even precedent to further its transformative vision of the Constitution's system of governance.¹² Indeed, writing for the majority in *Dobbs v. Jackson Women's Health Organization*,¹³ Justice Alito rejected the idea that the Court should consider public opinion regarding abortion rights.¹⁴ The Court's opinion striking down a New York state law regulating the public carry of firearms reflects the same disinterest in public opinion.¹⁵

Although these cases involve different subjects, they all reveal the Court's willingness to challenge current constitutional structures without the support of a political movement or consensus.¹⁶ How should we assess the effect this

10. See *id.* at 2608 (majority opinion) (“[T]here are ‘extraordinary cases’ that call for a different approach—cases in which the . . . ‘economic and political significance’ of that assertion, provide a ‘reason to hesitate before concluding that Congress’ meant to confer such authority.” (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159–60 (2000))).

11. See *infra* Part IV.

12. See Michael Scherer, *Supreme Court Goes Against Public Opinion in Rulings on Abortion, Guns*, WASH. POST (June 24, 2022), <https://perma.cc/9ND3-FJMA> (“The U.S. Supreme Court’s new majority boldly signaled with twin rulings this week that public opinion would not interfere with conservative plans to shift the nation’s legal landscape.”).

13. 142 S. Ct. 2228 (2022).

14. See *id.* at 2279 (“We do not pretend to know how our political system or society will respond to today’s decision And even if we could foresee what will happen, we would have no authority to let that knowledge influence our decision.”).

15. See *N.Y. State Rifle & Pistol Ass’n v. Bruen*, 142 S. Ct. 2111, 2156 (2022) (finding that New York’s proper-cause requirement was unconstitutional despite the popular support within the state).

16. See Scherer, *supra* note 12 (comparing the two cases and determining that they hold a common disregard for public opinion).

moment could have on state and federal governmental authority to address our most pressing problems? In other words, how *resilient* are our constitutional governance structures?

Scholars across disciplines have applied resilience theory in thinking about how social-ecological systems will respond to the disruptive changes of a warming world.¹⁷ As applied to legal systems, resilience theory has inspired frameworks for adaptive governance.¹⁸ At the heart of resilience thinking is an attempt to balance stability with change.¹⁹ But as scholars of adaptive governance have argued, if our normative goal is to promote the resilience of ecosystems and natural resources, our system of governance must also further an ecological resilience that supports the flexibility and adaptive capacity of our governing institutions and laws.²⁰ Not surprisingly, the adaptive governance literature focuses on the importance of democratic processes and institutions at all levels of government.²¹ In addition, both resilience theory and adaptive governance endorse overlapping state-federal authority, sometimes drawing on principles of “dynamic” or “polycentric” federalism.²²

Although legal scholars exploring the contours of adaptive governance recognize the importance of law and government in facilitating the adaptive capacity of social-ecological systems, the scholarship thus far has not attempted to ground these features in constitutional doctrine or practice.²³ Instead,

17. See *infra* note 69 and accompanying text.

18. See *infra* Part I.B.

19. See C.S. Holling, *Resilience and Stability of Ecological Systems*, 4 ANN. REV. ECOLOGY & SYSTEMATICS 1, 14 (1973) [hereinafter Holling, *Resilience and Stability of Ecological Systems*] (articulating the two types of behaviors of ecological systems—stability and resilience).

20. See Robin Kundis Craig, *Resilience Theory and Wicked Problems*, 73 VAND. L. REV. 1733, 1770 (2020) [hereinafter Craig, *Resilience Theory and Wicked Problems*] (“[P]olicymakers must embrace the difficult task of balancing social stability and flexibility in light of changing social-ecological systems.”).

21. See *infra* note 71 and accompanying text.

22. See Daniel A. DeCaro et al., *Legal and Institutional Foundations of Adaptive Environmental Governance*, ECOLOGY & SOC’Y (March 2017), <https://perma.cc/76CM-U686> (PDF) (explaining that polycentricism in adaptive governance is when there are flexible adaptive processes spread across multiple centers and discussing how that can be applied to environmental decision-making to improve its flexibility in crises).

23. See *infra* Part II.

constitutional design is a background condition rather than a feature of adaptive governance or decision making.²⁴ But background conditions may impede or facilitate the emergence of adaptive laws.²⁵ Indeed, these background conditions are subject to judicial interpretations that are less static and therefore capable of either facilitating or hindering the adaptive capacity of institutions and laws.²⁶

The premise of this Article is that constitutional doctrines governing federalism and the separation of powers can and should balance the static resilience integral to the rule of law with the flexibility required for adaptive governance in a climate-disrupted world. Judicial doctrines can enhance this adaptive capacity by fostering shared, overlapping governance and regulatory flexibility. The application of resilience theory to our system of constitutional governance illuminates the ways this system is and is not resilient to transformative change, thereby contributing to the legal scholarship on resilience theory and adaptive governance, as well as the constitutional literature on federalism, separation of powers, federal jurisdiction, and judicial power.

To provide the necessary background on resilience theory as applied to legal systems, Part I explains the distinction between engineering and ecological resilience, the principles of adaptive governance, the place of constitutional doctrine in adaptive governance, and the change modeled by adaptive cycles. Part II uses Bruce Ackerman's theory of constitutional transformations to demonstrate how resilience theory maps onto historical narratives about constitutional governance structures, leading to counterintuitive conclusions about the flexibility of these structures within the expansive regulatory state of the twentieth century.

Parts III and IV turn to recent cases involving federalism and the horizontal separation of powers. Part III explores how the uncertainties of a more flexible (ecologically resilient)

24. See DeCaro et al., *supra* note 22 (stating that the Constitution is there “to provide stability, establish societal norms, and reinforce legal processes at different scales,” but is “rigid” and “difficult to alter”).

25. See *id.* (explaining that when socio-ecological conditions change, rigidity can impact the ability to adapt).

26. See *id.* (“[L]egal sunsets and quasi-legislative and -judicial processes . . . provide windows of opportunity for adaptation.”).

system can create openings for judicial disturbances. In addition, it uses last term's decisions on abortion and gun regulation to illustrate how rigid systems (designed for static engineering resilience) are vulnerable to abrupt transformations to new states. It also explains how views of federalism underlying the *West Virginia v. EPA* decision and other challenges to environmental regulation threaten to undermine the ecologically resilient structures supportive of adaptive governance by replacing them with a static "engineered" vision of constitutional governance. Finally, Part IV examines doctrinal approaches to state and federal authority that may counter these judicial disruptions and support the ecological resilience of our current constitutional system of governance. Additionally, it highlights how these approaches would change the result in *West Virginia* and resolve two critical cases that were before the Supreme Court this past term: one involving the federal government's jurisdiction under the Clean Water Act ("CWA")²⁷ and the other involving California's authority to enact animal welfare laws with substantial out-of-state economic impacts.

I. RESILIENCE THEORY AND LEGAL SYSTEMS

The objective of this Article is not to confront questions of constitutional stability in a vacuum by thinking abstractly about rule-of-law principles. To be sure, the notion of stability necessarily intersects with the vast literature on the rule of law and the values that underpin it.²⁸ Moreover, the adaptive law and governance, which many scholars advocate for as a response to our complex ecological challenges, incorporates rule-of-law values, such as accountability, transparency, and legitimacy.²⁹ Conversely, the certainty and predictability often associated

27. 33 U.S.C. §§ 1251–1387.

28. See, e.g., DeCaro et al., *supra* note 22 ("One of law's primary roles is to establish ground rules for society, creating a sense of security and stability . . .").

29. See Carl Folke et al., *Adaptive Governance of Social-Ecological Systems*, 30 ANN. REV. ENV'T & RES. 441, 449 (2005) ("Issues of legitimacy and accountability are often stressed in the literature on governance, . . . and good governance of ecosystems has been interpreted as solving the trilemma characterized by tensions between effectiveness, participation, and legitimacy . . .").

with the rule of law can be obstacles to adaptive law.³⁰ Consequently, a constitutional design that furthers laws' adaptive capacity must strike a balance between rule-of-law stability and the flexibility that adaptive law requires.

Rather than wading into the definitional debates about constitutional design and the rule of law, this Article asks whether our constitutional governance structures balance stability and flexibility in ways that further its adaptive capacity, focusing especially on current constitutional tensions regarding the separation of powers. To set the stage for this discussion, this Part provides necessary background on resilience theory and adaptive governance.

A. *Engineering vs. Ecological Resilience*

Resilience theory in the field of ecology is grounded in systems thinking and the mathematical modeling enabled by advances in computer technology.³¹ In the 1970s, C.S. Holling developed complex models demonstrating that disturbances to a system may reach a threshold that causes the system to “flip” to a new state or regime.³² Contrary to traditional ecological thinking, transformative shifts are inevitable, and more than one stable state or equilibrium is possible.³³ Fixed rules that do not account for the complex variability of a system, according to

30. *See id.* at 462.

31. Today, resilience theory draws on *complex systems theory*. *See* Craig, *Resilience Theory and Wicked Problems*, *supra* note 20, at 1755–56

Scientists—particularly biologists and ecologists but also computer scientists and information systems analysts—have increasingly recognized that both natural systems and human societies are *complex systems*—that is, systems where seemingly simple entities or components self-organize into intricate and interrelated networks of functions, products, and responses. . . . Examples of complex systems include insect colonies, immune systems, brains, economies—and, many would argue, law.

32. *See* Holling, *Resilience and Stability of Ecological Systems*, *supra* note 19, at 17; *see also* Barbara A. Cosens et al., *Designing Law to Enable Adaptive Governance of Modern Wicked Problems*, 73 VAND. L. REV. 1687, 1714 (2020) (describing the development of resilience theory and adaptive management in ecology).

33. *See* Holling, *Resilience and Stability of Ecological Systems*, *supra* note 19, at 15 (pointing out that while an “equilibrium-centered view” can be appealing, it isn’t always the reality, and a focus on instability can help foster resilience).

Holling, result in less resilience and increase vulnerability to regime shifts.³⁴ To avoid abrupt shifts, ecosystem management must therefore “be flexible, adaptive, and experimental at scales compatible with the scales of critical ecosystem functions.”³⁵ In short, ecosystem management should incorporate the idea of ecological, rather than engineering, resilience.

This distinction between engineering and ecological resilience arises out of a moment in ecosystem sciences when two fields—one dominated by ecology and the other by the physical sciences and engineering—were converging.³⁶ Holling observed that the ecological literature contained two definitions of resilience: “One definition focuses on efficiency, constancy, and predictability—all attributes at the core of engineers’ desires for fail-safe design. The other focuses on persistence, change, and unpredictability—all attributes embraced and celebrated by biologists with an evolutionary perspective.”³⁷ As Holling’s interrogation of these two definitions illustrates, engineering resilience’s focus on “stability near an equilibrium steady state” does not align with the dynamic nature of ecosystems.³⁸

This is so because when natural resources are managed to achieve a predictable return (to achieve engineering resilience), they lose “functional diversity” over time and are more vulnerable to disturbances that can flip systems to new states.³⁹

34. C.S. Holling, *Engineering Resilience Versus Ecological Resilience*, in *ENGINEERING WITHIN ECOLOGICAL CONSTRAINTS* 31, 32 (Peter C. Schulze ed., 1996) [hereinafter *Holling, Engineering Resilience Versus Ecological Resilience*] (explaining that fixed-rule policies “such as constant carrying capacity of cattle or wildlife or constant sustainable yield of fish, wood, or water” lead to “systems that gradually lose resilience and suddenly break down in the face of disturbances that previously could be absorbed”).

35. *Id.* Holling is describing “adaptive management,” discussed more fully below. See C.S. HOLLING ET AL., *Adaptive Environmental Assessment and Management*, in *INTERNATIONAL SERIES ON APPLIED SYSTEMS ANALYSIS* 1, 77 (C.S. Holling ed., 1978) (highlighting a need for adaptive and flexible attitudes when selecting techniques).

36. See Holling, *Engineering Resilience Versus Ecological Resilience*, *supra* note 34, at 31–33 (remarking on the “interdisciplinary efforts” between the two fields and the differences in defining ecosystem structures and functions).

37. *Id.* at 33.

38. *Id.*

39. *Id.* at 36.

In other words, they are less ecologically resilient. Holling describes an example involving the grazing of semiarid grasslands in east and south Africa.⁴⁰ A “dynamic balance” between two types of grasses—one more attractive to grazers but drought sensitive and one less attractive to grazers but drought resistant—depends on periods of intense grazing by large herbivores.⁴¹ When people convert these grasslands to cattle ranching, the “more modest but persistent impact” of moderate levels of grazing supports the drought-sensitive grasses to the detriment of the drought-resistant grasses.⁴² Periods of drought can then cause the system to “flip” to a new state or regime.⁴³

Both engineering and ecological resilience focus on a system’s “stability,” but they seek to stabilize different things. Engineering resilience “focuses on maintaining *efficiency* of function,” while ecological resilience “focuses on maintaining *existence* of function.”⁴⁴ In the grasslands example, moderate cattle grazing sustains the productive grasses preferred by the cattle in the short term, but focusing on short-term efficiency reduces variability, making the system less “functionally diverse” and therefore more vulnerable to abrupt regime shifts.⁴⁵ By shifting the focus to maintenance of functional diversity (the existence of both types of grass), the system can better absorb disturbances, such as drought.⁴⁶

This approach reflects the view of “ecosystems as complex adaptive systems” subject to uncertainty and nonlinear

40. *See id.*

41. *See id.*

42. *Id.*

43. *See id.* Craig offers the following examples of regime shifts in social-ecological systems—one ecological and one social:

[I]n response to nutrient pollution, a freshwater lake can undergo a regime shift that transforms it from a clear, cold, trout-supporting ecosystem to a warm, algae-dominated eutrophic system. A social system dominated by a dictatorial political regime can reach a “tipping point” when levels of education and economic opportunity in a society prompt democratic regime changes.

Craig, *Resilience Theory and Wicked Problems*, *supra* note 20, at 1759.

44. Holling, *Engineering Resilience Versus Ecological Resilience*, *supra* note 34, at 33.

45. *See id.*

46. *See id.*

change.⁴⁷ Approaches that manage individual resources based on principles, such as maximum sustainable yield, at one scale, lessen the system's adaptive capacity to the contemporary challenges of climate change and biodiversity loss.⁴⁸ The adaptive capacity (ecological resilience) of an ecosystem requires a "focus on managing essential ecological processes that sustain the delivery of harvestable resources and ecosystem services at multiple scales."⁴⁹ We measure ecological resilience by assessing "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks."⁵⁰

In contrast, engineering resilience focuses on maintaining and restoring ecosystems to a single (desired) steady-state equilibrium.⁵¹ Conceptions of sustainability often incorporate this idea of stability or balance—the notion that social-ecological systems operate within a defined range of variability over time.⁵² But climate change and other ecological disruptions have shattered these assumptions.⁵³ Unpredictability, variability, and nonlinear change are the new defining properties of social-ecological systems.⁵⁴ This new reality makes resilience, rather than sustainability, a more accurate and productive framework for environmental law and governance.⁵⁵

47. Folke et al., *supra* note 29, at 443.

48. *See id.* at 446 (exploring the ways in which "change[s] in resource and ecosystem management" can be combatted with converging scientific and local knowledge to allow for more adaptive responses).

49. *Id.* at 443.

50. Brian Walker et al., *Resilience, Adaptability and Transformability in Social-Ecological Systems*, *ECOLOGY & SOC'Y* (Sept. 16, 2004), <https://perma.cc/85R7-PAZJ> (PDF).

51. *See* MELINDA HARM BENSON & ROBIN KUNDIS CRAIG, *THE END OF SUSTAINABILITY: RESILIENCE AND THE FUTURE OF ENVIRONMENTAL GOVERNANCE IN THE ANTHROPOCENE* 57 (2017).

52. *See id.*

53. *See id.* at 58.

54. *See id.*

55. *See id.* at 57 ("[Engineering resilience] *can* work—but only on a small scale, over the short term, and under relatively stable ecological conditions."); *see also* Robert L. Fischman, *Letting Go of Stability: Resilience and Environmental Law*, 94 *IND. L.J.* 689, 698 (2019) ("Rather than simplify [complex social-ecological systems] into sustained outputs, resilience recognizes that dynamic conditions (and our understanding of them) are relatively unpredictable.").

B. *Adaptive Governance*

The adaptive capacity of ecological systems does not exist outside the human or social environment. Resilience scholars now refer to “social-ecological systems” and recognize the complexity of social systems, including legal systems, interacting at various scales and creating “powerful reciprocal feedbacks.”⁵⁶ Adaptive governance is part of the “social dimension” of a social-ecological system.⁵⁷ In connecting resilience theory to adaptive governance, Robin Kundis Craig cogently observes “[i]f resilience theory is a scientific model of continual change in complex ecological and social-ecological systems, then adaptive governance is the legal and policy response to that same reality.”⁵⁸

In early work on adaptive governance, scholars identified three governance principles critical to adapting to complex environmental problems like climate change: (1) analytic deliberation, (2) nesting, and (3) institutional variety.⁵⁹ Informed analytic deliberation among stakeholders can facilitate trust (social capital) and change while mitigating

56. Folke et al., *supra* note 29, at 443.

57. *Id.* at 444. As Robert Fischman notes, the term “social-ecological system” is a “term associated with the ‘Ostrom School’ of political science.” Fischman, *supra* note 55, at 698. He describes how Ostrom extended the concept of ecological resilience to the social domain to “describe resilience as ‘the amount of disruption needed to transform a system from one stability domain . . . to another.’” *Id.* (quoting Elinor Ostrom & Marco A. Janssen, *Multi-Level Governance and Resilience of Social-Ecological Systems*, in *GLOBALISATION, POVERTY AND CONFLICT* 247 (Max Spoor ed., 2004)). As for the phrase “adaptive governance,” in a 2003 article, three social scientists explained that they chose “adaptive governance” rather than “adaptive management” to “convey[] the difficulty of control, the need to proceed in the face of substantial uncertainty, and the importance of dealing with diversity and reconciling conflict among people” Thomas Dietz et al., *The Struggle to Govern the Commons*, 302 *SCIENCE* 1907, 1911 n.28 (2003). Some commentators give Dietz, Ostrom, and Stern credit for coining the phrase “adaptive governance.” See Cosens et al., *supra* note 32, at 1716–17 (“[Ostrom] collaborated with Dietz et al. in coining the term ‘adaptive governance’ and identifying the conditions under which robust locally based adaptive governance is possible.”). *But see* Craig, *Resilience Theory and Wicked Problems*, *supra* note 20, at 1770 (noting that the “concept existed earlier”).

58. Craig, *Resilience Theory and Wicked Problems*, *supra* note 20, at 1770.

59. See Dietz et al., *supra* note 57, at 1910 (explaining these three “general principles for robust governance institutions for localized resources” are “well established as a result of multiple empirical studies”).

conflict.⁶⁰ Nesting refers to “institutional arrangements” that are “complex, redundant, and nested in many layers.”⁶¹ And institutional variety captures the need for governance to use multiple and varied rules and strategies (including command and control regulation, market-based regulation, and self-governing communities) to make rule evasion more difficult.⁶²

Although scholars have since used the phrase “adaptive governance” to encompass a great deal more, these three principles continue to capture its key elements. The literature has elaborated on the idea of analytic deliberation to emphasize broad-based participation by public and private actors across multiple scales.⁶³ In addition, the concepts of nesting and institutional variety are often captured in the idea of “polycentric institutions,” which operate at multiple scales and employ a mix of rules and strategies.⁶⁴ Nesting, or multilevel governance, empowers decision making and innovation at the local scale of the problem in accordance with standards or goals set at a higher level.⁶⁵

Some scholars add attributes of decision making—including “experimentation, learning, and participation”⁶⁶—to the definition of adaptive governance, but these attributes are also

60. *See id.*

61. *Id.*

62. *See id.* (“Governance should employ mixtures of institutional types . . . that employ a variety of decision rules to change incentives, increase information, monitor use, and induce compliance.”).

63. *See id.* (presenting analytic deliberation as a primary method for obtaining consensus on governance rules and United States regulations).

64. In her work on management of common-pool resources, Elinor Ostrom described a polycentric governance system as a system with “multiple governing authorities at differing scales.” ELINOR OSTROM, UNDERSTANDING INSTITUTIONAL DIVERSITY 283 (2005). These authorities vary from “general-purpose governments” to “highly specialized” entities and can include self-governing units such as “special districts, private associations, or parts of a local government” that are “nested” in other levels of government. *Id.*

65. *See* Dietz et al., *supra* note 57, at 1910 (explaining failures of central governments exerting sole authority over resources instead of employing nesting strategies).

66. Stefania Munaretto et al., *Integrating Adaptive Governance and Participatory Multicriteria Methods: A Framework for Climate Adaptation Governance*, ECOLOGY & SOC’Y (June 2014), <https://perma.cc/E36B-BWE5> (PDF).

associated with adaptive management, an approach to agency decision making that facilitates learning by doing in contexts of high uncertainty and low risk.⁶⁷ In contrast to conventional agency approaches to resource management, adaptive management allows agencies to monitor the efficacy of their actions and modify their approaches without engaging in the time-and-resource-consuming processes of administrative rulemaking.⁶⁸ Legal scholars have developed a rich literature on how to incorporate adaptive management into current regulatory structures governing natural resources.⁶⁹ This

67. See Robin Kundis Craig & J.B. Ruhl, *Designing Administrative Law for Adaptive Management*, 67 VAND. L. REV. 1, 20 (2014) (“The main thrust of adaptive management is to reduce uncertainty through integrative learning fostered in a structured, iterative decisionmaking [sic] process. This approach is most relevant for dynamic regulatory contexts . . . in which uncertainty and controllability are high and risk is low.”).

68. See *id.* at 7 (explaining that adaptive management allows the timing of agency decisions to be spread out by following a structured, multistep protocol).

69. See, e.g., Alejandro E. Camacho, *Adapting Governance to Climate Change: Managing Uncertainty Through a Learning Infrastructure*, 59 EMORY L.J. 1, 7–8 (2009) (proposing adaptive governance as a strategy for addressing climate effects); Robin Kundis Craig, “Stationarity Is Dead”—*Long Live Transformation: Five Principles for Climate Change Adaptation Law*, 34 HARV. ENV’T L. REV. 9, 40 (2010) (advocating for natural resources law to encompass assumptions of unpredictable and nonlinear change); Donald A. Falk, *The Resilience Dilemma: Incorporating Global Change into Ecosystem Policy and Management*, 48 ARIZ. ST. L.J. 145, 156 (2016) (utilizing wildfires to demonstrate the importance of resilience in ecosystems and the necessity for land management policies to adapt); Ahjond S. Garmestani et al., *Panarchy, Adaptive Management and Governance: Policy Options for Building Resilience*, 87 NEB. L. REV. 1036, 1053 (2009) (advocating for bridging organizations to create communication between large and small scale institutions and ecosystems to manage natural resources); Robert L. Glicksman & Jarryd Page, *Adaptive Management and NEPA: How to Reconcile Predictive Assessment in the Face of Uncertainty with Natural Resource Management Flexibility and Success*, 46 HARV. ENV’T L. REV. 121, 125 (2022) (exploring whether the National Environmental Policy Act’s “front-end, forward-looking approach” can be reconciled with the adaptive management process); Hillary M. Hoffmann, *Climate Change and the Decline of the Federal Range: Is Adaptive Management the Solution?*, 15 VT. J. ENV’T L. 262, 265 (2014) (advocating for incorporating adaptive management into current livestock grazing management of the federal rangeland); Kai N. Lee & Jody Lawrence, *Adaptive Management: Learning from the Columbia River Basin Fish and Wildlife Program*, 16 ENV’T L. 431, 435–41 (1986) (explaining benefits of an adaptive management program for fish and wildlife, stating that it is “the largest effort at biological restoration in the world”); Bryan G. Norton,

literature challenges environmental law's adherence to "a preservationist paradigm" that seeks "maintenance of and restoration to baseline historical conditions," recognizing the core insight of ecological resilience theory: ecosystems are not frozen in time, but are instead unpredictable and increasingly uncertain in a warming world.⁷⁰

Adaptive governance can facilitate adaptive management by creating the nested institutions that enable local innovation and the flexible standards that allow for an iterative process of learning by doing.⁷¹ Indeed, scholarly reflections on adaptive governance acknowledge that "the simplest definition . . . is the governance needed to implement adaptive management."⁷² The authors, however, ultimately reject this definition, noting that recent scholarship understands adaptive governance broadly to include "what is necessary to manage resilience (i.e., the

The Rebirth of Environmentalism as Pragmatic, Adaptive Management, 24 VA. ENV'T. L.J. 353, 366–69 (2005) (describing how hierarchy theory and adaptive management can assist in management of environmental resources and sustainability); J.B. Ruhl & Robert L. Fischman, *Adaptive Management in the Courts*, 95 MINN. L. REV. 424, 427 (2010) (examining how adaptive management is evaluated in judicial opinions); J.B. Ruhl, *Regulation by Adaptive Management—Is It Possible?*, 7 MINN. J.L. SCI. & TECH. 21, 30 (2005) (noting that agencies need to be able to respond to changing conditions at the "back end" rather than all at the "front end" of decision-making, a distinction that "captures the essence of adaptive management"); J.B. Ruhl, *Taking Adaptive Management Seriously: A Case Study of the Endangered Species Act*, 52 U. KAN. L. REV. 1249, 1252–53 (2004) (applying the "front end/back end" test to the Endangered Species Act statutory structure); Courtney Schultz & Martin Nie, *Decision-Making Triggers, Adaptive Management, and Natural Resources Law and Planning*, 52 NAT. RES. J. 443, 445 (2012) (analyzing the use of pre-negotiated commitments, or "triggers," in the adaptive management of natural resources, while considering the need to ensure greater political accountability).

70. Robin Kundis Craig et al., *Balancing Stability and Flexibility in Adaptive Governance: An Analysis of Tools Available in U.S. Environmental Law*, ECOLOGY & SOC'Y (2017), <https://perma.cc/65T6-J8LC> (PDF).

71. See J.B. Ruhl et al., *Resilience of Legal Systems: Toward Adaptive Governance*, in MULTISYSTEMIC RESILIENCE: ADAPTATION AND TRANSFORMATION IN CONTEXTS OF CHANGE 523 (Michael Ungar ed., 2021) (explaining that "adaptive management focuses on *instrument* design for decision-making at the microscale" and situating the legal scholarship regarding adaptive governance as a search for "the governance regime in which adaptive management of complex social-ecological systems might work").

72. Cosens et al., *supra* note 32, at 1715.

behavior of complex systems).⁷³ Adaptive governance therefore refers to the institutions, networks, and structures at multiple scales across which individuals collaborate in managing ecosystem resilience—often employing the strategies of adaptive management.⁷⁴ A useful way to differentiate the two concepts is to say that “governance creates a vision and management actualizes the vision.”⁷⁵

Substantial literature explores the role of law and governance in managing the resiliency of social-ecological systems subject to uncertainty and change. Often, adaptive governance reflects its origins in Elinor Ostrom’s work on collective action and self-governing communities by focusing on the legal and institutional design principles that facilitate the emergence of collective action (self-organization) and collaboration in the face of complex problems.⁷⁶ At a broad level of generality, these design principles include “flexibility, decision making authority . . . cooperation, and social-ecological fit.”⁷⁷ Other objectives furthered by adaptive governance include polycentric institutions, collaboration, experimentation, participation, and learning.⁷⁸ In formulating these principles,

73. *Id.*

74. See Ahjond S. Garmestani & Melinda Harm Benson, *A Framework for Resilience-Based Governance of Social-Ecological Systems*, *ECOLOGY & SOC’Y* (Mar. 2013), <https://perma.cc/CRV3-2YYZ> (PDF) (“Adaptive governance is a form of governance that is dependent upon adaptive management and incorporates formal institutions, informal groups/networks, and individuals at multiple scales for purposes of collaborative environmental management.”).

75. *Id.*

76. See, e.g., Craig et al., *supra* note 70 (outlining four principles of environmental governance arrangements: shared decision making, popular accountability, transparency, conflict resolution); DeCaro et al., *supra* note 22 (“We define ‘design principles’ as features of legal and other rule-governed, i.e., institutional, systems that may be especially important enabling conditions for self-organization and adaptation within complex governance systems.”).

77. DeCaro et al., *supra* note 22.

78. See Munaretto et al., *supra* note 66 (listing several key features of adaptive governance). Some scholars discuss these features as components of “adaptive law.” See Craig Anthony Arnold & Lance H. Gunderson, *Adaptive Law and Resilience*, in *SOCIAL-ECOLOGICAL RESILIENCE AND LAW* 319 (Ahjond S. Garmestani & Craig R. Allen eds., 2014) (explaining that adaptive law reflects polycentricism (multiple centers of authority) and integrationist multimodality (various methods) at multiple scales); Ruhl et al., *supra* note 71, at 522 (describing adaptive law as a component of adaptive governance that “searches for arrangements of legal institutions and instruments,

resilience scholars acknowledge their intersection with other areas of governance scholarship, including the literature on dynamic federalism, collaborative governance, and new governance.⁷⁹ Moreover, scholars agree that these institutional principles function most effectively when applied at the local level to particular resource systems as part of managing gradual change under conditions of uncertainty.⁸⁰

C. *Constitutional Governance's Place in Adaptive Governance*

What role—if any—do constitutional structures play in the literature on resilience of social-ecological systems? The short answer is that they receive little attention. This is not terribly surprising. As noted above, the concept of adaptive governance has its origins in Ostrom's work on self-governing communities, and adaptive management seeks to modify conventional regulatory approaches to address the new ecological reality of multistate, changing ecosystems.⁸¹ Both are focused on facilitating emergent local governance to manage common pool resources and ecosystem services.⁸² Indeed, the concept of resilience has even inspired a strain of scholarship that explores the ecological resilience of local, urban environments.⁸³

This does not mean, of course, that constitutional structures are irrelevant. One of the core components of resilience thinking and adaptive governance is polycentrism, the idea of “multiple, nested, and redundant centers of power”⁸⁴ employing a mix of regulatory strategies. Moreover, legal scholars applying

operating in public, private, and hybrid spheres, that optimize the opportunities for adaptive capacity at macroscales of social-ecological system management”).

79. See DeCaro et al., *supra* note 22 (outlining other areas of governance scholarship and drawing from those influences to build a framework for analyzing the role of law in creating “favorable conditions for adaptation”).

80. See Munaretto et al., *supra* note 66 (stating that adaptive governance functions best for “small-scale and well-defined resource systems”).

81. See *supra* note 58 and accompanying text.

82. See OSTROM, *supra* note 64, at 281–82 (presenting the advantages of and limits to organizing the governance of common-pool resources).

83. See, e.g., Jonathan Rosenbloom, *Fifty Shades of Gray Infrastructure: Land Use and the Failure to Create Resilient Cities*, 93 WASH. L. REV. 317, 320–21 (2018) (recognizing that infrastructure on private property greatly affects resilience to climate change).

84. Munaretto et al., *supra* note 66.

resilience theory emphasize that the local strategies for innovation and learning regarding ecosystem management must be guided by “clear, legally binding goals and standards” set at a higher scale of government.⁸⁵ Adaptive management endorses flexibility (along with public participation) in implementing these standards at the local levels and flexibility in setting standards at the higher level.⁸⁶ In addition to furthering adaptive capacity, this bounded discretion, along with oversight and judicial review, ensures accountability and legitimacy.⁸⁷

The governmental structures contemplated by adaptive governance clearly map onto familiar arrangements of cooperative federalism in the United States.⁸⁸ Not surprisingly,

85. Cosens et al., *supra* note 32, at 1727.

86. *See id.* at 1729 (“In a nested system of government, the level closest to the problem must have flexibility in implementation with public participation as the means to ensure legitimacy in the exercise of that flexibility . . .”). Higher levels of government may also review collaborative solutions “to ensure legitimacy, inclusion, and relation to a problem and a springboard for grant funding or legislation to institutionalize the solution.” *Id.* at 1731.

87. *See id.* at 1727–29 (highlighting that governmental leadership and judicial review are “essential to assure equitable participatory processes”).

88. *See, e.g.*, Judith Resnik, *Federalism(s) Forms and Norms: Contesting Rights, De-Essentializing Jurisdictional Divides, and Temporizing Accommodations*, in *FEDERALISM AND SUBSIDIARITY* 363 (James E. Fleming & Jacob T. Levy eds., 2014) (arguing that federalism does not require stability of political units and that domains of authority are constantly renegotiated as conflicts emerge); ROBERT A. SCHAPIRO, *POLYPHONIC FEDERALISM: TOWARD THE PROTECTION OF FUNDAMENTAL RIGHTS* 90 (2009) (“State implementation of federal regulatory regimes provides a prime example of the operation of cooperative federalism.”); David E. Adelman & Kirsten H. Engel, *Adaptive Federalism: The Case Against Reallocating Environmental Regulatory Authority*, 92 *MINN. L. REV.* 1796, 1800–01 (2008) (exploring environmental federalism and arguing that “an adaptive model of federalism is well suited to the complexity of the problems native to environmental policy”); William W. Buzbee, *Interaction’s Promise: Preemption Policy Shifts, Risk Regulation, and Experimentalism Lessons*, 57 *EMORY L.J.* 145, 145 (2007) (discussing the importance of “ceiling preemption” and how it interacts with environmental regulation); Kirsten H. Engel, *Harnessing the Benefits of Dynamic Federalism in Environmental Law*, 56 *EMORY L.J.* 159, 162 (2006) (viewing the states and the federal government as alternative, as opposed to exclusive, sources of regulatory authority in environmental federalism); Heather Gerken, *Foreward: Federalism All the Way Down*, 124 *HARV. L. REV.* 4, 8 (2010) (advocating for federalism as minority rule without sovereignty and highlighting the role administrative units can play in the democratic system);

legal scholars often embrace constitutional structures that further “democratic experimentalism” through cooperative federalism and broad delegations of policy authority from Congress to executive agencies.⁸⁹ One critical point to underscore is the role of clear, binding standards at the federal level.⁹⁰ Although much of environmental law today gives decision makers broad discretion, that discretion is limited by quantifiable federal standards, such as the National Ambient Air Quality Standards (“NAAQS”), or by inflexible directives, such as the Endangered Species Act’s (“ESA”) no jeopardy provision.⁹¹

Despite the importance of constitutional structures in facilitating adaptive governance, when resilience scholars explicitly recognize constitutional law, they tend to characterize the Constitution as a resilient document in an engineering rather than ecological sense. As J.B. Ruhl has noted, the Constitution’s “engineered structure and process design is so enduring that flips to new equilibrium states—the so-called ‘constitutional moments’—are quite rare.”⁹² Although the Reconstruction Amendments and the New Deal era constitute such moments, they happen infrequently, “setting a high threshold for change.”⁹³ Indeed, Ruhl identifies the horizontal

DeCaro et al., *supra* note 22 (exploring the concept of dynamic federalism and advocating for formal incorporation in environmental governance).

89. See Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 267 (1998) (identifying a new form of government “in which power is decentralized to enable citizens . . . to utilize their knowledge to fit solutions to their individual circumstances, but in which regional and national coordinating bodies require actors to share their knowledge with others facing similar problems”).

90. See *id.* at 428 (indicating that a crucial inquiry surrounding federal regulation is “whether the federal government has treated the states purely as instruments of its national will, or by contrast, as partners in policy formulation and implementation”).

91. See Fischman, *supra* note 55, at 714–15 (“[T]o replace conceptually flawed yet practically powerful objectives with vague missions to garden ecosystems is a recipe for failure. Voluntary, polycentric collaborative conservation is the gold (green?) standard for successful environmental management. But strict legal thresholds undergird such successes.”).

92. J.B. Ruhl, *General Design Principles for Resilience and Adaptive Capacity in Legal Systems—With Applications to Climate Change Adaptation*, 89 N.C. L. REV. 1373, 1380–81 (2011).

93. Ruhl et al., *supra* note 71, at 513. The authors recognize manifestations of both engineering and ecological resilience within legal

separation of powers as promoting engineering resilience (in the sense of stability) in environmental law by “reduc[ing] the propensity for any one institution, such as the executive, to move too far in one direction without other institutions, such as the judiciary, weighing in.”⁹⁴

Constitutional governance structures also map nicely onto a ball-on-the-surface analogy.⁹⁵ As Ruhl explains, structure (e.g., separation of powers) and process (e.g., agency procedures) define complex adaptive structures, such as the legal system.⁹⁶ They form the “shape of the resilience ‘basin of attraction’ and produce system behavior in the form of actual decisions of executives, legislatures, courts, and agencies, which is where the ‘ball’ is in the bowl [or surface] at any time.”⁹⁷ The design of the surface (or bowl) affects how the system responds to internal and external variables, and, therefore, how it adapts or transforms over time.⁹⁸ Social-ecological systems exist today in states of high variability and uncertainty.⁹⁹ This generally supports approaches based on ecological resilience.¹⁰⁰ But the structural design choices are also normative.¹⁰¹ Ruhl notes the

systems. *Id.* at 517. They propose using five characteristics to evaluate the adaptive capacity of legal systems: reliability, efficiency, scalability, modularity, and evolvability. *Id.* at 517–20. The first two qualities, reliability and efficiency, overlap with procedural rule-of-law values that further law’s predictability and stability over time (engineering resilience). *See id.* at 517. In contrast, the last three qualities promote flexibility and align with ecological resilience. *See id.*

94. *Id.* at 518; *see also* Craig et al., *supra* note 70 (noting the horizontal separation of powers as “constraining governance flexibility” to ensure the stability of a democratic government).

95. *See* F. STUART CHAPIN III ET AL., PRINCIPLES OF ECOSYSTEM STEWARDSHIP: RESILIENCE-BASED NATURAL RESOURCE MANAGEMENT IN A CHANGING WORLD 11 (2009) (diagram of the ball-on-the-surface analogy).

96. *See* Ruhl et al., *supra* note 71, at 512.

97. *Id.*

98. *See id.*

99. *See* Ruhl, *supra* note 92, at 1386 (explaining that it is a dangerous myth to assume that “the variability of natural systems can be effectively controlled” and “the consequences are predictable”).

100. *See id.* (indicating that “engineering resilience strategies pose a higher risk of catastrophic failure” when there is high variability and uncertainty, and favoring ecological resilience strategies in those conditions).

101. *See id.* at 1387 (conceding that “some foundational normative principles” may be preferable in order to “stick close to equilibrium conditions”).

freedoms of speech and religion as examples, positing that we may not “want the ‘ball’ to be able to stray far from the bottom of the bowl” when it comes to such freedoms.¹⁰² Proponents of these rights might therefore favor the rigidity of engineering resilience over the flexibility of ecological resilience.

Ideally, an adaptive legal system would strike the “right” balance between stability and flexibility—a challenging undertaking to say the least.¹⁰³ As scholarship on adaptive management recognizes, conventional regulatory processes in environmental law are not flexible; they do not allow decision makers to adapt their management techniques through experimentation and learning by doing.¹⁰⁴ Administrative law is often an obstacle to adaptation because it imposes new time-consuming procedures when agencies change their approaches, and these decisions are often subject to lengthy judicial review procedures.¹⁰⁵

On the other hand, public participation and judicial oversight are critical in furthering accountability and legitimacy.¹⁰⁶ The challenge is in finding “the optimal trade-off between stability and flexibility that produces neither too much rigidity nor too much room for arbitrary decision-making.”¹⁰⁷ One form of rigidity (relevant to constitutional structures) is

102. *Id.*

103. See Ruhl et al., *supra* note 71, at 524 (acknowledging the tension between “transparency, legitimacy, and accountability” and the “flexibility and dynamism” required for adaptive governance and adaptive management).

104. See Craig & Ruhl, *supra* note 67, at 7 (“The idea of adaptive management is that agencies should be free to make more decisions, but that the timing of those decisions is spread out into a continuous process that makes differentiating between the ‘front end’ and ‘back end’ of decisionmaking [sic] much less relevant.”).

105. See *id.* at 4 (acknowledging that agency decision making is constrained by “intense public participation” and “postdecision [sic] hard look judicial review”).

106. See *id.* at 29 (“[P]ublic participation in agency decisionmaking [sic] is valuable for its own sake, but it also promotes administrative legitimacy and public acceptance, encourages the agency’s consideration of diverse and divergent points of view, promotes transparency in agency decisionmaking [sic], checks unbridled agency discretion, and increases the amount of information available to decisionmakers . . .”).

107. Ruhl et al., *supra* note 71, at 524; see also Craig et al., *supra* note 70 (“[T]oo much or too little procedural flexibility in the wrong factual situations can lead to, respectively, arbitrariness or rigidity traps.”).

“the inability of a governance institution (such as a legislature or a court) to recognize and act on changing community and societal values.”¹⁰⁸ More flexible governance allows society to adapt to changing norms but risks undermining consistency and therefore core values of due process and equal treatment.¹⁰⁹

Indeed, because the structural dimensions of governmental power have allowed for flexibility in the development of environmental law, administrative processes seemed the greater obstacle for adaptive management.¹¹⁰ But this may be changing. As Parts III and IV explain, constitutional doctrines regarding the separation of powers are on the precipice of potential transformation. The environmental law community may have overestimated the extent to which the tradeoff between rigidity and arbitrariness in delegating power to agencies is a well-established norm.

D. *Adaptive Cycles*

Before turning to an examination of how well resilience theory maps onto narratives about constitutional change and doctrine, we need to acknowledge that these doctrines are not static and that constitutional structures are not defined solely by the Constitution’s formal text. Resilience thinking counsels that constitutional structures are components of a complex adaptive system.¹¹¹ As such, these structures are embedded in layers of subsystems, each subject to adaptive cycles in response to various disturbances and interacting with each other in different temporal and spatial scales (a complex dynamic termed “panarchy”).¹¹²

108. Craig et al., *supra* note 70.

109. *See id.* (“Important public values such as equal treatment, due process, and procedural fairness depend on stable governance institutions and consistent administration.”).

110. *See id.* (“Rigidity in federal administrative law, for example, thwarts increased efforts by federal agencies to engage in adaptive management.”).

111. *See generally* Candace K. May, *Complex Adaptive Governance Systems: A Framework to Understand Institutions, Organizations, and People in Socio-Ecological Systems*, SOCIO-ECOLOGICAL PRAC. RSCH. (2022), <https://perma.cc/QGN9-45HL> (PDF).

112. *See* CHAPIN III ET AL., *supra* note 95, at 17 (defining “panarchy” as “interactions and feedbacks among . . . adaptive cycles operating at different

For this reason, a brief overview of adaptive cycles is critical before we can map resilience theory onto constitutional governance structures. Adaptive cycles describe a four-state process whereby systems adapt to critical disturbances outside short-term gradual change.¹¹³ In response to such a disturbance, a system can “regenerate to a similar state or be transformed to some new state.”¹¹⁴ Disturbances, such as a forest fire or economic collapse, can trigger this phase, which is called “release.”¹¹⁵ It is followed by a period of “renewal,” which may lead to a similar state or a regime shift to a more or less desirable state.¹¹⁶ This stage is followed by “growth” and a period of “conservation,” during which the system becomes more complex and more vulnerable to disturbances triggering a new cycle.¹¹⁷

At the conservation stage, management objectives often reflect the efficiency goals of engineering resilience (e.g., sustainable harvesting or flood control) that seek to prevent even small-scale change, but unintentionally increase vulnerability to larger-scale change.¹¹⁸ For example, a reduction in flooding because of an engineered approach to flood control could lead to increased development in a floodplain, which increases vulnerability to a future large flood.¹¹⁹ Agricultural land management practices designed to optimize crop yields may lead to increased land applications of nutrients that make a lake vulnerable to a regime shift to a eutrophic state defined

temporal and spatial scales [that] account for the overall dynamics of the system”).

113. *See id.* at 15–16 (stating that “adaptive cycles provide a framework for describing the role of disturbance in social-ecological systems” through a series of phases, namely the release phase, the renewal phase, the growth phase, and the conservation phase).

114. *Id.* at 15.

115. *See id.* (“The [adaptive] cycle may be initiated by a disturbance such as a stand-replacing wildfire that causes a rapid change in most properties of the system. . . . This release phase occurs in hours to days and radically reduces the structural complexity of the system.”).

116. *See id.* at 16; *see also* Craig, *Resilience Theory and Wicked Problems*, *supra* note 20, at 1760 (labeling the renewal phase as “reorganization” and describing how this phase can be chaotic and unpredictable).

117. CHAPIN III ET AL., *supra* note 95, at 16.

118. *See id.*

119. *Id.* at 17.

by the presence of blue-green algae.¹²⁰ We might even understand large-scale economic disturbances (such as inflation) as vulnerabilities created by an engineering approach to economic growth which sought to suppress short-term or smaller-scale disturbances (such as a lower interest rate or price increases).¹²¹

As these examples illustrate, adaptive governance in service of ecological resilience does not always seek to stabilize rather than transform. As Robert Fischman has emphasized, “[e]quating resilience in environmental law with strengthening social-ecological systems by resisting phase changes is a blinkered misunderstanding of resilience as sustainability.”¹²² From a normative standpoint, we may seek legal and social reforms that transform watersheds and water bodies like the eutrophic lake into a more desirable state that supports functional diversity and ecosystem services. Likewise, to further a low-carbon energy economy, the complex social-ecological systems underpinning our current energy system must undergo transformative change as well.¹²³ But no system state is static, making the ball-on-the-surface analogy a useful way to visualize system change. Because each transformation affects the dynamics of a complex adaptive system, the shape of the surface is constantly changing, complicating predictions about how the ball (or current system) will react and which future states are likely.¹²⁴

Notably, resilience theory does not incorporate normative judgments about which of these future states are desirable.

120. *See id.* at 206–07.

121. Rana Foroohar, CNN global analyst, explained during an interview, [R]ecessions and recoveries have to happen. . . . That process used to happen in a gentler way, over a shorter period of time. . . . [But now], because of our reliance on easy money . . . instead of having a political system that can actually create longer term, bigger solutions . . . we’ve gotten used to the Fed stretching out the business cycle. So it’s now like ten year cycles of expansion. But then when you get a contraction, it’s bigger, so there’s more pain.

Jonathan Chang & Meghna Chakrabarti, *Inflation, Record-High Gas Prices, Interest Hikes: Making Sense of Our Confusing Economy*, WBUR (June 27, 2022), <https://perma.cc/4MKX-PS8W>.

122. Fischman, *supra* note 55, at 702.

123. *See id.*

124. *See* CHAPIN III ET AL., *supra* note 95, at 12.

Rather, resilience thinking evaluates whether systems are resilient and to what and for whom they are resilient.¹²⁵ Despite this caveat, other scholars have rightly noted that, in practice, the concept of resilience often implies normative judgments. Shalanda Baker has argued that talk of a resilient grid obscures the history of racism and injustice inflicted by the fossil fuel industry.¹²⁶ She describes how resilience in energy policy focuses on “resilience of the fuel supply rather than on opportunities to incentivize energy solutions that reduce burdens on communities impacted by the existing system.”¹²⁷ Baker’s critique reminds us that resilience carries many meanings, and because the concept of resilience is contingent, it must be put in context. But although Baker accurately describes how resilience is sometimes used in energy policy, resilience thinking as applied to social-ecological systems does not adopt this definition. Systems do not exhibit single, steady-state equilibria that can be preserved “intact.”

In short, the concept of resilience applied in this Article does not incorporate norms or values.¹²⁸ It is not a “panacea” that

125. See Ruhl et al., *supra* note 71, at 509 (“Translating the definition of resilience into legal systems research requires an understanding of the function, structure, feedbacks, and therefore identity of legal systems (the *of what*) and the kind of shocks they experience (the *to what*).”).

126. See Shalanda H. Baker, *Anti-Resilience: A Roadmap for Transformational Justice Within the Energy System*, 54 HARV. C.R.-C.L. L. REV. 1, 10 (2019) (“Black and brown bodies have always borne the burden of the United States’ energy system.”).

127. *Id.* at 27.

128. For another critique of resilience theory’s application to social systems in that it is incompatible with contemporary theories and methods in the social sciences, see Lennart Olsson et al., *Why Resilience Is Unappealing to Social Science: Theoretical and Empirical Investigations of the Scientific Use of Resilience*, SCI. ADVANCES, May 2015, at 1–2, 5. In this view, although systems theory may have explanatory power in the natural sciences, it falls short in the social realm because it does not incorporate “agency, conflict, knowledge, and power, which are core social science concepts.” *Id.* at 2. But this critique does not undermine the usefulness of resilience theory. Although it accurately describes what resilience theory does not do (i.e., explain the role of norms, agency, and power imbalances), resilience theory does not claim to be a complete theory of social change. Other critics have characterized resilience theory as functionalist. The irony is that this critique charges resilience theory with a bias toward a static steady-state view of society (the very idea that ecological resilience challenges). This argument seems to misunderstand core tenets of resilience theory. Change is not necessarily slow or orderly; it is unpredictable, nonlinear, and uncertain. Moreover, the result

seeks to explain or solve social and ecological problems.¹²⁹ It does, however, provide a useful framework for understanding the complexity of social-ecological systems in the context of nonlinear, unpredictable change. And it does not keep us from managing for resilience in ways that reflect our normative commitments.

II. VIEWING CONSTITUTIONAL GOVERNANCE STRUCTURES THROUGH A RESILIENCE LENS: THE NEW DEAL REGIME

Having made the case for applying resilience theory to constitutional design generally, this Part applies it to the dynamics of constitutional governance structures that allocate power among branches and levels of government. To do so, it draws on resilience concepts, including both engineering and ecological resilience, discussed above. If resilience theory helps understand the adaptive capacity of these structures, then we can turn to the normative question of how to fortify or strengthen that capacity in the context of a warming world.

Before we can ask whether resilience theory maps onto constitutional governance structures, we must determine what these structures are. This is a descriptive enterprise, not a normative one, although scholars often mix these two dimensions. The legal scholarship applying resilience theory does not examine constitutional structures, but when it does, it refers only to basic textual commands in the Constitution regarding the separation of powers among the federal branches and the separation of powers between the federal government and the states. The assumption is that these formal structures are mostly static and resilient in the engineering sense.

But this assessment of constitutional governance turns on the basic notion that the Constitution seeks to prevent tyranny through diffusion of governmental powers. It does not describe

of change (the equivalent of release in an adaptive cycle) may not be desirable from a social perspective. *See* Fischman, *supra* note 55, at 710 (“Resilience as an organizing principle can promise neither to resist change nor to sustain prior outputs from social-ecological systems.”).

129. *See* ELINOR OSTROM, SUSTAINABLE SOCIAL-ECOLOGICAL SYSTEMS: AN IMPOSSIBILITY? 1 (2007), <https://perma.cc/LZC9-VUJ7> (PDF) (seeking to counter “the presumption that scholars have the tools to make *simple*, predictive models of linked social-ecological systems and deduce the universal solution—a panacea—to problems of overuse or destruction of resources”).

how this diffusion of power operates over time and space. To do that, we need to turn to accounts of constitutional history and examine how constitutional governance has evolved since the founding. Looking only at the formal text of the Constitution tells us very little about how governmental institutions have functioned and interacted over time. And it provides no insight into administrative law and the regulatory structures that govern environmental problems today.

An account that moves beyond constitutional text and seeks to explain constitutional change is Bruce Ackerman's theory of constitutional transformations.¹³⁰ This theory is often referred to as one of "constitutional moments," but this oversimplifies the processes that he describes. The core insight of his account is that transformations in constitutional meaning, such as those that occurred during Reconstruction and the New Deal era, exhibit a similar process (or, in resilience language, "cycle"); they generally begin with the signaling of a movement with a transformative agenda that political leaders can translate into popular proposals, followed by a period of "mobilized deliberation" that sustains public support, and end with a judicial synthesis of the new order.¹³¹ The role of elections is central; without a series of electoral victories, the contenders for a new constitutional order cannot claim to speak for "we the people."¹³²

Because the New Deal transformation is our most recent transformation and critical to understanding constitutional structures of governance, it deserves further detail. In contrast to the Reconstruction's model of congressional leadership, the New Deal transformation is a model of presidential leadership and one that Ackerman presciently observes "may serve as a more reliable guide to future exercises in constitutional

130. See generally II BRUCE ACKERMAN, *WE THE PEOPLE: TRANSFORMATIONS* (1998) [hereinafter II ACKERMAN, *TRANSFORMATIONS*] (describing myriad episodes in American history where the Constitution was challenged, changed, or otherwise confronted by the American people).

131. See *id.* at 115, 290.

132. *Id.* at 21. In Ackerman's theory, elections play a critical role—that of dissent: "[N]o movement for revolutionary reform can rightfully expect an easy victory for its transformative visions. It must earn its claim to speak for the People by repeatedly winning electoral support in the face of sustained constitutional critique." *Id.* at 291.

politics.”¹³³ Although the details of President Roosevelt’s vision emerged over time, he clearly signaled in his first election campaign that he had a radically new vision of government’s role in response to the hardships of the Great Depression.¹³⁴ As Ackerman notes, Roosevelt “repeatedly” emphasized his intent to end limited government in favor of market capitalism: “We need to correct, by drastic means if necessary, the faults in our economic system. . . . The country needs and, unless I mistake its temper, the country demands bold persistent experimentation. . . . Above all, try something.”¹³⁵

The country responded by electing Roosevelt and unprecedented numbers of Democrats to Congress in 1932.¹³⁶ In Ackerman’s theory, this is a signaling election, setting the stage for a longer process.¹³⁷ After the first wave of New Deal reforms that greatly expanded federal power in “fields like agriculture, energy, and pensions,”¹³⁸ the Democrats won another landslide victory in 1934.¹³⁹ Of course, this is when the Supreme Court enters the story. As Roosevelt and Congress passed expansive federal legislation, the Court initially remained skeptical of governmental regulation of the market—reflecting its commitment to property rights and the freedom of contract recognized in *Lochner v. New York*,¹⁴⁰ the notorious case in which the Court struck down a New York state law setting maximum working hours for bakers as a violation of the Fourteenth Amendment right to liberty.¹⁴¹

133. *Id.* at 277.

134. *See id.* at 284 (“Despite its discordant and fragmentary character, the general direction of Roosevelt’s campaign was clear enough—away from limited government and toward the activist regulatory state.”).

135. *Id.*

136. *Id.* at 283–84.

137. *See id.* at 281.

138. *Id.* at 288.

139. *Id.* at 289.

140. 198 U.S. 45 (1905).

141. Ackerman describes the values reflected in *Lochner* as the continuation of an old constitutional order: “Since the Civil War, the Justices had worked out principles of liberty that constrained the operation of government at all levels—state no less than federal. Speaking broadly, these principles of restraint presented private property and freedom of contract as the central constitutional bulwarks of individual freedom.” II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 303.

Most notably, in 1935, the Court struck down Roosevelt's biggest market intervention, the National Industrial Recovery Act ("NIRA"),¹⁴² which "proposed to *abolish* market capitalism and replace it with a corporatist structure under Presidential leadership" for a period of two years unless Congress renewed it.¹⁴³ In *Schechter Poultry Corp. v. United States*,¹⁴⁴ the Supreme Court unanimously struck down the NIRA as an unconstitutional delegation of Congress's lawmaking authority, to private entities and the President, *and* as an unconstitutional exercise of Congress's power to regulate interstate commerce under the Commerce Clause.¹⁴⁵ Roosevelt chose not to fight the first holding regarding delegation, concluding that more specific statutory language could cure the Court's concerns.¹⁴⁶ But New Deal Democrats did not accept the Court's view on the extent of federal power.¹⁴⁷

Instead, they passed the second wave of New Deal legislation, including the "Wagner Labor Act, the Social Security Act, and the Public Utility Holding Company Act," designed to correct market externalities rather than replace the market, as the NIRA had done.¹⁴⁸ The Court continued to reject these federal incursions into the social and economic realms.¹⁴⁹ As the 1936 election approached, the debate between the old constitutional order and the new one was clear. It was also clear that Roosevelt was willing to pack the Court to further his vision.¹⁵⁰ Against this backdrop, "Americans went to the

142. 15 U.S.C. §§ 703–712, *invalidated by* *Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935).

143. II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 286.

144. 295 U.S. 495 (1935).

145. *See id.* at 543.

146. *See* II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 297.

147. *See id.* at 297.

148. *Id.* at 302.

149. *See, e.g.,* *Louisville Joint Stock Land Bank v. Radford*, 295 U.S. 555, 601–02 (1935) (holding that amendments to federal bankruptcy law providing relief for a debtor were an unconstitutional taking of the creditor's property rights).

150. *See* II ACKERMAN, TRANSFORMATIONS, *supra* note 86, at 314.

polls—and gave Roosevelt and the New Deal Congress the greatest victory in American History.”¹⁵¹

At this point, Ackerman asks why the New Deal Democrats did not use Article V to formally amend the Constitution to reflect a new vision of government and federal power.¹⁵² The short answer, which suffices for our purposes, is that the Supreme Court put the debate to rest by making its famous “switch in time,” repudiating *Lochner* and its limited view of federal power.¹⁵³ But in 1937, the Court’s decisions upholding the activist federal government were still on fragile ground, narrowly decided by five-four majorities. Then, once again, the people spoke decisively in the consolidating elections of 1938 and 1940, rejecting Republicans’ attacks on the constitutional legitimacy of the New Deal and allowing Roosevelt to appoint justices to the Supreme Court who would enthusiastically support the new constitutional view of federal power.¹⁵⁴

In just a few short years, the Court shored up the constitutional transformation in a series of decisions upholding the federal government’s regulation of the economy, moving further away from the distinctions between local and federal authority in *Schechter*.¹⁵⁵ By thin majorities, the Court upheld federal labor legislation against challenges by industry,¹⁵⁶ and in the well-known case *West Coast Hotel Co. v. Parrish*,¹⁵⁷ it rejected a challenge to state minimum-wage and hour laws for minors and women.¹⁵⁸ *Parrish* is often cited as the definitive end

151. *Id.* at 310; *see id.* at 311 (emphasizing the importance of the election of 1936 as having “cemented the hold of the Democratic Party on American life for the next generation”).

152. *See id.* at 315.

153. *See id.* at 314–15.

154. *See id.* at 360–61.

155. *See id.* at 359.

156. *See* *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1, 49 (1937) (holding the National Labor Relations Act of 1935 was constitutional as applied to the Board’s action); *NLRB v. Friedman-Harry Marks Clothing Co.*, 301 U.S. 58, 75 (1937) (holding that the ruling of the Board and the National Labor Relations Act are valid).

157. 300 U.S. 379 (1937).

158. *See id.* at 392 (“There is no absolute freedom to do as one wills or to contract as one chooses. The guaranty of liberty does not withdraw from legislative supervision that wide department of activity which consists of the

of *Lochner*'s endorsement of freedom of contract under the Due Process Clause, though Ackerman views it as a "mid-course correction"¹⁵⁹ that—in dicta—replaced the market with the welfare state as a "constitutional baseline."¹⁶⁰ With the appointment of new justices, the Court's transformative vision of the Fourteenth Amendment reached an apex; in *United States v. Carolene Products Co.*,¹⁶¹ the Court announced it would not closely scrutinize the wisdom of legislation governing economic activity but, would instead, presume that legislators had a "rational basis" for passing such legislation.¹⁶²

By the early 1940s, the Court's decisions were unanimous. In *United States v. Darby*,¹⁶³ the Court unanimously upheld the Fair Labor Standards Act,¹⁶⁴ which criminalized the interstate shipment of goods made with child labor or by workers earning less than the federal minimum wage.¹⁶⁵ And in *Wickard v. Filburn*,¹⁶⁶ the Court endorsed a broad view of Congress's Commerce Clause power by upholding a federal law regulating

making of contracts, or to deny the government the power to provide restrictive safe guards.").

159. II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 365.

160. *Id.* at 366. Other scholars have similarly rejected the view that the moderate justices made an abrupt shift solely in response to the president's threat to pack the Court (the famous "switch in time saved nine"). *See, e.g.*, BARRY CUSHMAN, RETHINKING THE NEW DEAL COURT: THE STRUCTURE OF A CONSTITUTIONAL REVOLUTION 5–6 (1998) (arguing that an account grounded in the "history of ideas" is superior to one based on the "history of politics").

161. 304 U.S. 144 (1938).

162. *See id.* at 153. The Court signaled a willingness to look more closely at legislation affecting "specific prohibition[s]" such as those found in the Bill of Rights. This opened the door to a new substantive due process jurisprudence that would give some rights the privileged status once held by property and contract rights. *See* II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 119–22.

163. 312 U.S. 100 (1941).

164. 29 U.S.C. §§ 201–219.

165. *See Darby*, 312 U.S. at 125–26 ("The Act is sufficiently definite to meet constitutional demands. One who employs persons, without conforming to the prescribed wage and hour conditions, to work on goods which he ships or expects to ship across state lines, is warned that he may be subject to the criminal penalties of the Act.").

166. 317 U.S. 111 (1942).

intrastate wheat production.¹⁶⁷ What is remarkable about these decisions, according to Ackerman, is that they were both unanimous and predictable, reflecting a revolutionary transformation in constitutional governance in just a few short years.¹⁶⁸

The other important takeaway is that the Supreme Court's transformative opinions obviated the need for the formal Article V amendment process: "[I]n the American system, *the Supreme Court largely determines whether a constitutional revolution will be codified in Article Five terms*. Only if the Justices refuse to recognize the legitimacy of a transformation do the President and Congress have an incentive to take the Article Five path."¹⁶⁹ Ackerman views this as a "dialectical process of legitimation," emphasizing that the New Deal's model of presidential leadership depends on sustained electoral support and transformative judicial appointments.¹⁷⁰ Only under these circumstances "will the time come when the Supreme Court consolidates the new regime by unanimous opinions that repudiate the old order in the name of new principles."¹⁷¹

This model solved "an aching problem threatening the adaptive capacities of the system as a whole: the veto power of the states by Article Five."¹⁷² Allowing a minority of states to override the constitutional vision of the national majority seemed wrong and unwise. Why unwise? In resilience terms, adherence to rigid structures of dual federalism¹⁷³ and limited federal government in the face of popular consensus would likely have flipped the system to a new and less desirable regime. Ackerman alludes to this using the language of adaptation and

167. *See id.* at 130 ("Appellee's claim is . . . that the Fifth Amendment requires that he be free from penalty for planting wheat and disposing of his crop as he sees fit. We do not agree.").

168. *See* II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 373.

169. *Id.* at 315.

170. *Id.* at 381.

171. *Id.*

172. *Id.* at 348.

173. *See infra* note 277.

then sketches out the less desirable outcomes that would follow a formal Article V process.¹⁷⁴

At this point, the congruence of Ackerman's theory of constitutional change with resilience thinking should be easy to see. They share a remarkable overlap in vocabulary, describing systemic transitions to "new regimes" as "transformations" and referring to the "adaptive capacities" of a system. Where Ackerman refers to old and new "orders," resilience theory might use the term equilibria. Both theories acknowledge the possibility of multiple outcomes or equilibria in an adaptive cycle. We can even understand Ackerman's concept of a period of "normal" politics (when the citizenry is less engaged in constitutional politics and the Court is synthesizing the new order) in terms of the growth and conservation periods in an adaptive cycle, which is often followed by the "release" of a constitutional moment.¹⁷⁵

These overlapping concepts help map resilience theory onto this story of constitutional change. Having done so, we can begin to make some observations about resilience thinking as applied to constitutional governance structures. First, the New Deal narrative reminds us not to equate stability with engineering resilience or with legal formalism. Textual provisions in the Constitution were not so rigid that they forced a complete rupture. Both during Reconstruction and the New Deal era, movements for change found flexibility in constitutional structures.¹⁷⁶ This complicates any clear line between engineering and ecological resilience—at least from a normative standpoint. And it supports a view of constitutional change more consistent with ecological resilience. If Article V represents stability in an engineering sense (a rule-based process at least

174. *See id.* at 348–50 (explaining that it is unlikely America would have been better off if the Court “continued to up-hold the *Lochnerian* tradition in its opinions while Congress episodically asserted New Deal activism in a proliferating set of overriding statutes”).

175. *See* I ACKERMAN, FOUNDATIONS, *supra* note 1, at 115–16 (describing how the Court synthesizes the new order with older traditions and “reworks” them into more “comprehensive” doctrines).

176. *See id.* at 44 (“In each case, the new spokesmen for the People refused to follow the path for constitutional revision set out by their predecessors; like the Federalists before them, [Reconstruction Republicans and New Deal Democrats] transformed existing systems of higher lawmaking in the process of changing the fundamental direction of political development.”).

appears more efficient), then Ackerman's model of change represents stability in the ecological sense (flexible mechanisms and pathways for expressing the popular will). Constitutional governance structures are therefore more ecologically resilient—more flexible—than we might first have imagined.

Perhaps that is good news, but perhaps not. This constitutional narrative is also the story of the governance structure upon which environmental regulation in all its iterations is built. It is the foundation of the federal regulatory state and attendant models of cooperative federalism and shared governance. And although legal commentators and environmental activists have proposed changes to these laws over time, they are largely critiques of regulatory strategies—for example, the debate between prescriptive technology-based standards and market-based mechanisms.¹⁷⁷ Adaptive management follows in this same vein, calling for changes in regulatory strategies and flexibility in implementation.¹⁷⁸ These calls for reform nevertheless depend on the basic governance structures—an activist federal government and overlapping state-federal authority—that the New Deal put in place.¹⁷⁹ They are also at the heart of adaptive governance's commitment to polycentrism and flexible governance.¹⁸⁰

177. See JODY FREEMAN & CHARLES D. KOLSTAD, *MOVING TO MARKETS IN ENVIRONMENTAL REGULATION: LESSONS FROM TWENTY YEARS OF EXPERIENCE* 3–16 (Jody Freeman & Charles D. Kolstad eds., 1st ed. 2006) (evaluating the performance of prescriptive environmental regulations and market-based incentive for environmental regulation).

178. See Craig et al., *supra* note 70, at 10 (“The more procedure that is required to bring about change, the less flexibility that the relevant governance entity is likely to have. However, too much or too little procedural flexibility in the wrong factual situations can lead to, respectively, arbitrariness or rigidity traps.”).

179. See I ACKERMAN, *FOUNDATIONS*, *supra* note 1, at 47 (acknowledging “the successful struggle by New Deal Democrats to place activist federal government on solid constitutional foundation” as a great turning point in constitutional history).

180. See *generally* Craig et al., *supra* note 70 (noting the importance of flexibility to adaptive governance). See DeCaro et al., *supra* note 22 (“[A]daptive processes are flexible, e.g., open to revision, iterative decision making, and experimentation; innovative; participatory; and ‘polycentric,’ or spread across multiple centers of activity, social networks, and environmental stakeholders in a pluralistic decision-making context.”).

So, the question that remains is: where are we in the adaptive cycle? Are we nearing a period of release and, if so, transformation? To examine these questions is to acknowledge the role of ideas and norms. Commitments of the “old” order do not completely fade away when a system transitions to a new state. They continue to create “disturbances” that test the system’s resilience.

III. JUDICIAL DISTURBANCES TO TWENTIETH-CENTURY GOVERNANCE STRUCTURES

In the 2021-2022 term, the Supreme Court majority repudiated its preservationist role, issuing opinions regarding abortion, gun control, and climate change regulation that depart from established rules and norms in the name of older conceptions of constitutional governance.¹⁸¹ This Part begins by explaining how an ecologically resilient (flexible) constitutional order may create openings for transformations to new equilibria; in other words, in the post New Deal regime, the Court can more easily “move the ball” to new states or regimes. Furthermore, these decisions also demonstrate that more rigid constitutional rights doctrines (in the engineering sense) are vulnerable to transformative regime shifts that leave little of the old regime intact. The second subpart delves more deeply into the challenges to New Deal governance structures, exploring judicial decisions that seek to redesign constitutional doctrines for engineering resilience, a development that threatens the flexibility necessary for adaptive governance.

A. *The Uncertainties of a Flexible Regime and the Breaking Point of a Rigid One*

Despite its descriptive power and its success in transforming constitutional governance, Ackerman expresses deep normative concern about the presidential model of leadership and the role of the Court in synthesizing or codifying presidential visions. In the New Deal story, the Court plays a “preservationist role” during periods of normal politics; it looks

181. See generally *West Virginia v. EPA*, 142 S. Ct. 2587 (2022); *Dobbs v. Jackson Women’s Health Org.*, 142 S. Ct. 2228 (2022); *N.Y. State Rifle & Pistol Ass’n, Inc. v. Bruen*, 142 S. Ct. 2111 (2022).

backward to affirm the principles unequivocally endorsed by the People, as the Court has done since the early 1940s in affirming the reach of federal power under the Commerce Clause.¹⁸²

But Ackerman recognizes that most presidents do not have the clear, sustained mandate that Roosevelt and the New Deal Democrats had, and he worries that the New Deal model's use of transformative judicial appointments is subject to abuse by presidents who lack such a mandate.¹⁸³ The danger is that the Court will then attempt a "switch in time" to endorse a constitutional vision that lacks broad, deep popular support.¹⁸⁴ Such a result would be undemocratic indeed. In resilience thinking, the more flexible New Deal model of constitutional transformation creates openings for transitions to multiple new states; the "basin" or "surface" of the current state is not deep, and changes take shape in response to economic, political, and social factors, allowing the ball to roll in various directions more easily and increasing the likelihood of it landing in undemocratic places.

In the wake of a Supreme Court term that seems to fulfill the prophecy, we should first pause to acknowledge a historical analog of contemporary politics in the Reagan administration. In the 1980s, Reagan challenged the legitimacy of New Deal constitutional structures.¹⁸⁵ His election "signaled" that an activist federal government was on the political agenda, but although Reagan won a second term, the Republicans did not sustain repeated congressional victories in both houses.¹⁸⁶ Moreover, Reagan did not always pursue transformative judicial appointments, and the Senate thwarted one such attempt, confirming Justice Scalia but not Robert Bork.¹⁸⁷ A divided government returned the nation to a period of normal politics¹⁸⁸—a period of growth and conservation in the adaptive cycle. And when the Republicans did gain control of Congress,

182. See I ACKERMAN, TRANSFORMATIONS, *supra* note 1, at 10, 102.

183. See *id.* at 53.

184. See II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 404–05.

185. See *id.* at 390.

186. See *id.*

187. *Id.* at 391–92.

188. See *id.* at 392.

their Contract with America also failed for lack of a sustained electoral mandate.¹⁸⁹

Because a period of normal politics had resulted in the appointments of Justices O'Connor, Kennedy, and Souter, the Court did not issue a transformative decision when given the opportunity to overrule *Roe v. Wade*¹⁹⁰ in 1992.¹⁹¹ Anti-abortion sentiment had triggered a social movement and support from Republican presidents, but without a period of sustained electoral victories in Congress as well, it could hardly claim a popular mandate.¹⁹² If Reagan and Bush had succeeded in making more transformative judicial appointments, the result would have been different.¹⁹³ And if the Court had overturned *Roe*, it would have disavowed its role as synthesizer of constitutional transformations, setting off a “decade of jurisprudential crisis.”¹⁹⁴

Of course, now we have an opportunity to test whether this is true. In 2022, the Supreme Court overturned *Roe* and erased the right to abortion, a fifty-year-old constitutional right that Republican-appointed justices reaffirmed in 1992 in *Planned Parenthood of Southeastern Pennsylvania v. Casey*.¹⁹⁵ The Court's six-justice majority opinion is undoubtedly made possible by the transformative judicial appointments made during the Trump administration rather than by popular mandate.¹⁹⁶ Republicans have not enjoyed sustained electoral

189. See *id.* at 397; see also Cass R. Sunstein, *Congress, Constitutional Moments, and the Cost-Benefit State*, 48 STAN. L. REV. 247, 307 (1996) (“The public never authoritatively committed itself to such fundamental change, and hence the constitutional moment, though signalled [sic], failed to occur.”).

190. 410 U.S. 113 (1973), *overruled by* *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228 (2022).

191. See *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 858 (1992) (declining to overrule *Roe*), *overruled by* *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228 (2022).

192. See II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 398.

193. See *id.* at 399.

194. *Id.*

195. 505 U.S. 833 (1992), *overruled by* *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228 (2022); see *Dobbs*, 142 S. Ct. at 2285.

196. See Jason Zengerle, *How the Trump Administration Is Remaking the Courts*, N.Y. TIMES (Aug. 22, 2018), <https://perma.cc/T2L6-HLWP> (highlighting how Trump's streamlining of the judicial-selection process has led to a historic number of federal judges being appointed to the bench).

success, as Democrats won the Presidency in 2020 and secured majorities in Congress.¹⁹⁷ This decision therefore reflects the undemocratic dangers of the New Deal model of constitutional change. It also disrupts the stability of constitutional governance structures by unsettling the role of the federal government in securing rights recognized by the People.

There is a long story to tell about how the Civil Rights Movement and the Second Reconstruction moved the nation closer to the First Reconstruction's promises of equality; unfortunately, most of that story is outside the scope of this Article.¹⁹⁸ During this period, the Supreme Court struck down governmental regulation that encroached on certain "fundamental" rights—a new substantive due process that critics perceived as just as pernicious as the old *Lochner* order.¹⁹⁹ *Roe* is one of those decisions. And although the history of the Court's rights jurisprudence is not the focus of inquiry here, the Court's recent decisions regarding abortion and gun rights are relevant because they reflect a legalistic rigidity—a kind of absolutism that is resilient in the engineering sense but lacks the flexibility to mediate competing rights claims.

This observation is at the center of Jamal Greene's recent book about how rights discourse has failed society.²⁰⁰ He argues that the "binary approach to rights that sought to correct for the mistakes of the twentieth century is deeply unstable in the twenty-first."²⁰¹ An approach that "discriminates" rather than

197. See Anthony Zurcher, *U.S. Midterm Results: Why Democrats Winning Control of Senate Matters*, BBC (Nov. 13, 2022), <https://perma.cc/54Y2-447Y> (stressing the significance of Democrats having the majority in the House and Senate while Democratic President Joe Biden is in office).

198. For a more robust discussion of the Civil Rights Movement and the Second Reconstruction's impact on moving the nation closer to the First Reconstruction's promises of equality, see III BRUCE ACKERMAN, *WE THE PEOPLE: THE CIVIL RIGHTS REVOLUTION* (2014).

199. See, e.g., *Obergefell v. Hodges*, 576 U.S. 644, 675 (2015). Not surprisingly, in *Obergefell*, the decision recognizing a right to same-sex marriage, Chief Justice Roberts accuses the majority of making social policy, the judicial sin symbolized by *Lochner*: "[T]he majority's approach has no basis in principle or tradition, except for the unprincipled tradition of judicial policymaking that characterized discredited decisions such as *Lochner v. New York*." *Id.* at 694 (Roberts, J., dissenting) (citation omitted).

200. See generally JAMAL GREENE, *HOW RIGHTS WENT WRONG: WHY OUR OBSESSION WITH RIGHTS IS TEARING AMERICA APART* (2021).

201. *Id.* at xxv.

“mediates” among rights claims furthers social polarization; when a court erases a “right” in a case, “the court tells [the losing party] not just that he has lost but that *he does not matter*.”²⁰² While this furthers predictability, it oversimplifies and obscures the interests involved. In picking winning rights over losing rights, courts appear arbitrary—protecting hate speech, for example, while denying rights to education or housing and blocking race-conscious remedies to race discrimination.²⁰³

Greene traces the development of this approach to rights through constitutional opinions and convincingly argues that it was not inevitable nor consistent with an originalist understanding of the Bill of Rights.²⁰⁴ He argues that a proportional approach that recognizes the legitimate interests on both sides would be more “sustainable.”²⁰⁵ Such an approach would be fact sensitive, weighing the rights and interests in each specific case and allowing today’s losers to win on different facts tomorrow.

Although space constraints foreclose an assessment of these normative claims here, one observation is relevant to a project mapping resilience thinking onto constitutional governance structures: Greene’s account accurately describes the Court majority’s approach to abortion and gun rights in the 2021-2022 term. Rather than critiquing the notion of abortion as an absolute right, the Court repudiated *Casey*’s effort to find some middle ground by asking whether a law places an undue burden on a woman’s right to abortion.²⁰⁶ The majority also rejected efforts by Chief Justice Roberts to uphold Mississippi’s

202. *Id.* at xxxii.

203. *See id.* at xxviii (“When a court flattens textured rights conflicts into a facile question of which side has rights . . . in favor of *interpretive* questions about text or intent or historical values, it pays for lawyers and advocates to paint the rights their opponents seek as leading to absurd or destructive consequences.”).

204. *See id.* at 13 (arguing that the men who ratified the Bill of Rights were primarily concerned with “protecting self-governance, not individual liberty from the majority”).

205. *Id.* at xxviii.

206. *See Dobbs v. Jackson Women’s Health Org.*, 142 S. Ct. 2228, 2275 (2022) (“*Casey*’s ‘undue burden’ test has proved to be unworkable. ‘Plucked from nowhere,’ . . . it ‘seems calculated to perpetuate give-it-a-try litigation’ before judges assigned an unwieldy and inappropriate task.” (quoting *Planned Parenthood of Se. Pennsylvania v. Casey*, 505 U.S. 833, 965 (1992) (Rehnquist, J., concurring in part and dissenting in part))).

fifteen-week ban as a reasonable “mediation” of competing rights and interests.²⁰⁷ Because six justices viewed *Roe* as “egregiously wrong from the start,”²⁰⁸ they explicitly rejected the relevance of public opinion.²⁰⁹ Consequently, decades of “rightsism”²¹⁰ around abortion are now playing out predictably: state bans show little regard for the life of the mother or the circumstances of specific cases.²¹¹ Increasingly, the rhetoric from the anti-abortion movement characterizes the right of fetal life as absolute.

New York’s law limiting the carrying of firearms in public spaces was struck down in similar, absolutist terms.²¹² Indeed, writing for the majority, Justice Thomas explicitly rejected the consideration of the reasons or interests for governmental regulation, concluding that “the very enumeration of the right takes out of the hands of government—even the Third Branch

207. *See id.* at 2313 (Roberts, J., concurring) (characterizing the majority opinion as rejecting “half measures” and arguing that *Roe*’s ban on abortion until viability can be rejected without deciding the harder question of whether a woman has the right to choose to terminate a pregnancy).

208. *Id.* at 2243 (majority opinion). Although the Court does not conclude that the right to fetal life trumps a woman’s right to choose (leaving that to state legislatures), it does distinguish *Dobbs* from other substantive due process cases based on *Roe*’s reasoning (such as those guaranteeing rights to contraception and same-sex marriage) as different because they do not involve “the destruction of . . . potential life.” *Id.* at 2260.

209. *Id.* at 2278; *see also Public Opinion on Abortion*, PEW RSCH. CTR. (May 17, 2022), <https://perma.cc/JS3X-SB9D> (referencing a recent poll which found that “61% [of U.S. adults] say abortion should be legal in all or most cases, while 37% say it should be illegal in all or most cases”); *America’s Abortion Quandary*, PEW RSCH. CTR. (May 6, 2022), <https://perma.cc/G238-WWF2> (noting that most people reject the binary approach to abortion furthered by the *Dobbs* decision and highlighting that “relatively few Americans on either side of the debate take an absolutist view on the legality of abortion—either supporting or opposing it at all times, regardless of circumstances”).

210. *See GREENE, supra* note 200, at xxxii (“Rightsism has victims. Treating a rights conflict as a question of who has rights and who doesn’t degrades our relationship to the law and to each other.”).

211. *See* Michelle Goldberg, *The Anti-Abortion Movement’s Contempt for Women Is Worse than I Imagined*, N.Y. TIMES (July 18, 2022), <https://perma.cc/J4YM-VYZ2> (documenting stories of women denied medical care when pregnancy termination was essential to their health and survival because healthcare providers feared the strict application of abortion bans).

212. *See* N.Y. State Rifle & Pistol Ass’n. v. Bruen, 142 S. Ct. 2111, 2122 (2022) (noting that New York’s law required an applicant for a public-carry license to show “proper cause”).

of Government—the power to decide on a case-by-case basis whether the right is *really worth* insisting upon.”²¹³ Although the two decisions look dissimilar in that one leaves regulation to the states and one takes it away, they share the same rights discourse. Instead of asking why New York has long limited firearms in this way or considering other rights (such as the right to be free from violence) that might “mediate” the right to bear arms, the Court recognized only one unmitigated, unassailable right.²¹⁴

This rigid approach to rights permits no other conclusion. Of course, in resilience thinking, this rigidity reduces the system’s adaptive capacity. Instead of mediating these rights conflicts with some measure of flexibility, the Court’s engineering approach to rights makes the system more vulnerable to larger conflict, much like preventing small-scale floods can lead to a large flooding event.

B. *Signs of a Return to an Engineering Perspective*

These disruptions to the Court’s rights jurisprudence are coupled with disruptions to the New Deal regime’s expansion of federal power in service of the regulatory state. The Court’s recent decision in *West Virginia v. EPA* is at the heart of this storm, but other challenges are coming. The conservative majority’s view of agency authority and desire to roll back federal jurisdiction seek to “return” constitutional governance structures to a static, inflexible system that limits governmental reach into the economic and social dimensions of life by drawing artificial lines among spheres of governmental power. Such line drawing may seem more predictable and efficient (for purposes of judicial interpretation), but—like rights absolutism—this static, engineering approach weakens the system’s adaptive capacity and renders it vulnerable to a shift to a new state that lacks “essentially the same function, structure, identity, and feedbacks.”²¹⁵ In other words, it risks a shift that undermines the century-old governance structures of the regulatory state (and does so without the legitimacy of a popular mandate).

213. *Id.* at 2129 (internal quotations omitted).

214. *See id.* at 2130 (characterizing the right as an “unqualified command”).

215. Walker et al., *supra* note 50, at 2.

To illustrate the disruptive nature of the Court's views of delegation and federal power, this section examines its recent opinion in *West Virginia v. EPA* and then turns to other challenges to executive agency authority regarding environmental regulation, including lawsuits challenging agency consideration of the social cost of carbon and the EPA's recent tailpipe rule.²¹⁶ Contested ideas about federalism and state authority are at the heart of the debate. Some are reminiscent of older constitutional orders (dual federalism), but some are drawing on newer attempts to unsettle the shared governance of contemporary federalism. After discussing *West Virginia v. EPA*'s disruptive break with conventional approaches to regulatory authority, this subpart traces these arguments to illuminate their critical role in challenges to the governance structures supportive of federal regulatory power and adaptive governance more generally.

1. *West Virginia v. EPA*: Challenges to the New Deal Horizontal Separation of Powers

At issue in *West Virginia v. EPA* was the Obama administration's 2015 Clean Power Plan, a set of regulations under § 111 of the Clean Air Act²¹⁷ designed to reduce greenhouse gas emissions from existing fossil-fuel-fired power plants.²¹⁸ Instead of requiring plants to implement certain controls or technologies at the source, the EPA used a set of "building blocks" to determine each state's share of reductions, resulting in state-specific rates and mass-based goals for power plant emissions based on each state's inventory of sources.²¹⁹ Two of the building blocks the EPA used involved "generation shifting"—either from coal to natural gas or from coal and

216. See Craig et al., *supra* note 70, at 10 ("For example, absent a federal waiver, states cannot regulate emissions from motor vehicles more stringently than the EPA does, with the justification that this national unity provides stability for a national-scale auto industry."); Keith Laing, *Automakers Side with EPA in Court Case Over Car Emission Rules*, BLOOMBERG L. (Mar. 30, 2022), <https://perma.cc/Q2D6-GVNM>.

217. 42 U.S.C. §§ 7401–7675.

218. *West Virginia v. EPA*, 142 S. Ct. 2587, 2602 (2022).

219. *Id.* at 2603. See generally EPA, OVERVIEW OF THE CLEAN POWER PLAN: CUTTING CARBON POLLUTION FROM POWER PLANTS (2015), <https://perma.cc/Q7YT-GXUT> (PDF).

natural gas to zero-carbon renewable energy sources such as wind and solar.²²⁰ States could use a range of approaches to meet their goals, including state-wide and regional trading or emissions credits.²²¹

The Clean Power Plan never went into effect.²²² It was challenged in court, stayed by the Supreme Court, and was ultimately rescinded and replaced by the Trump administration with the Affordable Clean Energy (“ACE”) Rule.²²³ In response to a challenge to the ACE Rule, the Court of Appeals for the D.C. Circuit concluded that the Trump EPA erred in rescinding the Clean Power Plan because it lacked statutory authority under § 111 to reduce emissions through “outside-the-fence-line” measures such as generation shifting.²²⁴ After the administration once again changed, the Biden EPA announced that it would not implement the Clean Power Plan.²²⁵ Because of market forces and other environmental rules, the Clean Power Plan’s goals had already been met.²²⁶ The new administration was preparing to draft rules responsive to this new reality.²²⁷

In a surprising turn of events, the Supreme Court granted certiorari to answer the following question:

In 42 U.S.C. § 7411(d), an ancillary provision of the Clean Air Act, did Congress constitutionally authorize the

220. See *West Virginia*, 142 S. Ct. at 2603.

221. See *id.*

222. Emma Newburger & Dan Mangan, *Supreme Court Limits EPA Authority to Set Climate Standards for Power Plants*, CNBC (Jun. 30, 2022) <https://perma.cc/VCQ6-NY2M>.

223. 40 C.F.R. §§ 60.01–60.5805a (2023); see also Newburger & Mangan, *supra* note 222.

224. *Am. Lung Ass’n v. EPA*, 985 F.3d 914, 995 (D.C. Cir. 2021), *overruled by West Virginia v. EPA*, 142 S. Ct. 2602 (2022).

225. See Newburger & Mangan, *supra* note 222.

226. See Niina H. Farah, *How the Hight Court Ruling Changes EPA and Clean Electricity*, E&E NEWS (July 1, 2022), <https://perma.cc/HC65-R2S3> (“EPA’s targets under the 2015 rule to slash power plant emissions by 32 percent from 2005 levels by 2030 had already been achieved by the time the Trump administration finalized its replacement rule in 2019.”).

227. See *id.* (“Congressional action was always going to be needed to cut greenhouse gas in half by 2030, a target supported by the Biden administration to meet the goals of the Paris climate agreement and to stave off the most devastating effects of climate change . . .”).

Environmental Protection Agency to issue significant rules—including those capable of reshaping the nation’s electricity grids and unilaterally decarbonizing virtually any sector of the economy—without any limits on what the agency can require so long as it considers cost, nonair impacts, and energy requirements?²²⁸

The petitioners were clearly seeking to capitalize on the conservative majority’s interest in revisiting long-held views regarding the delegation of legislative power to agencies.²²⁹

In a majority opinion authored by Chief Justice Roberts, the Court rewarded this effort by invalidating the Clean Power Plan as beyond the statutory authority granted to the EPA in § 111.²³⁰ The opinion relies on the “major questions doctrine,” a doctrine that applies to “extraordinary cases,” defined as cases where an agency exercises broad authority over a question of “economic and political significance.”²³¹ According to Chief Justice Roberts, to safeguard the separation of powers and congressional intent, the Court requires “something more than a merely plausible textual basis for the agency action” in major questions cases; it must find “clear congressional authorization” in the text.²³² In his view, this doctrine and its clear statement rule are grounded in recent cases that confront “a particular and recurring problem: agencies asserting highly consequential power beyond what Congress could reasonably be understood to have granted.”²³³ Here, that “highly consequential power” is the EPA’s generation-shifting approach to emissions reductions, an

228. Petition for a Writ of Certiorari at i, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (No. 20-1530).

229. *See id.* at 17 (“The incredible reach of the majority’s decision also makes this the right case to resolve whether and how Congress can ever delegate issues of this magnitude.”).

230. *West Virginia v. EPA*, 142 S. Ct. 2587, 2616 (2022).

231. *Id.* at 2608. The doctrine germinates in cases such as *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014), and *King v. Burwell*, 576 U.S. 473 (2015). But it reaches its full potential only in recent cases decided by the conservative majority either on an expedited basis or as part of the Court’s “shadow” docket. *See Nat’l Fed’n of Indep. Bus. v. OSHA*, 142 S. Ct. 661 (2022) (per curiam); *Ala. Ass’n of Realtors v. Dep’t of Health & Hum. Servs.*, 141 S. Ct. 2485 (2021) (per curiam).

232. *West Virginia*, 142 S. Ct. at 2609.

233. *Id.*

approach that gives the EPA the power to decide how much energy generation from coal is desirable.²³⁴

Chief Justice Roberts characterizes this decision as “consequential” and of “vast economic and political significance.”²³⁵ But as Justice Kagan elaborated in her dissent, even the Trump administration noted that the Clean Power Plan would have little effect because the power industry had already more than met the nationwide emissions target.²³⁶ The regulations largely tracked what the industry wanted: “substantial reductions in carbon-dioxide emissions accomplished in a cost-effective way while maintaining a reliable energy market.”²³⁷ Not surprisingly, utilities, states, and local governments were among the challengers of the ACE Rule.²³⁸

Chief Justice Roberts focused on the means or the “how” of regulation, namely EPA’s reliance on generation shifting. But as Justice Kagan explained in her dissent, the EPA could achieve the same result by shutting down coal plants using source-specific standards; there is nothing “extraordinary” about an approach that allows for generation shifting and trading.²³⁹ The EPA has used such approaches in the past to achieve greater economic efficiency than clunkier technology-based standards.²⁴⁰ Furthermore, the coal industry is on the decline.²⁴¹ It is shutting down all on its own, losing out

234. *Id.* at 2613.

235. *Id.* at 2605, 2613.

236. *Id.* at 2638 (Kagan, J., dissenting).

237. *Id.* at 2639 (Kagan, J., dissenting).

238. *See* Brief for States and Municipalities in Opposition, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (Nos. 20-1530, 20-1531, 20-1778, & 20-1780); *see also* Brief in Opposition for Power Company Respondents, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (Nos. 20-1530, 20-1531, 20-1778, & 20-1780).

239. *See West Virginia*, 142 S. Ct. at 2633 (Kagan, J., dissenting) (“The Clean Power Plan falls within EPA’s wheelhouse, and it fits perfectly . . . with all the Clean Air Act’s provisions.”).

240. *See id.* at 2631 (arguing that the statutory language “best system” clearly “says to EPA: Do as you would do under NAAQS and Acid Rain programs—go ahead and use cap and trade”).

241. U.S. ENERGY INFO. ADMIN., IN 2020, U.S. COAL PRODUCTION FELL TO ITS LOWEST LEVEL SINCE 1965 (2021), <https://perma.cc/JVZ9-G9KD>.

to cheaper natural gas and renewables.²⁴² Most coal plants in operation today are old, having been built in the 1970s or 1980s.²⁴³ Their continued operation is simply not financially viable given competition from natural gas and renewables.²⁴⁴ Given this landscape, how can an EPA rule that reduces coal generation be of *vast economic or political significance* (assuming the reference point here is the national economy and polity rather than the coal industry)?

If the Clean Power Plan looks like an unremarkable exercise of the EPA's authority over air emissions, then this case looks more like a challenge to business as usual in the regulatory state. We can hear echoes of *Schechter Poultry's* nondelegation holding, but times have changed.²⁴⁵ Unlike President Roosevelt, the Biden administration may not simply ask Congress to sharpen its language.²⁴⁶ Without an electoral mandate like that enjoyed by the New Deal Democrats, Congress will not pass more specific language.²⁴⁷ Indeed, for decades, Congress has been passing legislation that authorizes agencies to act under broad directives.²⁴⁸ As public choice scholars have explained, "broad"—even ambiguous language—is the predictable result of compromise around issues such as environmental protection that impose concentrated costs on industry.²⁴⁹ Congress must pass the hard (dare we say consequential?) questions onto agencies.

242. See *id.* ("Lower natural gas prices made coal less competitive for power generation.").

243. U.S. ENERGY INFO. ADMIN., MOST COAL PLANTS IN THE UNITED STATES WERE BUILT BEFORE 1990 (2017), <https://perma.cc/3C3N-XVJD>.

244. U.S. ENERGY INFO. ADMIN., COAL WILL ACCOUNT FOR 85% OF U.S. ELECTRIC GENERATING CAPACITY RETIREMENTS IN 2022 (2022), <https://perma.cc/M5TK-BHXE>.

245. See *supra* notes 145–147 and accompanying text.

246. See *supra* note 146 and accompanying text.

247. See Daryl J. Levinson & Richard H. Pildes, *Separation of Parties, Not Powers*, 119 HARV. L. REV. 2311, 2366 (2006) (discussing how the New Deal Democrats leveraged the electoral mandate to pass legislation).

248. Cf. *West Virginia v. EPA*, 142 S. Ct. 2587, 2641–42 (2022) (Kagan, J., dissenting) (explaining that Congress habitually delegates on "important policy issues" by authorizing agencies to act under broad directives (citing *Mistretta v. United States*, 488 U.S. 361, 372 (1989))).

249. See, e.g., JAMES Q. WILSON, *POLITICAL ORGANIZATIONS* 281–301 (1973).

At least this is how things have worked for some time. In breaking from normal politics, *West Virginia* is a disturbance that will test the resilience of our system of constitutional governance. Settled approaches to both nondelegation and statutory interpretation are rejected.²⁵⁰ In their place, we find justices willing to replace agency views with their own, refusing to read conventionally *broad* statutory language using now dominant tools of textual construction.²⁵¹ In interpreting the EPA's authority under § 111, the Court majority described the word "system" in the phrase "best system of emissions reduction" as vague.²⁵² But, as Justice Kagan emphasized in her dissent, it is far from vague when read in context using textual tools of interpretation.²⁵³

This does not mean that there are no viable arguments supporting a textualist interpretation that would invalidate the Clean Power Plan. For example, in its brief, North Dakota explained that under § 111(d), the EPA may create guidelines for the "best system of emissions reduction," which states would then translate into source-specific "standards of performance."²⁵⁴ This is a plausible textual reading, but the Court majority was clearly more interested in furthering its larger agenda regarding congressional delegation of discretion to agencies.²⁵⁵

The implications of this larger agenda are serious. If "best system of emissions reduction" cannot be given meaning in its statutory context, the broad directives of many administrative statutes are vulnerable.²⁵⁶ Indeed, the language at issue in the key nondelegation precedent, *Whitman v. American Trucking*

250. See *West Virginia*, 142 S. Ct. at 2609–11.

251. See *id.* at 2614–15 (rejecting the government's reading of the EPA's authority under the Clean Power Plan for a narrower view).

252. *Id.* at 2614.

253. See *id.* at 2630 (Kagan, J., dissenting) (accusing the Court majority of abandoning its textual commitments).

254. Reply Brief of the State of North Dakota at 20, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (No. 20-1780).

255. See Tom Merrill, *West Virginia v. EPA: Was "Major Questions" Necessary?*, REASON (July 26, 2022), <https://perma.cc/SP2B-4HZH> (arguing that under § 111(d), the EPA did not have "the authority to issue the sort of regulations at issue in the case").

256. Clean Air Act § 111, 42 U.S.C. § 7411.

Association,²⁵⁷ is arguably just as vague.²⁵⁸ Writing for the Court, Justice Scalia rejected a nondelegation challenge to the Clean Air Act's program regulating conventional pollutants such as ozone and carbon monoxide.²⁵⁹ The Court held that language directing the EPA to set standards "requisite to protect the public health" within "an adequate margin of safety" satisfied the Court's requirement that agency discretion be guided by an "intelligible principle" in the statute.²⁶⁰ The consequences of a different holding were clear. Justice Scalia noted that the Court has upheld agency power under numerous federal statutes with broad language, including language that simply authorizes agency regulation in the "public interest."²⁶¹ The Court's conclusion that it should not second-guess the political branches reflects its preservationist role in a time of normal politics: "In short, we have almost never felt qualified to second-guess Congress regarding the permissible degree of policy judgment that can be left to those executing or applying the law."²⁶²

Many of the statutes cited in *American Trucking* give agencies authority over economic policies and structures, including agency authority to fix commodity prices during wartime and the SEC's authority to modify the structure of public utility holding companies.²⁶³ We could add others to the

257. 531 U.S. 457 (2001).

258. See *id.* at 472. Cass Sunstein has asserted that the clear-statement version of a major questions doctrine means agencies lose under broad statutory directives:

The idea is not merely that courts will decide questions of statutory meaning on their own. It is that such questions will be resolved unfavorably to the agency. When an agency is seeking to assert very broad power, it will lose, because Congress has not clearly granted it that power.

Cass Sunstein, *There Are Two "Major Questions" Doctrines*, 73 ADMIN. L. REV. 475, 477 (2021).

259. See *Am. Trucking*, 531 U.S. at 486.

260. *Id.* at 463.

261. *Id.* at 474.

262. *Id.* at 474–75. Indeed, Justice Scalia would likely fault the *West Virginia* majority for reviving a view of nondelegation that replaces agencies' interpretation of their mandates with judicial views. See Antonin Scalia, *A Note on the Benzene Case*, 4 REGULATION 25, 27–28 (1980).

263. See *Am. Trucking*, 531 U.S. at 474.

list, including statutes that give the Federal Energy Regulatory Commission (“FERC”) authority to regulate wholesale energy markets.²⁶⁴ Indeed, the FERC has issued orders requiring open access of natural gas pipelines and electric transmission lines—no doubt market-restructuring decisions of “vast economic and political significance”—based on its broad authority to remedy “unduly discriminatory” practices.²⁶⁵

Moreover, if the “skepticism” of the *West Virginia* majority depends in part on “novel” responses to new problems under old statutes,²⁶⁶ it seems to conflict with its 2016 decision in *Federal Energy Regulatory Commission v. Electric Power Supply Association*²⁶⁷ This case involved the FERC’s authority to regulate transactions “in which operators of wholesale markets pay electricity consumers for commitments *not* to use power at certain times,” so-called “demand response transactions.”²⁶⁸ At issue was whether demand response transactions constitute the “sale of electric energy to any person *for resale*.”²⁶⁹ The Court held that they do (even though they involve no sale at all).²⁷⁰ But when Congress passed the Federal Power Act²⁷¹ in 1935, it could

264. See 16 U.S.C. §§ 824(b), 824e.

265. See Transmission Access Pol’y Study Grp. v. Fed. Energy Regul. Comm’n, 225 F.3d 667, 686 (D.C. Cir. 2000); see also *Assoc. Gas Distribs. v. Fed. Energy Regul. Comm’n*, 824 F.2d 981, 1001 (D.C. Cir. 1987). In the case affirming the FERC’s order requiring open access to natural gas pipelines, the D.C. Circuit rejected the inference that the FERC was acting outside its statutory authority simply because it previously chose not to regulate in such a manner (an argument cited favorably in *West Virginia*):

It is finally argued that the Commission’s not having imposed any requirements like those of Order No. 436 in the period from enactment in 1938 until the present demonstrates the lack of any power to do so. But as our introductory review of the economic background sought to illustrate, the Commission here deals with conditions that are altogether new. Thus, no inference may be drawn from prior non-use.

Assoc. Gas Distribs., 824 F.2d at 1001(citation omitted).

266. *West Virginia v. EPA*, 142 S. Ct. 2587, 2623 (2022) (Gorsuch, J., concurring) (noting that one factor relevant to whether Congress has clearly spoken is “the age and focus of the statute the agency invokes in relation to the problem the agency seeks to address”).

267. 577 U.S. 260 (2016).

268. *Id.* at 265.

269. *Id.* at 298 (Scalia, J., dissenting).

270. *Id.* at 294–96 (majority opinion).

271. 16 U.S.C. §§ 791a–828c.

not have foreseen the role demand response plays in today's energy market.²⁷² In fact, it is far more likely that Congress could—at least by the 1990 Clean Air Act amendments—foresee generation shifting and emissions trading as regulatory strategies to address air pollution.²⁷³ The contrast here is notable: one approach allows agencies with broad mandates the flexibility to apply their statutory directives to changed circumstances, while the other does not.²⁷⁴

The latter approach forecloses the regulation of our most pressing economic and social problems. Justice Gorsuch explicitly acknowledged this in his concurring opinion in *West Virginia*. He quoted Justice Kagan's recognition that climate change is "one of 'the greatest . . . challenge[s] of our time.'"²⁷⁵ But in his view, this fact counsels agency restraint rather than action: "[I]f this case does not implicate a 'question of deep economic and political significance,' it is unclear what might."²⁷⁶ Taken to its logical conclusion, this view rewrites decades of accepted doctrine regarding delegation and requires Congress to

272. See Harry L. Reiter, *Would FERC's Landmark Decisions Have Survived Review Under the Supreme Court's Expanding "Major Questions Doctrine" and Could the Doctrine Stifle New Regulatory Initiatives?*, EBA BRIEF (Energy Bar Assoc., Washington, D.C.), Spring 2022, at 10 (explaining that the FERC rule regulated demand response "as a 'practice' related to the sale for resale of electricity, even though demand response—the *non-purchase* of electricity—was the opposite of the sale for resale of electricity" and noting that Congress in 1935 could not have foreseen demand response).

273. See *West Virginia*, 142 S. Ct. at 2631 (Kagan, J., dissenting) (noting that in 1977 and 1990 Congress deleted language requiring technological controls in Clean Air Act § 111, the provision on which EPA based the Clean Power Plan).

274. See *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007). The majority in *Massachusetts v. EPA* explicitly endorsed the view that broad language captures Congress's recognition of the need for flexibility and adaptation:

While the Congresses that drafted § 202(a)(1) might not have appreciated the possibility that burning fossil fuels could lead to global warming, they did understand that without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete. The broad language of § 202(a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence.

Id.

275. *West Virginia*, 142 S. Ct. at 2625 (Gorsuch, J., concurring) (quoting *West Virginia*, 142 S. Ct. at 2630 (Kagan, J., dissenting)).

276. *Id.* at 2626 (quoting *King v. Burwell*, 576 U.S. 473, 486 (2015)).

amend legislation in response to the vicissitudes of ecological and social change—an unworkable approach since the dawn of the regulatory state—and one that resilience thinking counsels will reduce system resilience to the unpredictable, nonlinear change of a warming world.

2. New Federalisms: Challenges to the Vertical Separation of Powers

Contested ideas about federalism and state authority also threaten established constitutional governance structures. Some of these views are reminiscent of older constitutional orders (separate-spheres federalism),²⁷⁷ but some are drawing on newer attempts to unsettle the shared governance of contemporary federalism. In fact, recent red state challenges to the EPA’s exercise of regulatory authority in the lower courts assert even stronger versions of state separatism rooted in new, ahistorical concepts of regulatory injury and state dignity.

a. Separate-Spheres Sovereignty: Justice Gorsuch’s Concurrence

What was old is new again. In *West Virginia v. EPA*, Justice Gorsuch wrote separately “to provide some observations about the underlying doctrine on which today’s decision rests.”²⁷⁸ One of the striking components of his reasoning is his use of federalism to support nondelegation of legislative power to agencies.²⁷⁹ In his view, Article I’s Vesting Clause permits no delegation of legislative power to executive agencies.²⁸⁰ In addition to his concerns regarding presidential overreach, he fears that agencies with broad delegations will “move[] into

277. See Martin H. Redish, *Supreme Court Review of State Court “Federal” Decisions: A Study in Interactive Federalism*, 19 GA. L. REV. 861, 874 (1985) (characterizing separate-spheres or “dual federalism” as where “[t]he states were respected as integral units, equal with and antagonistic to the federal government, while also retaining their own impregnable spheres of authority”).

278. *West Virginia v. EPA*, 142 S. Ct. 2587, 2616 (2022) (Gorsuch, J., concurring).

279. See *id.* at 2617–19.

280. *Id.* at 2619.

areas where state authority has traditionally predominated.”²⁸¹ Consequently, the federalism canon that encourages courts to look for clear statements of Congress’s intent to intrude on state sovereignty has a synergy with the major questions doctrine: “When an agency claims the power to regulate vast swaths of American life, it not only risks intruding on Congress’s power, it also risks intruding on powers *reserved* to the States.”²⁸² He concludes that the Clean Power Plan poses these risks because it intrudes on states’ “traditional” regulation of utilities.²⁸³

Language such as “traditional” state authority and “powers reserved to the States” clearly invokes an old version of federalism that invalidated laws under the Tenth Amendment when they infringed on the “zone of activities” reserved to the states.²⁸⁴ Although this notion of dual federalism was repudiated by decisions upholding New Deal legislation,²⁸⁵ it resurfaced briefly in 1976 in *National League of Cities v. Usery*.²⁸⁶ In that case, the Court reasoned that even the more expansive federal power to regulate interstate commerce is limited when it infringes state sovereignty by displacing state “functions essential to separate and independent existence.”²⁸⁷ But in 1985, the Court clearly rejected the separate-spheres approach of *National League of Cities* by endorsing the notion that the political process sufficiently limits federal power over the states.²⁸⁸ In *Garcia v. San Antonio Metropolitan Transit Authority*,²⁸⁹ the Court concluded that state interests “are more

281. *Id.* at 2618.

282. *Id.* at 2621.

283. *Id.* at 2622.

284. *Id.* at 2621–22.

285. *See e.g.*, *United States v. Darby*, 312 U.S. 100, 105, 125–26 (1941) (affirming minimum wage and the forty-hour work week provisions of the Fair Labor Standards Act of 1938); *Wickard v. Filburn*, 317 U.S. 111, 130–33 (1942) (affirming a 1941 amendment to the Agricultural Adjustment Act of 1938).

286. 426 U.S. 833 (1976), *overruled by* *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985).

287. *Id.* at 845 (internal quotation omitted).

288. *Compare id.* at 844 (recognizing that federal and state governments have “their proper spheres” (internal quotation omitted)), *with* *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528, 546–57 (1985) (rejecting that the judiciary should review federal legislation for whether it overreaches into “traditional” state government functions).

289. 469 U.S. 528 (1985).

properly protected by procedural safeguards inherent in the structure of the federal system than by judicially created limitations on federal power.”²⁹⁰

Rather than cite *National League of Cities* or acknowledge an attempt to revive the dual federalism of a bygone era, Justice Gorsuch cites *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*²⁹¹ (“SWANCC”). This five-four decision invalidated the Corps’ “Migratory Bird Rule,” which extended their permitting authority under § 404 of the Clean Water Act²⁹² to intrastate waters used as habitat by migratory birds.²⁹³ In limiting the reach of federal jurisdiction over the “waters of the United States,” the majority invoked the constitutional avoidance canon, asserting that a broad interpretation would raise “significant constitutional questions” regarding the limits of Congress’s Commerce Clause authority.²⁹⁴ As the four dissenters in *SWANCC* highlight, strong arguments support Congress’s power to regulate interstate commerce by regulating “the natural resources that generate such commerce.”²⁹⁵ The water and wildlife resources at stake present interstate issues beyond local land use concerns.²⁹⁶ In short, *SWANCC* is a weak case to use in support of separate-spheres federalism. And like the Court majority’s assertion of traditional state land use power in *SWANCC*, Justice Gorsuch’s assertion of traditional state power over

290. *Id.* at 552.

291. 531 U.S. 159 (2001) [hereinafter *SWANCC*]; see *West Virginia v. EPA*, 142 S. Ct. 2587, 2619 (2022) (Gorsuch, J., concurring) (referring to *SWANCC* as an example of “where state authority has traditionally predominated”).

292. 33 U.S.C. § 1344(a).

293. See *SWANCC*, 531 U.S. at 164.

294. See *id.* at 173–74 (stating that, while the Corps raises “significant constitutional questions” as to whether migratory birds and commercial owners of their habits substantially affect interstate commerce, Congress does not seem to have intended this broadening).

295. *Id.* at 196 (Stevens, J., dissenting).

296. See *id.* at 192–96 (asserting that the activity regulated was the discharge of fill material into the habitat of the migratory birds and that the fill discharge’s impacts on the migratory bird populations and bird-centered activities aggregates).

utilities ignores reality.²⁹⁷ Energy markets, like water quality, are regulated by *both* state and federal governments. Indeed, the regulation of *wholesale* energy markets and interstate transmission, both of which affect utilities, is entirely within federal jurisdiction.²⁹⁸

b. Equal Sovereignty: State Challenges to California’s Clean Air Act Preemption Waiver

Since the enactment of the Clean Air Act, the EPA has evaluated and granted “dozens” of requests by California for waivers of preemption under the EPA’s emissions control standards for new motor vehicles.²⁹⁹ Under § 209(b) of the Clean Air Act,³⁰⁰ the EPA must allow California to implement its own vehicle emissions standards provided they are “in the aggregate, at least as protective of public health and welfare as applicable federal standards.”³⁰¹ Although California is not specifically mentioned in § 209(b), it is effectively the only state covered because it is the only state that had adopted standards prior to the date specified in the statute.³⁰² The EPA can deny the waiver request on limited grounds such as a finding that the separate state standards are not necessary “to meet compelling and extraordinary conditions.”³⁰³ Moreover, under a separate provision, other states may choose to adopt California’s

297. See *West Virginia*, 142 S. Ct. at 2617–18 (Gorsuch, J., concurring) (asserting that while bypassing states may be more efficient, traditional state power should still be preserved).

298. See *What FERC Does*, FED. ENERGY REGUL. COMM’N, <https://perma.cc/BWX3-TJDT> (explaining that the Federal Energy Regulation Commission “[r]egulates the transmission and wholesale sale of electricity in interstate commerce”).

299. See Cal. State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program, 87 Fed. Reg. 14332, 14332 (EPA Mar. 14, 2022) (notice) [hereinafter Cal. Advanced Clean Car Program] (rescinding the EPA’s 2019 waiver withdrawal for California’s Advanced Clean Car program).

300. 42 U.S.C. § 7543(b).

301. *Id.*

302. See *id.* § 7543(b)(1) (allowing “any state” that has adopted vehicle emissions standards “prior to March 30, 1966” to apply for a waiver); *History*, CA. AIR RES. BD., <https://perma.cc/G495-SM9N> (stating that in 1966 California was the first state to regulate tailpipe emissions).

303. 42 U.S.C. § 7543(b)(1).

standards; if they do not, they are governed by the federal standards.³⁰⁴

For over fifty years, the EPA granted these waivers with few exceptions, recognizing Congress's intent to allow California to address its struggle with smog and other forms of air pollution by adopting special standards.³⁰⁵ During the Trump administration, the EPA changed course and withdrew a 2013 waiver of preemption for portions of California's Advanced Clean Car program designed to limit emissions of greenhouse gases as well as criteria pollutants such as ozone and particulate matter.³⁰⁶ The Trump EPA also prohibited other states from adopting California's standards.³⁰⁷ Under the Biden administration, the EPA rescinded these decisions, reinstating the 2013 waiver and allowing other states to adopt California's standards.³⁰⁸

A coalition of states, and some industry groups, have filed a petition for review of the recent rule reinstating the waiver.³⁰⁹ Based on comments submitted during the rulemaking, state challengers intend to argue that California's waiver of preemption is a violation of the "equal sovereignty doctrine."³¹⁰ The essence of the argument is that under § 209 of the Clean Air Act, Congress "limits state sovereignty unequally."³¹¹ It does so "by allowing California to exercise sovereign authority that § 209(a) takes from every other State," a power that—in this

304. Clean Air Act § 177, 42 U.S.C. § 7507.

305. See Cal. Advanced Clean Car Program, 87 Fed. Reg. at 14341–43 (describing the EPA's interpretation of § 177 as "placing the burden on the opponents of a waiver and the EPA" to prove the criteria for denial).

306. See The Safer Affordable Fuel-Efficient ("SAFE") Vehicles Rule Part One: One National Program, 84 Fed. Reg. 51310 (Sept. 27, 2019).

307. See *id.* at 51350–51 (interpreting § 177's exception for standards identical to California's as not applicable to greenhouse gas standards).

308. Cal. Advanced Clean Car Program, 87 Fed. Reg. 14332, 14378–79.

309. See Petition for Review, *Ohio v. EPA*, No. 22-1087 (D.C. Cir. May 12, 2022), <https://perma.cc/KWL2-FYFY> (PDF).

310. See Cal. Advanced Clean Car Program, 87 Fed. Reg. 14332, 14356 (noting that commenters had argued that the "compelling and extraordinary" language in § 209(b) of the Clean Air Act "required unique consequences in order to give adequate meaning to the words themselves and in order to overcome equal sovereignty implications").

311. See Dave Yost et al., Comment Letter on Notice of Decision for Cal. Advanced Clean Car Program, at 8 (July 6, 2021), <https://perma.cc/K73D-QV4J> (PDF).

view—Congress does not possess under the Commerce Clause.³¹²

Where does the “equal sovereignty doctrine” come from? Aside from rhetorical flourishes about state sovereignty at the founding and dicta from old or inapposite cases, the key precedent is *Shelby County v. Holder*,³¹³ a case involving the preclearance requirement of the Voting Rights Act of 1965 (“VRA”).³¹⁴ Under § 4 and § 5 of the VRA,³¹⁵ Congress required some states, namely, those with a documented history of voting discrimination, to receive federal approval before changing state election laws.³¹⁶ In 1965, Congress included a sunset provision in § 4 that required congressional renewal for the preclearance program after five years.³¹⁷ In the decades that followed, Congress reauthorized these provisions four times, most recently in 2006 for a period of twenty-five years.³¹⁸ Despite evidence that the preclearance remedy was instrumental in blocking voting discrimination,³¹⁹ the Supreme Court invalidated § 4 as a violation of the affected states’ “equal”

312. See *id.* (noting that “the States, in ratifying the Commerce Clause, did not compromise their right to equal sovereignty, as they did with later amendments” (internal quotation omitted)).

313. 570 U.S. 529 (2013).

314. 52 U.S.C. §§ 10303–10314, 10501–10508, 10701–10702; *Shelby County*, 570 U.S. at 534–36, 544 (invalidating the VRA based on principles of equal sovereignty).

315. 52 U.S.C. § 10303–10304, *invalidated by* *Shelby County v. Holder*, 570 U.S. 529 (2013).

316. See *Shelby County*, 570 U.S. at 537 (“At the time of the Act’s passage, these ‘covered’ jurisdictions were those States or political subdivisions that had maintained a test or device as a prerequisite to voting as of November 1, 1964, and had less than 50 percent voter registration or turnout in the 1964 Presidential election.”).

317. *Id.* at 538.

318. See *id.* at 538–39; Voting Rights Act Amendments of 1970, §§ 3–4, 84 Stat. 315 (5-year extension); Voting Rights Act Amendments of 1975, §§ 101, 202, 89 Stat. 400, 401 (7-year extension); Voting Rights Act Amendments of 1982, 96 Stat. 131. (25-year extension); Fannie Lou Hamer, Rosa Parks, and Coretta Scott King Voting Rights Act Reauthorization and Amendments Act, 120 Stat. 577 (25-year extension).

319. See *Shelby County*, 570 U.S. at 571 (Ginsburg, J., dissenting) (noting that “between 1982 and 2006, DOJ objections blocked over 700 voting changes based on a determination that the changes were discriminatory”).

sovereignty.³²⁰ As others have recognized, the notion of equal treatment that emerges from this case is *sui generis*.³²¹ Moreover, it is a distinct departure (in a period of normal politics) from the Second Reconstruction's national commitments to equality.³²²

The extension of a “doctrine” that rests on such a slender reed is concerning. But even more important is its imperfect fit with preemption under the Clean Air Act's provisions governing vehicle emissions standards. The concern in *Shelby County* was that VRA § 4 violated the equal “dignity” of states because it assumed states with discriminatory histories would continue to pass discriminatory laws.³²³ To ensure this did not happen, Congress enacted a prophylactic measure that would subject these states to federal oversight.³²⁴ To see how different this is from national preemption under the Clean Air Act, just imagine an analogous preemption approach under the VRA. If Congress had sufficient evidence of *de jure* voting discrimination in every state, nothing in *Shelby County* suggests that it could not enact a *national* preclearance regime.³²⁵ And if prior to enactment, a state had already put an independent review process in place to address its own history of racism in voting, Congress would not violate states' dignity by allowing that state to apply for an exemption from the national preclearance program. Furthermore, in doing so, it might also allow other states to enact laws that adopt a similar independent review process and obtain waivers from the federal program.

In other words, a statutory regime that allows a state to depart from federally imposed standards to address its own history of racism in voting would not violate other states'

320. See *id.* at 557 (majority opinion) (invalidating § 4 as unconstitutional and invalidating § 5 based on congress' failure to update the formula found within).

321. See II ACKERMAN, TRANSFORMATIONS, *supra* note 130, at 333–35 (asserting Chief Justice Robert's opinion did not follow precedent).

322. *Id.*

323. See *Shelby County v. Holder*, 570 U.S. 529, 543 (2013) (“[T]he fundamental principle of equal sovereignty remains highly pertinent in assessing subsequent disparate treatment of States. The Voting Rights Act sharply departs from these basic principles.” (citation omitted)).

324. *Id.* at 535.

325. See *id.* at 529–36 (noting the disparate treatment of states as relevant to the holding).

sovereignty. Nor does a regime that allows a state to depart from federal vehicle emissions standards to address unique local and regional air pollution problems. The idea of equal sovereignty applied in this context is an upside-down version of state sovereignty—one that insists on equal treatment without regard to background conditions or state motivations in seeking to depart from federal standards. It also stifles the innovation and experimentation that is often cited as one of the virtues of federalism.

c. Isolationist Sovereignty: The Social Cost of Carbon

In two separate lawsuits, states have challenged guidelines regarding the monetization of the social costs of carbon (“SCC”) in agencies’ cost-benefit analyses.³²⁶ Although one district court dismissed the challenge,³²⁷ a Louisiana district court recently granted a preliminary injunction of breathtaking scope.³²⁸ The court enjoined federal agencies from considering interim estimates of the SCC and essentially shut down all efforts to implement the executive order directing an interagency working group to provide interim and final estimates of the SCC.³²⁹ The Fifth Circuit stayed the preliminary injunction pending appeal, concluding that the states lacked standing, and the Supreme Court refused to intervene.³³⁰

As the Fifth Circuit’s opinion and the federal government’s brief before the Supreme Court make clear, there are numerous problems with the plaintiffs’ case, including their lack of an injury in fact for standing purposes and the absence of any final agency action under the Administrative Procedure Act (“APA”).³³¹ Their challenge is to an economic methodology for

326. See *Louisiana v. Biden*, 585 F. Supp. 3d 840, 848 (W.D. La. 2022), *vacated*, *appeal dismissed sub nom.* *La. ex rel. Landry v. Biden*, 64 F.4th 674 (5th Cir. 2023); see *Missouri v. Biden*, 558 F. Supp. 3d 754, 758 (E.D. Mo. 2021), *aff’d*, 52 F.4th 362 (8th Cir. 2022).

327. See *Missouri*, 558 F. Supp. 3d at 759 (dismissing for lack of subject matter jurisdiction).

328. See *Louisiana*, 585 F. Supp. 3d at 870.

329. *Id.*

330. *La. ex rel. Landry v. Biden*, 64 F.4th 674, 684 (5th Cir. 2023).

331. 5 U.S.C. §§ 551–559; see *Landry*, 64 F.4th at 684; Response in Opposition to Application to Vacate Stay Pending Appeal at 3, *Louisiana v.*

estimating the SCC that includes global costs in addition to domestic costs and adopts a lower discount rate than is sometimes used to account for the present value of future costs and benefits.³³² But they challenge these estimates in the abstract rather than pointing to a specific agency decision that relied on them to reach a given outcome that resulted in actual injury.³³³

Despite the absence of a statutory directive, the district court was persuaded by the plaintiffs' invocation of the major questions doctrine.³³⁴ The plaintiffs argued that agencies' use of the SCC estimates will "impose significant costs on the economy."³³⁵ But the major questions doctrine is a canon of statutory interpretation (in the form of a clear-statement rule); it does not apply to the President's exercise of Article II authority to oversee executive branch agencies.³³⁶ Since the Reagan administration, the White House's Office of Management and Budget ("OMB") has reviewed agencies' cost-benefit analyses of all rules with significant economic impact.³³⁷ Both Republican and Democratic administrations have engaged in this practice of regulatory oversight.³³⁸ The latest SCC estimates are simply a piece of this larger process that takes place subject to statutory constraints and administrative processes, such as notice and comment, and judicial review of rulemaking. For example, if a statute

Biden, 142 S. Ct. 2750 (2022) [hereinafter Response in Opposition] (asserting that the plaintiffs lack standing).

332. See *Louisiana*, 585 F. Supp. 3d at 851–59.

333. See *id.*

334. See *id.* at 862–65.

335. *Id.* at 863.

336. See Response in Opposition, *supra* note 331, at 4 ("Because Article II vests the executive power in the President and directs him to take care that the laws be faithfully executed, he may supervise how subordinate officers in the Executive Branch carry out their responsibilities, including analyzing costs and benefits in compliance with an earlier Executive Order.").

337. See Exec. Order No. 12,291, 3 C.F.R. 127 (1981) (requiring federal agencies to submit regulatory impact analyses for all major rules to the Office of Management and Budget).

338. President Clinton revoked Executive Order 12291 issued by President Reagan and replaced it with Executive Order No. 12866, 58 Fed. Reg. 51735, 51735–37 (1993), which continued the practice of OMB review of significant rules.

precludes consideration of costs, an agency may not base a decision not to regulate on the costs monetized in a regulatory cost-benefit analysis. And if the statute permits or requires such analysis, the agency's reliance on it would be subject to public comment and judicial review.

Clearly, these challenges have little merit. But what is most relevant for a discussion of disruptive theories of state sovereignty is the plaintiffs' underlying theory of state sovereignty vis-à-vis the federal government and other states. They argued that the SCC estimates will eventually result in environmental regulations that burden state industries, thereby reducing tax revenues and generally harming state economies.³³⁹ These impacts may result from environmental impact analyses for oil and gas leases or delays in energy project approvals (although the plaintiffs did not identify any specific leases or projects).³⁴⁰

But the most telling alleged injury is one to the states' governance interest under the "good neighbor provision" of the Clean Air Act.³⁴¹ Indeed, this is the only injury that the district court described as "actual" for standing purposes.³⁴² The states argued that the SCC estimates were instrumental in disapproving their implementation plans for criteria air pollutants.³⁴³ In agreeing with this argument, the court cited an EPA rule finalizing federal implementation plans for twenty-two upwind states with significant contributions to downwind ozone pollution.³⁴⁴

339. See *Louisiana v. Biden*, 585 F. Supp. 3d 840, 854 (W.D. La. 2022), *vacated, appeal dismissed sub nom. La. ex rel. Landry v. Biden*, 64 F.4th 674 (5th Cir. 2023) ("[T]he SC-GHG Estimates will directly harm Louisiana's energy, chemical manufacturing, and agricultural industries by increasing their regulatory burdens and driving up the price of electricity that these businesses need to stay in business and continue to employ Louisianians and contribute to tax revenues.").

340. See *id.* at 854–58 (identifying only general statistics but no specific leases or projects that would be harmed).

341. *Id.* at 858.

342. See *id.* (describing an "actual" injury to "executive agencies that have already employed the SC-GHG Estimates" and giving only the EPA's use of the good neighbor provision as an example).

343. See *id.* ("[T]he states are confronted with a forced choice: either they employ the [SCC] Estimates in developing their state implementation plan, or the EPA subjects them to a federal plan based on the [SCC] Estimates.").

344. See *id.*

These arguments fundamentally misrepresent how the SCC functions in this context. In establishing the emissions budgets for these states, the EPA engaged in a lengthy process that uses technology-based pollution controls to assess cost-effective limits.³⁴⁵ The rule includes the EPA's cost-benefit analysis (which incorporates the SCC), but it does not rely on it; it is simply the typical cost-benefit analysis that agencies include in the regulatory impact analyses they submit to the OMB.³⁴⁶ And even if the cost-benefit analysis influenced the result, climate benefits likely had no impact given that the health benefits were substantial.³⁴⁷ Moreover, regulating interstate air pollution requires federal intervention.³⁴⁸ Upwind states have no incentive to internalize the costs of pollution that travels out of state. To characterize the federal implementation plans as coercive is disingenuous at best.

The fact that states relied on this argument at all reveals a view of state sovereignty that is even more absolute than separate-spheres or equal sovereignty. It might be termed "isolationist" sovereignty because it contemplates freedom from federal regulation *even when* that regulation is designed to address problems of scale and state coordination. That is, it advances a notion of state sovereignty that is wholly inconsistent with even a minimalist version of the regulatory state and the long-accepted role of the federal government in regulating *interstate* pollution. This is the most disruptive view of state-federal authority yet. The fact that even one court would entertain it suggests we need to take these disturbances to

345. See Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 86 Fed. Reg. 23054, 23105 (describing the process it took to assess the cost-effectiveness of electricity-generating units).

346. See *id.* at 23160. For a plain language explanation of how the Revised Cross-State Air Pollution Rule functions, see *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 501–02 (2014).

347. The climate benefits of the Revised Cross-State Air Pollution Rule in 2021 are estimated at \$1,000,000 with a 3% discount rate, while the health benefits are \$230,000,000 and \$1,900,000,000. Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 86 Fed. Reg. at 23153. At a 3% discount rate for 2021 through 2040, the present value of climate benefits is \$4,400,000,000 compared to \$4,800,000,000 and \$37,000,000,000 in health benefits. *Id.* at 23155. Compliance costs are estimated at \$370,000,000. *Id.*

348. See Symposium, *Interstate Agreements for Air Pollution Control*, 1968 WASH. U. L. REV. 260, 282 (1968) (concluding that "control and prevention of interstate air pollution may be best left to the federal government").

constitutional governance structures seriously.³⁴⁹ We need a competing narrative that allows the system to adapt rather than transform to a less (ecologically) resilient regime.

IV. MANAGING FOR RESILIENCE: WILL CONSTITUTIONAL GOVERNANCE ADAPT OR TRANSFORM?

As explained in Part II, we already have theoretical foundations for the kind of “cooperative” federalism that supports adaptive governance and adaptive management of natural resources. The rich literature in dynamic and polycentric federalism has long supported overlapping, shared governance when it can further values such as innovation, experimentation, and accountability, as well as solve problems of scale.³⁵⁰ What is missing from judicial doctrine, however, is a theory of state sovereignty that can resolve states’ disagreement over whether a regime is sufficiently cooperative—a doctrine that can correctly situate state sovereignty in litigation regarding federal regulation so that the ball does not roll too far from the constitutional governance structures that facilitate adaptive governance. Shared governance must adapt, not transform, if we are to manage the challenges ahead.

Fortunately, a conception of state sovereignty that relies on shared governance already exists in the context of states’ interests in the preservation of their natural resources and their responsibilities to protect the public health and welfare. In 1907, the Supreme Court granted Georgia an injunction in a nuisance action against Tennessee copper smelters, whose sulfur emissions were damaging property in Georgia.³⁵¹ In granting this remedy, Justice Holmes emphasized that a state, rather than a private party, was the injured party:

349. See *Louisiana v. Biden*, 543 F. Supp. 3d 388, 405–06 (W.D. La. 2021), (granting a preliminary injunction on the basis that the states’ “quasi-sovereign interests” had been affected by government action), *vacated, appeal dismissed sub nom.* *Louisiana v. Biden*, 45 F.4th 841 (5th Cir. 2022).

350. See *supra* note 22 and accompanying text.

351. See *Georgia v. Tenn. Copper Co.*, 206 U.S. 230, 239 (1907) (“If the state of Georgia adheres to its determination, there is no alternative to issuing an injunction, after allowing a reasonable time to the defendants to complete the structures that they now are building, and the efforts that they are making to stop the fumes.”).

This is a suit by a state for an injury to it in its capacity of quasi-sovereign. In that capacity the State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air. . . . When the States by their union made the forcible abatement of outside nuisances impossible to each, they did not thereby agree to submit to whatever might be done. They did not renounce the possibility of making reasonable demands on the ground of their still remaining quasi-sovereign interests; and the alternative to force is a suit in this court.³⁵²

In 2007, the Court again recognized a state's quasi-sovereign interest in its natural resources when it held that Massachusetts had standing to challenge the EPA's decision not to regulate greenhouse gas emissions from new vehicles:

Just as Georgia's independent interest "in all the earth and air within its domain" supported federal jurisdiction a century ago, so too does Massachusetts' well-founded desire to preserve its sovereign territory today. . . . When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, it cannot negotiate an emissions treaty with China or India, and in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted.³⁵³

In recognizing that Massachusetts had standing, the Supreme Court majority emphasized that states are "entitled to special solicitude" by virtue of their "quasi-sovereign interests"³⁵⁴ in the "earth and air within"³⁵⁵ their boundaries. There is some evidence that this line of reasoning made it into the majority opinion because of Justice Kennedy, who raised

352. *Id.* at 237.

353. *Massachusetts v. EPA*, 549 U.S. 497, 519 (2007) (quoting *Tenn. Copper Co.*, 206 U.S. at 237).

354. *Id.* at 520.

355. *Id.* at 519 (quoting *Tenn. Copper Co.*, 206 U.S. at 237).

*Georgia v. Tennessee Copper Co.*³⁵⁶ at oral argument even though none of the parties had included it in their briefs.³⁵⁷ But though the Court's recognition of the states' special status regarding its natural resources drew upon older precedent grounded in the common law, its revival in the modern regulatory era is consistent with the justifications for cooperative federalism and the recognition that environmental problems often require the exercise of federal authority.³⁵⁸

Like the air pollution at issue in *Tennessee Copper*, climate change and other environmental problems do not observe political boundaries. When a state cannot prevent or abate these nuisances through the exercise of its police powers or by seeking redress in its own courts, the federal government has an obligation to help the state protect its "quasi-sovereign" interests.³⁵⁹ Cooperative federalism under statutes like the Clean Air Act and Clean Water Act attempts to account for these pollution externalities *ex ante*—before they become nuisances that require judicial remedies. It does so by furthering a goal of shared governance that recognizes the states' quasi-sovereign interests in preservation of their natural resources.

To see how this view can inform the state-sovereignty debate, this Part applies it to two recent challenges: a challenge to the EPA's regulatory authority over greenhouse gas emissions in *West Virginia v. EPA* and a challenge to the EPA's interpretation of federal jurisdiction under the Clean Water Act in *Sackett v. EPA*.³⁶⁰ Although quasi-sovereign state interests require expansive federal jurisdiction in these cases, they might suggest *limited* federal jurisdiction under the Dormant Commerce Clause. The final subpart explores this distinction in a Dormant Commerce Clause case that was before the Court in the 2021-2022 term.

356. 206 U.S. 230 (1907).

357. See Bradford Mank, *Should States Have Greater Standing Rights than Ordinary Citizens?* *Massachusetts v. EPA's New Standing Test for States*, 49 WM. & MARY L. REV. 1701, 1738 (2008) (noting how Justice Kennedy suggested that *Tennessee Copper Co.* was the petitioners' "best case").

358. For a discussion of how adapting to the worst-case scenarios for global warming will require a national response, see generally J.B. Ruhl & Robin Kundis Craig, *4°C*, 106 MINN. L. REV. 191 (2021).

359. See *Tenn. Copper Co.*, 206 U.S. at 237.

360. 143 S. Ct. 1322 (2023); see *West Virginia v. EPA*, 142 S. Ct. 2587, 2599–2600 (2022); *Sackett*, 143 S. Ct. at 1332.

A. *Federal Jurisdiction in Support of State Sovereignty: The Reach of Federal Authority*

Congress enlists state assistance in administrative government in one of two ways: it either encourages state participation by offering federal funds in exchange for state cooperation³⁶¹ or conditions non-preemption of state implementation and enforcement authority on a state's agreement to exercise this authority consistent with federal law.³⁶² This kind of "cooperative" federalism, as it is traditionally called, is pervasive.³⁶³ Most major antipollution statutes, such as the Clean Air Act and the Clean Water Act, contemplate substantial state participation, as do other health and safety laws.³⁶⁴ In state litigation challenging federal authority under these statutes, states often disagree about the virtues of federal regulation, typically along predictable political lines.³⁶⁵ I have argued elsewhere that states should have

361. See *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 567 U.S. 519, 576 (2012)

The Spending Clause grants Congress the power "to pay the Debts and provide for the . . . general Welfare of the United States." We have long recognized that Congress may use this power to grant federal funds to the States, and may condition such a grant upon the States' "taking certain actions that Congress could not require them to take." (first quoting U.S. CONST. art. 1, § 8, cl. 1; then quoting *Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 686 (1999)).

362. See *New York v. United States*, 505 U.S. 144, 167 (1992) (clarifying that the Supreme Court has "recognized Congress' power to offer States the choice of regulating [an] activity according to federal standards").

363. See *id.* at 167–68 (listing examples of federal statutory schemes that use a model of cooperative federalism, including the Clean Water Act, the Resource Conservation and Recovery Act, and the Alaska National Interest Lands Conservation Act, 16 U.S.C. §§ 3101–3103, 3111–3126, 3141–3151, 3161–3173, 3181–3183, 3191–3215, 3231–3233).

364. See *Michigan v. EPA*, 268 F.3d 1075, 1078 (D.C. Cir. 2001) (describing how the Clean Air Act "gives states responsibility for implementing [the National Ambient Air Quality] standards"); *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (describing how the Clean Water Act "anticipates a partnership between the States and the Federal Government, animated by a shared objective: 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters'" (quoting 33 U.S.C. § 1251(a))).

365. See Jonathan H. Adler, *The Republican Reversal*, CATO INST., <https://perma.cc/48UE-G5X6> (last visited Aug. 18, 2023) ("Democratic officeholders tend to endorse and advocate for more expansive federal environmental regulation, while GOP officeholders resist.").

standing under these statutes based on their “governance” interests in implementing them.³⁶⁶ The focus in this subsection is on how courts should evaluate those interests on the merits, especially when states disagree.

1. Shared Governance: *West Virginia v. EPA*

The states that challenged the Clean Power Plan³⁶⁷ acknowledged the cooperative-federalism framework of § 111(d). North Dakota referred to cooperative federalism in some form twelve times in its brief.³⁶⁸ States and municipalities defending the EPA’s interpretation of § 111(d) similarly recognized that it contemplates a role for both states and the federal government.³⁶⁹ They disagreed, of course, about what functions the statute assigns to states versus the federal government. For the challengers, the EPA may not set binding emissions limits at the national or state levels.³⁷⁰ It may only establish some guidelines that states must consider in developing their own plans for existing sources under § 111(d).³⁷¹ The EPA may impose a plan if the state plan is not “satisfactory.”³⁷² But even then, the argument is that the EPA may not impose requirements that preclude states’

366. See Shannon Roesler, *State Standing to Challenge Federal Authority in the Modern Administrative State*, 91 WASH. L. REV. 637, 684–87 (2016) (arguing that, per the governance approach, states would have a right to sue under the Clean Air Act and Clean Water Act).

367. See EPA, *supra* note 219.

368. See Reply Brief of the State of North Dakota at 2, 4, 8, 12, 13, 19, 23, 24, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (No. 20-1530).

369. See Brief for States and Municipalities in Opposition at 22, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (No. 20-1530) (recognizing that the “Clean Air Act contains multiple approaches to cooperative federalism”).

370. See Merits Brief of Petitioner the State of North Dakota at 5, *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (No. 20-1530) (arguing that the lower court erred in the finding that EPA “could set binding hard nationwide performance standards (i.e., emission limitations)”).

371. See Reply Brief of the State of North Dakota, *supra* note 368, at 23 (describing EPA’s guidelines as “the practically achievable and affordable ‘guardrails’ within which the States exercise their responsibility to establish standards of performance in State plans”).

372. 42 U.S.C. § 7411(d)(2).

consideration of “source-specific factors,” such as “the remaining useful life” of a source.³⁷³

As noted above, this interpretation has textual support. It supports Trump’s ACE Rule, which required only heat-rate improvements by sources and would have no real effect on greenhouse gas emissions.³⁷⁴ Of course, as Justice Kagan’s dissent makes clear, the arguments supporting the EPA’s approach in the Clean Power Plan have textual support as well.³⁷⁵ And although the outdated plan would not have much effect today,³⁷⁶ the strategies it contemplates (emissions trading and generation shifting) are the ones that can most efficiently reduce greenhouse gas emissions from fossil-fueled power plants.

Given the competing interpretations, the Court should have engaged in a reasoned analysis that employed typical tools of statutory construction, deferring to the EPA if its construction is reasonable.³⁷⁷ The challengers would, of course, invoke the federalism canon. Indeed, as discussed above, Justice Gorsuch sought to bolster the clear statement rule associated with the major questions doctrine by noting its close connection to the canon requiring a clear statement from Congress when one interpretation would “intrude on state governmental functions.”³⁷⁸

373. Merits Brief of Petitioner the State of North Dakota, *supra* note 370, at 14.

374. *See id.* at 5 (arguing that the EPA’s decision to promulgate Trump’s ACE Rule was based on an erroneous view of the law).

375. *See West Virginia v. EPA*, 142 S. Ct. 2587, 2630 (2022) (Kagan, J., dissenting) (referring to various dictionary definitions of “system”).

376. *See supra* note 226 and accompanying text.

377. *See Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984) (holding that a federal court should defer to an agency’s interpretation of an ambiguous statute); *see also* Bridget A. Fahey, *Coordinated Rulemaking and Cooperative Federalism’s Administrative Law*, 132 YALE L.J. 1320, 1371 (2023) (describing the *Chevron* deference doctrine).

378. *Gregory v. Ashcroft*, 501 U.S. 452, 470 (1991) (“In the face of such ambiguity, we will not attribute to Congress an intent to intrude on state governmental functions regardless of whether Congress acted pursuant to its Commerce Clause powers or § 5 of the Fourteenth Amendment.”); *see West Virginia*, 142 S. Ct. at 2621 (Gorsuch, J., concurring) (“To preserve the ‘proper balance between the States and the Federal Government’ and enforce limits on Congress’s Commerce Clause power, courts must ‘be certain of Congress’s intent’ before finding that it ‘legislate[d] in areas traditionally regulated by the States.’” (quoting *Gregory*, 501 U.S. at 459–60)). It is worth noting that the

But states in favor of stricter emissions limits might respond by noting that the limited ACE Rule frustrates their quasi-sovereign interests in preserving their natural resources. The Supreme Court has emphasized that the EPA has regulatory authority over greenhouse gas emissions.³⁷⁹ But, even if this were not the case, the states cannot meaningfully regulate emissions of an air pollutant with global rather than local effects. They are left, however, bearing the burden of climate impacts such as sea-level rise, changes in the hydrological cycle (droughts and floods), and public health harms.³⁸⁰ State sovereignty, in this context, therefore *requires* an expansive exercise of federal authority. Because this broader federal role helps states perform a traditional governmental function (preventing and abating nuisances) that they otherwise

original version of this rule does not contemplate “traditional” functions, but rather, “governmental” functions and, in addition, unlike the clear statement rule associated with the major questions doctrine, the federalism canon applies only when the statute is ambiguous. *See id.* at 2633, 2640, 2643 (Kagan, J., dissenting).

379. *See* Am. Elec. Power Co. v. Connecticut, 564 U.S. 410, 424 (2011) (citing § 111 in concluding that the Clean Air Act “speaks directly’ to emissions of carbon dioxide from [power] plants”).

380. In recent years, states and local governments have brought a range of state law claims against fossil fuel companies in state courts, seeking damages for climate impacts. *See generally, e.g.*, Rhode Island v. Shell Oil Prods. Co., 35 F.4th 44 (1st Cir. 2022); San Mateo v. Chevron Corp., 32 F.4th 733 (9th Cir. 2022); Mayor & City Council of Balt. v. BP P.L.C., 31 F.4th 178 (4th Cir. 2022); Bd. of Cnty. Comm’rs v. Suncor Energy (U.S.A.), Inc., 25 F.4th 1238 (10th Cir. 2022). The claims include common law nuisance (public and private), trespass, negligence, design defect, and failure to warn, as well as claims brought under state consumer protection statutes alleging that the companies engaged in misinformation campaigns regarding climate science, which led to increased consumption of fossil fuels. Despite defendants’ efforts to remove these cases to federal court, four federal circuit courts have affirmed district court orders remanding these cases back to state courts. *See Shell Oil Prods. Co.*, 35 F.4th at 62; *San Mateo*, 32 F.4th at 764 (“We therefore reject the broad interpretations of removal jurisdiction urged on us by the Energy Companies and affirm the district court’s remand order.”); *BP P.L.C.*, 31 F.4th at 238 (affirming “[b]ecause [the court could] not discern a proper basis for removal that permits a federal court to entertain Baltimore’s action”); *Suncor Energy*, 25 F.4th at 1275 (affirming the lower court and holding that none of the energy company’s six grounds for removal would be “sufficient to establish federal jurisdiction over the Municipalities’ state-law claims”). *But see* City of New York v. Chevron Corp., 993 F.3d 81, 98–100 (2d Cir. 2022) (holding that the Clean Air Act preempted state law claims when they were brought in federal court).

cannot, the federalism canon should require a clear statement *negating* such authority.³⁸¹ A contrary reading only enables states that wish to abdicate their governmental responsibilities by not regulating at all.

2. National Governance: *Sackett v. EPA*

The Clean Water Act defines the “navigable waters” it covers as “waters of the United States.”³⁸² The controversy over the statutory interpretation of this short phrase has a long, troubled history.³⁸³ Although the interpretation affects the reach of all CWA programs, including a permitting program that states implement under a cooperative federalism model,³⁸⁴ the most controversial application is in the context of the § 404 permitting program governing the “discharge of dredged or fill material” into covered waters—a program that is administered by the Army Corps in most states.³⁸⁵ In many cases, the water bodies at issue are wetlands or streams that lack a continuous surface connection to a traditional “navigable” water.³⁸⁶ Although the hydrological connection of these water bodies to “navigable waters” may be clear, the connection looks less direct than a perennially flowing stream or a wetland directly adjoining a navigable water body.³⁸⁷ Moreover, the § 404

381. See *supra* note 378 and accompanying text.

382. 33 U.S.C. § 1362(7).

383. See Robin Kundis Craig, *There Is More to the Clean Water Act than Waters of the United States: A Holistic Jurisdictional Approach to the Section 402 and Section 404 Permit Programs*, 73 CASE W. RESV. L. REV. 349, 362–91 (2022) [hereinafter Craig, *There Is More to the Clean Water Act*] (detailing how the phrase has been interpreted over years, including the differences between the EPA and the Corps over the scope of the act, and then the Supreme Court’s interpretation over the years).

384. 33 U.S.C. § 1342 (setting out how, amongst other things, the federal government may authorize a state to administer a permit program).

385. *Id.* § 1344; see also Craig, *There Is More to the Clean Water Act*, *supra* note 383, at 379–91 (illustrating through case law how the § 404 controversy has played out).

386. See, e.g., *Rapanos v. United States*, 547 U.S. 715, 720 (2006) (regarding wetlands from which the “nearest body of navigable water was 11 to 20 miles away”).

387. See *id.* at 719–20 (noting petitioner had violated federal law for “backfill[ing] wetlands on a parcel of land in Michigan that he owned and sought to develop” near “navigable waters”).

program can affect whether and how landowners develop their properties if proposed projects will “fill” a covered water body.³⁸⁸

Although the Supreme Court has weighed in at times, until this past term, it had not resolved the question of how far the Clean Water Act’s reach extends.³⁸⁹ When the Court tried to answer the question in 2006 in *Rapanos v. United States*,³⁹⁰ it produced a fractured set of opinions with no majority approach. Writing for a plurality of the Court, Justice Scalia’s interpretation included “relatively permanent, standing or continuously flowing bodies of water” that are connected to traditional navigable waters, as well as wetlands with a continuous surface connection to such bodies of water.³⁹¹ Such a definition does not clearly extend to intermittent streams or wetlands without a continuous surface connection to traditional waters. Finding this approach too limited, Justice Kennedy concurred in the result but extended the definition to wetlands and other waters that “possess a significant nexus” to other covered waters more readily understood as “navigable.”³⁹² This nexus involves a determination of whether the wetlands (alone or in combination with similarly situated lands in the region) “significantly affect the chemical, physical, and biological integrity of other covered waters.”³⁹³

388. See 33 U.S.C. § 1342 (outlining the powers available to the government for projects that are proposed to fill a covered water body).

389. See *Rapanos*, 547 U.S. at 758 (“[N]o opinion commands a majority of the Court on precisely how to read Congress’ limits on the reach of the Clean Water Act.”).

390. 547 U.S. 715 (2006).

391. *Id.* at 739 (plurality opinion).

392. *Id.* at 782 (Kennedy, J., concurring).

393. *Id.* at 780. The four dissenting Justices would have upheld the agency’s broader interpretation based on hydrological connection. See *id.* at 788 (Stevens, J., dissenting) (describing how the dissenting judges viewed the agency’s interpretation as a “quintessential example of the Executive’s reasonable interpretation of a statutory provision”). This includes waters covered by either Justice Scalia’s or Justice Kennedy’s approaches, meaning that at least five Justices concluded that the wetlands at issue may be treated as covered waters under either test. See *id.* at 810 (arguing that, since the dissenting Justices would have upheld Corps’ jurisdiction if either Justice Scalia or Justice Kennedy’s test is satisfied, then such wetlands should be treated as covered water).

In 2015, the Corps and the EPA finalized a rule that attempted to codify and clarify the significant-nexus test.³⁹⁴ The agencies based their interpretation of the Act's coverage on a 400-page "connectivity report" that detailed the scientific research supporting the connection between wetlands (including isolated wetlands) and downstream rivers, lakes, and streams.³⁹⁵ Under the Trump administration, the agencies rescinded the Obama-era interpretation and replaced it with a rule that more closely tracked Justice Scalia's interpretation.³⁹⁶ In response to the vacatur of this rule by a federal district court,³⁹⁷ the EPA and the Corps under the Biden administration announced that they would return to the pre-2015 regulatory approach to "waters of the United States" while working toward another rule that would revise and clarify the definition.³⁹⁸ In January 2023, the Corps and the EPA published a final rule that clarified how the agencies would determine "adjacency" and incorporated both Justice Kennedy's and Justice Scalia's tests.³⁹⁹

This past term, the Supreme Court revisited the question of how to define "*waters of the United States*."⁴⁰⁰ The property owners at the center of the case, Michael and Chantell Sackett, contended that the wetlands on their Idaho property were not covered, so they did not need a § 404 permit to build a

394. See 33 C.F.R. § 328.3 (2015) (requiring that certain waters would be subject to a case-specific analysis to determine if they had a significant nexus to a wetland).

395. See Clean Water Rule: Definition of "Waters of the United States", 80 Fed. Reg. 37,054, 37,057 (June 29, 2015).

396. See 33 C.F.R. § 328.3 (2020).

397. See *Pascua Yaqui Tribe v. EPA*, 557 F. Supp. 3d 949, 957 (D. Ariz. 2021).

398. See Ryan Elliott, *U.S. EPA and Army Corps Revert Back to Pre-2015 Interpretation of "Waters of the United States"*, VORYS, <https://perma.cc/QBH7-WD6P> (last visited Aug. 18, 2023).

399. See 88 Fed. Reg. 61964 (2023) (expanding the definition to include both waters which are "[r]elatively permanent, standing or continuously flowing" and those which "alone or in combination with similarly situated waters . . . affect the chemical, physical, or biological integrity" of identified waters (quoting *Rapanos v. United States*, 547 U.S. 715, 780 (2006))).

400. See *Sackett v. EPA*, 598 U.S. 651, 684 (2023).

residence.⁴⁰¹ The Corps, EPA, and lower courts disagreed.⁴⁰² Although the wetlands on the Sacketts' property lack a continuous surface connection to a traditionally navigable water, the Ninth Circuit upheld as reasonable the EPA's determination that the wetlands are adjacent to a jurisdictional tributary of the lake and have a significant nexus with the lake when considered in connection with other similarly situated wetlands.⁴⁰³

The Supreme Court granted certiorari to decide whether the Ninth Circuit erred in applying the significant-nexus test to the wetlands on the Sacketts' property.⁴⁰⁴ And in a five-four decision, the Supreme Court adopted Justice Scalia's narrower interpretation of "waters of the United States," limiting covered wetlands to those that are "indistinguishable" from other covered waters.⁴⁰⁵ This approach is a radical departure from decades of agency practice. As Justice Kavanaugh observed, "the Court's 'continuous surface connection' test departs from the statutory text, from 45 years of consistent agency practice, and from this Court's precedents."⁴⁰⁶ Four justices would have interpreted "adjacent" to mean "lying near or close to, neighboring, or not widely separated," rather than interpreting it to only mean adjoining.⁴⁰⁷

Although the question before the Court involved a matter of statutory interpretation, the underlying debate is one involving federalism. States filed *amicus* briefs advancing the relevance

401. *See id.* at 662–63.

402. *See id.* at 663–64 (noting how the lower courts ruled in favor of the EPA and the "materially identical definitions" of the EPA and the Corps, which obviously differed from the Sacketts' interpretation).

403. *See Sackett v. EPA*, 8 F.4th 1075, 1093 (9th Cir. 2021), *rev'd Sackett v. EPA*, 598 U.S. 651 (2023).

404. *See Sackett v. EPA*, 142 S. Ct. 896 (2022) (mem.).

405. *See Sackett*, 598 U.S. at 684.

406. *Id.* at 716 (Kavanaugh, J., concurring).

407. *Id.* at 718. Justices Thomas and Gorsuch appear to favor an even more limited interpretation of federal jurisdiction. In his concurrence, Justice Thomas objected to the agencies' expansive "New Deal era" interpretation and endorsed an interpretation of federal jurisdiction tied to old notions of navigability, one that would exclude purely intrastate waters such as the lake at issue in the case. *See id.* at 710 (Thomas, J., concurring) (explaining that the "EPA and the Corps" must respect the Supreme Court's prior rulings that the Clean Water Act "extends only to the limits of Congress' traditional jurisdiction over navigable waters").

of different conceptions of state sovereignty. As in *West Virginia v. EPA*, states on both sides acknowledge that Congress contemplated a state-federal partnership—a model of cooperative federalism—under the CWA.⁴⁰⁸ But for some states, this partnership is nonetheless limited by old conceptions of dual sovereignty dubiously preserved in the federalism canon’s protection of the states’ “traditional power” to regulate land and water.⁴⁰⁹ This separate-spheres federalism bolsters the view that the significant-nexus test may violate the Commerce Clause.⁴¹⁰ Tellingly, for this last proposition, they cited language from an old Supreme Court decision in 1937,⁴¹¹ a period during which the Supreme Court was synthesizing the old constitutional order with a more expansive view of federal power.⁴¹²

Contrast this with the view of federal power in support of state sovereignty advanced by the states supporting the Ninth Circuit’s disposition of the case.⁴¹³ Their view of the state-federal partnership rests on the quasi-sovereign interests of states in protecting their natural resources.⁴¹⁴ Not surprisingly, they cited *Georgia v. Tennessee Copper Co.* in rejecting the separate-spheres ideology: “When the States formed a union and renounced the use of force to protect themselves from other

408. See *supra* notes 368–373 and accompanying text.

409. See Brief of Amici Curiae State of West Virginia and 25 Other States in Support of Petitioners at 7, *Sackett v. EPA*, 598 U.S. 651 (2023) (No. 21-454) [hereinafter Brief of Amici Curiae] (arguing the legislature’s provision powers enable a state to regulate intrastate waters and other natural resources).

410. See *id.* at 19 (explaining how the significant-nexus test “breaks down” when it reaches a certain distance).

411. *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1, 37 (1937).

412. See Brief of Amici Curiae, *supra* note 409, at 20 (“Enshrining the significant nexus test would pose a genuine risk of letting the Commerce Clause ‘embrace effects upon interstate commerce so indirect and remote’ as to ‘effectually obliterate the distinction between what is national and what is local.’” (quoting *Jones & Laughlin Steel Corp.*, 301 U.S. at 37)).

413. See Brief for States of New York et al. as Amici Curiae in Support of Respondents, *Sackett v. EPA*, 598 U.S. 651 (2023) (No. 21-454) (discussing how the forty-eight “contiguous States” have an interest in the question presented in *Sackett* due to their reliance on the CWA’s federal standards for water protection from pollutants).

414. See *id.* at 21 (“[T]he discharge of pollutants into [downstream navigable waters] will thus degrade downstream water quality or increase downstream flood risks.”).

States, they ‘did not thereby agree to submit to whatever might be done.’”⁴¹⁵ In this view, a narrow interpretation of the CWA undermines federalism by ignoring how the “CWA vindicates these sovereign interests of the States by protecting them from the harms generated by pollutant discharges in upstream States and by giving them a mechanism for enforcing that interest.”⁴¹⁶ In other words, if the CWA does not cover wetlands like those at issue in the case, the federal government is abdicating its responsibility to respect downstream states’ sovereignty. Once again, a federalism canon that respects state sovereignty should require a clear statement *limiting* federal authority.⁴¹⁷

Amicus briefs submitted by Colorado and eighteen tribes further emphasized the role of federal power in protecting state and tribal interests in their water resources. Colorado’s brief described Colorado’s hydrological landscape to illustrate the limited reach of Justice Scalia’s approach, noting that Colorado is home to the headwaters of five multistate rivers, two-thirds of which are intermittent waters without perennial flow.⁴¹⁸ Without the state’s partnership with federal agencies, it cannot effectively regulate the water quality of these important river systems, resulting in negative impacts both in and out of state.⁴¹⁹ As noted in the brief, when the Supreme Court held that the CWA displaced the federal common law of nuisance, it recognized Congress’ intent to enact comprehensive water quality regulation.⁴²⁰ Rolling back the reach of this legislation

415. *Id.* at 17 (quoting *Georgia v. Tenn. Copper Co.*, 206 U.S. 230, 237 (1907)).

416. *Id.*

417. This is bolstered by the CWA’s stated goal “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251.

418. Brief of Amicus Curiae State of Colorado in Support of Respondents at 3, *Sackett v. EPA*, 598 U.S. 651 (2023) (No. 21-454) (“The United States Geological Survey’s National Hydrography Dataset estimates that 24 percent of Colorado’s streams are ephemeral, and 45 percent are intermittent, meaning over two-thirds of Colorado’s waters are temporary in nature and lack year-round flow.”).

419. *See id.* at 13 (explaining that drawing an “arbitrary line” between the state and federal jurisdiction would result in an “unworkable patchwork” of water quality protection).

420. *See id.* at 11 (“Congress’ intent in enacting the [1972] Amendments was clearly to establish an all-encompassing program of water pollution regulation.” (citing *City of Milwaukee v. Illinois*, 451 U.S. 304, 318 (1981))).

now may leave states like Colorado less able to protect their natural resources than they were before Congress passed the CWA.⁴²¹

In their brief, the eighteen tribes similarly emphasized how limited federal jurisdiction would endanger their sovereign interests in water resources by undermining their ability to prevent “cross-border pollution, including destruction of upstream wetlands that protect tribal waters and harm treaty protections.”⁴²² The brief provides detailed examples of how wetlands and intermittent and ephemeral streams protect the aquatic life and water central to cultural practices, spiritual beliefs, and treaty rights to fish, hunt, gather, and otherwise use their land.⁴²³ Because most tribal lands are downstream from nontribal lands, the tribes rely on federal permitting processes under the CWA to protect these water resources.⁴²⁴ In addition, important consultation requirements are triggered by these permits that protect treaty rights in waters not on tribal reservations.⁴²⁵

Unfortunately, the Supreme Court’s adoption of a limited view of federal authority threatens to create a regulatory void, leaving wetlands and streams critical to tribes subject to no governmental oversight.⁴²⁶ States lack jurisdiction to regulate on tribal reservations and many tribes lack the resources to regulate.⁴²⁷ Furthermore, states lack the federal government’s

421. *See id.* at 12 (addressing Colorado’s successful work with federal agencies to assist with state-specific laws governing water and land rights).

422. Brief of Menominee Indian Tribe of Wisconsin and 17 Federally Recognized Indian Tribes as Amici Curiae in Support of Respondents at 3, *Sackett v. EPA*, 598 U.S. 651 (2023) (No. 21-454) [hereinafter Brief of Menominee Indian Tribe].

423. *See id.* at 4–14.

424. *See id.* at 16 (explaining how federal permits protect tribes’ reliance on catching and eating quality, unpolluted fish).

425. *See id.* at 17 (discussing how permits provide protection against any harm or negative impacts that may affect indigenous historic sites that are outside the reservation due to strong cultural and historical ties).

426. *See* E.A. Crunden, *Post-Sackett, Chaos Erupts for Wetlands Oversight*, E&E NEWS (June 2, 2023), <https://perma.cc/TQ5U-DK84> (predicting that at least 50 percent of wetlands will no longer be subject to federal jurisdiction under the Court’s limited definition of “adjacent”).

427. *See* Brief of Menominee Tribe of Wisconsin, *supra* note 422, at 21–22 (emphasizing how tribes rely on the federal government for enforcement and

consultation requirement (meaning tribes will not be consulted regarding impacts to off-reservation waters), and nearly half of the states prohibit state water-quality regulations that are more stringent than federal law.⁴²⁸ In short, limits on federal authority will undermine tribes' (as well as some states') sovereign interests in their natural resources, a result that erodes the ecological resilience of our constitutional governance structures.

B. *State Power in the Absence of Federal Legislation: The Dormant Commerce Clause*

As the Court noted in *Tennessee Copper and Massachusetts v. EPA*,⁴²⁹ the states surrendered certain aspects of their sovereignty upon entering the union, but they did not surrender their police powers “to provide for the public health, safety, and morals.”⁴³⁰ These powers are circumscribed by the Supremacy Clause;⁴³¹ the federal government can choose to preempt state laws when legislating pursuant to an enumerated power.⁴³² In addition, states may not force other states to regulate as they see fit; as the Court noted in *Massachusetts v. EPA*, Massachusetts may not invade Rhode Island to force the reduction of greenhouse gas emissions in that state.⁴³³

But like any state, Massachusetts is generally free to adopt legislation that furthers its citizens' preferences for emissions reductions as long as that legislation is not discriminatory (treating out-of-state entities differently from their in-state counterparts) and does not place an “undue burden” on

protection within reservations and how states lack jurisdiction within reservation boundaries).

428. *See id.* at 23.

429. 549 U.S. 497 (2007).

430. *Barnes v. Glen Theatre, Inc.*, 501 U.S. 560, 569 (1991).

431. U.S. CONST. art. VI, cl. 2.

432. *See Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 203–04 (1983) (finding that a federal law may preempt a state or local law if the state law impedes the achievement of a federal objective).

433. *Massachusetts*, 549 U.S. 497 (referencing that states “are not relegated to the role of mere provinces or political corporations, but retain the dignity, though not the full authority, of sovereignty” (quoting *Alden v. Maine*, 527 U.S. 706, 715 (1999))).

interstate commerce.⁴³⁴ This is the essence of the “negative” or Dormant Commerce Clause, a doctrine that arose out of a concern that states would seek to favor in-state economic interests (for example, by taxing out-of-state goods more stringently than in-state goods).⁴³⁵ Even though Congress may not have passed a law specifically prohibiting protectionist state policies, federal courts may invalidate them as if Congress has spoken.⁴³⁶ This judicial doctrine has its critics, most notably Justice Thomas, who would abandon it all together.⁴³⁷ After all, if a state passes a protectionist law, Congress may simply preempt it.⁴³⁸ The power to regulate interstate commerce resides in Congress, not the courts.⁴³⁹

The contours of this larger debate are outside the scope of this Article. But because the Supreme Court considered whether to expand the doctrine’s reach this past term, it is worth asking what a resilient Dormant Commerce Clause doctrine would look like. To further resilience (in terms of adaptive capacity), the doctrine should support adaptive governance principles, such as shared governance, localized decision making, innovation, democratic participation, and accountability.

434. See *South Dakota v. Wayfair, Inc.*, 138 S. Ct. 2080, 2090–91 (2018) (“Modern precedents rest upon two primary principles that mark the boundaries of a State’s authority to regulate interstate commerce. First, state regulations may not discriminate against interstate commerce; and second, States may not impose undue burdens on interstate commerce.”).

435. U.S. CONST. art. I, § 8, cl. 2.

436. See *Camps NewFound/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 575 (1997); *cf.* U.S. CONST. art. I, § 8, cl. 2 (“Congress may impose relevant conditions and requirements on those who use channels of interstate commerce in order that those channels may not become means of promoting or spreading evil, whether physical, moral, or economic nature.”).

437. See *Camps NewFound/Owatonna, Inc.*, 520 U.S. at 610 (Thomas, J., dissenting) (describing the doctrines associated with the Dormant Commerce Clause as “developed primarily to invalidate discriminatory state taxation of interstate commerce” but lacking a textual basis and being “unworkable in application”).

438. See *Tenn. Wine & Spirits Retailers Ass’n v. Thomas*, 139 S. Ct. 2449, 2461 (2019) (“[S]tate protectionist measures ‘if maintained . . . would ultimately bring our commerce to that ‘oppressed and degraded state,’ existing at the adoption of the present Constitution, when the helpless, inadequate Confederation was abandoned and the national government instituted.” (citing *Guy v. Balt.*, 100 U.S. 434, 440 (1880))).

439. See U.S. CONST. art. I, § 8, cl. 2.

To explore these principles in context, we turn now to a case decided during the 2021-2022 term: *National Pork Producers Council v. Ross*.⁴⁴⁰ The case involved a California ballot initiative, Proposition 12, passed by voters in 2018 that prohibits the in-state sale of pork from animals (sows) that are confined in a manner inconsistent with the law's standards.⁴⁴¹ The stated purposes of the law include prevention of cruelty to animals and the health and safety of California's citizens.⁴⁴² Organizations representing industry interests filed suit, alleging that Proposition 12 violates the Dormant Commerce Clause.⁴⁴³ Even though it does not treat out-of-state pork producers differently from in-state producers, the law's economic impacts will fall primarily on out-of-state interests because California imports most of its pork.⁴⁴⁴

The Ninth Circuit dismissed the plaintiffs' suit for failure to state a claim under the Dormant Commerce Clause.⁴⁴⁵ The plaintiffs' core argument was that Proposition 12 will have an impermissible extraterritorial effect because the practical effect of Proposition 12 is to force upstream changes to all pork production (given the costs in segregating pork for sale in California).⁴⁴⁶ That is, the regulation of in-state sales of pork under California's standards will primarily affect out-of-state economic interests, forcing changes to a nationwide industry. The circuit court rejected the argument that significant *upstream* effects of a law regulating *in-state* conduct constitute impermissible extraterritorial regulation.⁴⁴⁷ In its view, the

440. 598 U.S. 356 (2023).

441. See *Nat'l Pork Producers Council v. Ross*, 6 F.4th 1021, 1025 (9th Cir. 2021), *cert. granted*, 142 S. Ct. 1413 (2022) (No. 20-55631; renumbered No. 21-468); see also 2018 Cal. Legis. Serv. Prop. 12 (West), <https://perma.cc/ZV6U-TJFQ> (PDF); Cal. Health & Safety Code §§ 25990–25993 (West 2023).

442. See *Nat'l Pork Producers Council*, 6 F.4th at 1025.

443. *Id.*

444. According to Council, “99.9% of pork consumed in California derives from sows raised out-of-state.” Brief for Petitioners at 29, *Nat'l Pork Producers Council v. Ross*, 598 U.S. 356 (2023) (No. 21-468).

445. *Nat'l Pork Producers Council*, 6 F.4th at 1025.

446. See *id.* at 1026.

447. See *id.* at 1029 (“The requirements under Proposition 12 . . . merely impose a higher cost on production, rather than affect interstate commerce.”).

extraterritoriality doctrine applies only to state laws that “directly regulate conduct that is wholly out of state.”⁴⁴⁸

The plaintiffs continued to press their arguments regarding the extraterritoriality doctrine before the Supreme Court.⁴⁴⁹ As the Ninth Circuit noted, however, the doctrine is arguably limited to cases involving state price-control statutes that effectively dictate out-of-state prices and suppress competition.⁴⁵⁰ The extension of this doctrine to cases outside of this context would greatly expand the reach of the Dormant Commerce Clause, opening the door to challenges based solely on the out-of-state economic impacts of state regulation of in-state conduct pursuant to a state’s police power.

As legal scholars argued in an *amicus* brief before the Court, this expansive view of the negative reach of the Commerce Clause contradicts historical views of the states’ police power to pass laws reflecting policy judgments about matters of public health, safety, and morals.⁴⁵¹ Such laws often have effects on interstate commerce.⁴⁵² But for *courts* rather than Congress to restrict such laws would be to deny state

448. *Id.* In addition to discussing Supreme Court caselaw arguably limiting the extraterritoriality doctrine, the Ninth Circuit applied its own directly analogous precedent. In a case involving a prohibition on the in-state sale of “duck products made by force feeding the duck,” the court rejected the extraterritoriality argument “because the state law applied to both California entities and out-of-state entities, and the law merely precluded a more profitable method of operation—force feeding birds for the purpose of enlarging its liver—rather than affecting the interstate flow of goods.” *Id.* (quotations omitted).

449. See Brief for Petitioners, *supra* note 444, at 22–27.

450. See *Nat’l Pork Producers Council*, 6 F.4th at 1028 (“[T]he Supreme Court . . . has indicated that the extraterritoriality principle . . . should be interpreted narrowly as applying only to state laws that are ‘price control or price affirmation statutes.’” (quoting *Pharm. Rsch. & Mfrs. of Am. v. Walsh*, 538 U.S. 644, 669 (2003))).

451. See Brief for Amici Curiae Federalism Scholars Supporting Respondents at 3–5, *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356 (2023) (No. 21-468) [hereinafter Brief for Amici Curiae Federalism Scholars].

452. See Grant S. Nelson & Robert J. Pushaw, Jr., *Rethinking the Commerce Clause: Applying First Principles to Uphold Federal Commercial Regulations but Preserve State Control over Social Issues*, 85 IOWA L. REV. 1, 61 (1999) (noting that while each state may “employ its extensive police powers to promote public health, safety, and welfare,” state laws were required “to yield when Congress exercised its express Article I power to regulate interstate commerce”).

citizens their right to decide controversial policy questions and force more populous states like California to accept the policy choices of other states.⁴⁵³ Animal welfare laws vary from state to state.⁴⁵⁴ As these scholars argued, if significant upstream impacts are enough to violate the Dormant Commerce Clause, the policy choices of a state like Iowa (with a large hog industry) will effectively override the choice of the California majority who voted for Proposition 12.⁴⁵⁵ This unequal treatment violates states' "equal sovereignty" and undermines the political process contemplated by the Constitution.⁴⁵⁶ After all, Iowa remains free to seek national standards or state law preemption in Congress where it enjoys equal representation with more populous states in the Senate.⁴⁵⁷

These arguments resonate with old-order conceptions of dual sovereignty and the idea of "equal sovereignty" embedded in *Shelby County*,⁴⁵⁸ as well as the notion endorsed by the *Dobbs* majority that controversial political issues should be left to state legislatures to resolve.⁴⁵⁹ Perhaps this alignment with old

453. See Brief for Amici Curiae Federalism Scholars, *supra* note 451, at 6–7 (“[T]he balance between competing interests must be reached after deliberation by the political process established by the citizens of the State, not by judicial decree.” (quoting *Alden v. Maine*, 527 U.S. 706, 751 (1999))).

454. Brief for Amici Curiae Animal Protection Organizations & Law Professors in Support of Respondents & Respondents-Intervenors at 46, *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356 (2023) (No. 21-468) (citing state statutes banning use of battery cages and gestation crates); see also Brief for Amici Curiae Federalism Scholars, *supra* note 451, at 8 (noting examples of how states differ with their animal welfare laws in regards to forceful feeding and unnecessary surgical removals).

455. See Brief for Amici Curiae Federalism Scholars, *supra* note 451, at 8 (“Just as the dormant Commerce Clause does not allow California to veto the more permissive standards governing Iowa’s livestock farms, the clause does not bind California consumers to the choices made by Iowa’s legislature.”).

456. See *id.* at 9 (“[A] population-based limit on California’s police power would be ‘so repugnant to the theory of [its] equality under the Constitution that it cannot be entertained.’” (quoting *Bolln v. Nebraska*, 176 U.S. 83, 89 (1900))).

457. See *id.* at 10 (“Protections for less populous states are built into the Senate, and Congress regularly vindicates the policy interests of smaller states.”).

458. See *Shelby County v. Holder*, 570 U.S. 529, 534 (2013) (striking down the “coverage formula” within the Voting Act of 1965 based on the principle that “all States enjoy equal sovereignty”).

459. See *Dobbs v. Jackson Women’s Health Org.*, 142 S. Ct. 2228, 2265 (2022) (asserting that in recognizing abortion rights “the Court usurped the

conceptions of federalism is the reason that the Biden administration chose to make a different argument in support of the pork industry. Instead of arguing that Proposition 12 is an impermissible extraterritorial regulation, the Solicitor General argued that the law does not advance a legitimate interest of local concern.⁴⁶⁰

Under established Dormant Commerce Clause doctrine, if a state law regulates “even-handedly,” a reviewing court applies a means-end test (often called the *Pike* test), under which it upholds a law that furthers a “legitimate local public interest” unless it places burdens on interstate commerce that are “clearly excessive in relation to the putative local benefits.”⁴⁶¹ In the Solicitor General’s view, Californians’ interest in not consuming meat raised in a cruel, inhumane manner is insufficient because it is a “bare philosophical disagreement with the public policy of other States.”⁴⁶² In addition, the asserted interest in public health and safety fails because the scientific literature does not reflect a consensus regarding the health benefits of animal welfare standards.⁴⁶³

Ironically, in avoiding an expansion of the extraterritoriality doctrine, the federal government seemed to support a return to the old *Lochner* era when courts scrutinized the legitimacy of social and economic regulation.⁴⁶⁴ In the place of property and contract, the Solicitor General suggested a novel limitation on states’ police power—one that draws a line between regulations that prevent health and environmental

power to address a question of profound moral and social importance that the Constitution unequivocally leaves for the people”).

460. See Brief for the United States as Amicus Curiae Supporting Petitioners at 19, *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356 (2023) (No. 21-468) [hereinafter Brief for the United States] (explaining that California has no legitimate interest in the housing conditions of out-of-state animals).

461. *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970) (citing *Huron Cement Co. v. Detroit*, 362 U.S. 440, 443 (1960)).

462. Brief for the United States, *supra* note 460, at 20.

463. See *id.* at 25.

464. See *Lochner v. New York*, 198 U.S. 45, 64–65 (1905) (invalidating a New York statute that forbade employment in a bakery for more than sixty hours per week and ten hours per day because it interfered with the right of contract between the employer and employee).

harms and those that advance “moral” or philosophical views.⁴⁶⁵ As other *amici* made clear, this is not a clear line.⁴⁶⁶ Public health professionals and organizations argued that “[s]ubstantial scientific research demonstrates that the intensive confinement of sows in gestation crates threatens the health and safety of consumers.”⁴⁶⁷ Moreover, the police power has historically included the regulation of public morality.⁴⁶⁸ Constitutional limits, such as due process, restrict the state’s authority, but the Solicitor General did not suggest that any of these constraints were at issue in the case. Instead, the argument is that a moral view regarding animal welfare is not a legitimate local interest for purposes of the Dormant Commerce Clause if it burdens interstate commerce.⁴⁶⁹

The revival of *Lochner*-like arguments signals yet another disruption to the New Deal constitutional order.⁴⁷⁰ A Dormant Commerce Clause doctrine that scrutinizes state police power to ensure it addresses narrowly defined harms would undermine the resilience of our constitutional structures. It would not further adaptive governance principles, such as shared governance, localized decision making, innovation, democratic participation, and accountability. Instead, it would replace state-level democratic policies with court-imposed standards

465. See Brief for the United States, *supra* note 460, at 37 (“But the mere incantation of a purpose to promote the public health or safety does not insulate a state law from Commerce Clause attack.” (quoting *Kassel v. Consol. Freightways Corp.*, 450 U.S. 662, 670 (1981))).

466. See, e.g., Brief of Am. Pub. Health Ass’n et al. as Amici Curiae in Support of Respondents, *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356 (2023) (No. 21-468).

467. *Id.* at 6.

468. See *Mugler v. Kansas*, 123 U.S. 623, 661 (1887) (“[If] a statute purport[s] to have been enacted to protect the public health, the public morals, or the public safety . . . it is the duty of the courts to so adjudge, and thereby give effect to the Constitution.”).

469. See Brief for the United States, *supra* note 460, at 19–21 (“[T]o the extent that animals are harmed by the hog-farming practices that are the target of the sales ban, that harm occurs wholly outside California . . .”).

470. See Robin Feldman & Gideon Schor, *Lochner Revenant: The Dormant Commerce Clause & Extraterritoriality*, 16 N.Y.U. J.L. & LIBERTY 209, 265–66 (2022) (“Where federal courts are insufficiently attentive to breadth of language and to concerns of federalism, that inattention can easily lead to a renewal of *Lochner*-type trammeling of state power.”).

based on putative negative impacts on an industry.⁴⁷¹ It would also silence political deliberation at the federal level over national standards, replacing democratic participation at all levels with judicially endorsed industry standards.⁴⁷² Justice Scalia once cautioned that our “Commerce Clause jurisprudence should [not] degenerate into disputes over degree of economic effect.”⁴⁷³ Under either the petitioners’ or the federal government’s approach, courts would indeed be deciding these questions of degree, an approach we repudiated almost a century ago.

Fortunately, a Court majority did not endorse the explicit expansion of the extraterritoriality doctrine or the federal government’s views on legitimate state interests.⁴⁷⁴ Indeed, although the decision resulted in five opinions, none of them even mention the Solicitor General’s argument. All of the Justices seemed to agree that a state’s police power extends to moral concerns regarding animal welfare.⁴⁷⁵ In addition, six Justices reinforced the Court’s commitment to the *Pike* balancing test as the appropriate doctrinal framework for analyzing challenges under the Dormant Commerce Clause.⁴⁷⁶

471. See *id.* at 307 (“[W]e risk . . . returning to an era in which the federal courts liberally strike down vast number of state statutes reflecting the exercise of legitimate police powers in the interests of their own citizens.”).

472. See *id.* at 306 (“The dormant Commerce Clause—if used improvidently, without regard to breadth of language or to the Constitution’s delicate state-federal balance—can easily be transformed into a tool enabling federal courts to invalidate state statutes at will.”).

473. *Healy v. Beer Inst., Inc.*, 491 U.S. 324, 345 (1989) (Scalia, J., concurring in part).

474. See *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356, 390 (2023) (referencing petitioners’ reasonings as “incautious invitations” and stating that matters of state law in the name of the dormant Commerce Clause are a matter of “extreme delicacy”).

475. See, e.g., *id.* at 381 (noting that the petitioners conceded that states may prohibit “the in-state sale of products they deem unethical and immoral without regard to where those products are made”). In his dissent, however, Justice Kavanaugh rejects California’s attempt to “unilaterally impose its moral and policy preferences . . . on the rest of the Nation” as an impermissible burden on the interstate pork market. *Id.* at 406 (Kavanaugh, J., concurring in part and dissenting in part). He cautions that upholding California’s law could lead states to force other states to comply with a range of “idiosyncratic state demands,” including minimum-wage standards and employer provisions or withholding of birth control or abortion coverage. *Id.*

476. See *id.* at 407 n.3.

Four Justices would have remanded to the Ninth Circuit for further analysis under this test.⁴⁷⁷ Moreover, Chief Justice Roberts emphasized the “sweeping extraterritorial effects” of California’s law on producers who may not even sell to the California market, signaling that the “industry-wide harms” may be “clearly excessive in relation to the putative local benefits” under *Pike*.⁴⁷⁸ In short, it is an open question whether and how extraterritoriality will inform the Court’s balancing of the burdens on interstate commerce in future cases.

CONCLUSION

Will our constitutional structures adapt or transform? Much depends on the role of the judiciary in either reinforcing and synthesizing the flexible foundations of the New Deal order or in further disrupting it and seeking to flip it to a new state grounded in more rigid principles of horizontal and vertical separation of powers. The engineering version of constitutional structure ignores the complexity of the systems it seeks to manage. In this view, regulatory agencies have less flexibility to regulate greenhouse gas emissions, and rights are absolute, further polarizing an electorate around issues like abortion and gun regulation. In place of doctrines like cooperative federalism that further ecological resilience, the Court’s majority may revive old notions of separate sovereignty and limited federal power. If limitations on states’ police power follow, legislative solutions to environmental problems may be more difficult at all levels of government. When considered together, these cases represent a substantial disruption and threat to the resilience of a constitutional governance system accepted for nearly a century. Whether this system adapts or transforms will depend on whether these new disruptions are bolstered by political mandates in elections to come.

477. See *id.* at 394–95 (Roberts, C.J., concurring in part and dissenting in part).

478. *Id.* at 400, 402 (internal quotation omitted).