CONSTITUTIONAL ENVIRONMENTAL LAW, OR, THE CONSTITUTIONAL CONSEQUENCES OF INSISTING THAT THE ENVIRONMENT IS EVERYBODY'S BUSINESS

BY ROBIN KUNDIS CRAIG*

Constitutional environmental law has become a recognized and institutionalized specialty within environmental law, an acknowledgement of the pervasive interactions between the U.S. Constitution and the federal environmental statutes that go well beyond the normal constitutional underpinnings of federal administrative law. This Article posits that constitutional environmental law is the result of Congress consciously deciding that environmental protection is everybody's business—specifically, from Congress's decisions that states should participate in rather than be preempted by federal environmental law, that private citizens and organizations should help to enforce the statutes, and that private land and water rights are necessary components of national environmental protection. Nevertheless, despite almost five decades of constitutional environmental litigation and scholarship, the federal courts had never recognized environmental rights within the U.S. Constitution until 2016, raising the possibility that constitutional environmental law may soon assume another dimension.

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^{*} James I. Farr Presidential Endowed Professor of Law, University of Utah S.J. Quinney College of Law, Salt Lake City, Utah; J.D., Lewis & Clark School of Law 1996. I would like to thank Bill Funk, Janice Weis, and the student editorial staff of *Environmental Law* for inviting me to participate in their April 2019 Environmental Law Symposium honoring Bill's scholarship. I dedicate this Article to Bill, with fond thanks for introducing me so well to both Constitutional Law and Environmental Law, for mentoring me in Administrative Law, and for influencing my law school teaching and legal scholarship ever after. This research was also made possible, in part, through generous support from the Albert and Elaine Borchard Fund for Faculty Excellence. The author may be reached at robin.craig@law.utah.edu.

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I. INTRODUCTION

Somewhere in the early 2000s, constitutional environmental law became a thing—a recognized sub-specialty of environmental law practice and scholarship. The institutional signals of this fact are strong. The American Bar Association's (ABA) Section on Environment, Energy, and Resources (SEER) has included a committee on Constitutional Law¹ since 2005.² The Constitutional Accountability Center considers environmental justice to be a core focal area.³ For the last thirteen years, the Environmental Law Institute in Washington, D.C., through the support of Beveridge & Diamond, P.C., has sponsored an annual law student writing competition on constitutional environmental law.⁴ Law schools advertise specializations in constitutional environmental law,⁵ and there are textbooks on constitutional environmental law. And, of course, there is constitutional environmental law scholarship—lots of it, including domestic and comparative legal analyses as well as work in and about other countries.

Constitutional Law Committee, AM. BAR. ASS'N., https://perma.cc/M982-LJ7A (last visited July 13, 2019).

² Author's personal recollection, confirmed through communication with Professor James R. May, who petitioned SEER to create the committee.

³ Environmental Justice, CONST. ACCOUNTABILITY CTR., https://perma.cc/Q54N-U9Z6 (last visited July 13, 2019).

⁴ ELI Constitutional Environmental Law Writing Competition, ENVTL. L. INST., https://perma.cc/Z69R-WAEG (last visited July 13, 2019).

⁵ See, e.g., Jim May, Constitutional Environmental Law, WIDENER ENVTL. L. CTR., https://perma.cc/R7ND-V5DY (last visited July 13, 2019) (providing examples of some institutions that offer certificates in environmental law).

⁶ See, e.g., James R. May, Principles of Constitutional Environmental Law 1 (2011).

⁷ Bill Funk, of course, has been a contributor to this scholarship, including: William Funk, Constitutional Implications of Regional CO₂ Cap-and-Trade Programs: The Northeast Regional Greenhouse Gas Initiative as a Case in Point, 27 UCLA J. ENVTL. L. & POL'Y 353, 354 (2009) [hereinafter Constitutional Implications of Regional CO₂] (discussing environmental constitutional law issues pertaining to the regional northeast cap-and-trade program); William Funk, Justice Breyer and Environmental Law, 8 ADMIN. L. REV. AM. U. 735, 735–36 (1995) (discussing Justice Breyer's views on environmental law under the U.S. Supreme Court's jurisdiction); William Funk, Reading Dolan v. City of Tigard, 25 ENVTL. L. 127, 127 (1995) (discussing a case involving a regional city plan to develop a green area and bike path using the power of eminent domain); William Funk, Revolution or Restatement? Awaiting Answers to Lucas' Unanswered Questions, 23 ENVTL. L. 891, 891 (1993) (discussing the potential impact of a U.S. case on environmental law in the United States); William

Constitutional environmental law in many respects signals that environmental law is a different kind of federal regulatory law. Complexity is probably not the explanation. While environmental law can certainly be complicated, there are a number of other fairly complicated areas of federal statutory and regulatory law where the Constitution plays a fairly minimal role, especially outside the realm of enforcement and occasional preemption issues; drug safety regulation through the United States Food and Drug Administration and securities law under the Securities and Exchange Commission immediately suggest themselves. Notably, no other area of federal regulatory law appears to have an established subspecialty to address the constitutional issues that it raises. So, why has this subspecialty arisen for environmental law?

This Article argues that one of the key differences between federal environmental law and other areas of federal regulatory law is that federal environmental law effectively makes environmental protection *everybody's* business. ¹⁰ Federal environmental statutes establish a suite of relationships between and among federal agencies, federal courts, state agencies, state courts, regulated entities, property owners, and general citizens, creating new issues of constitutional boundaries while at the same time incorporating all the constitutional issues that arise when citizens and regulated entities interact with federal agencies within classic administrative law procedures—rulemaking, licensing, and adjudication or enforcement.

While the list of environmental law relationships is somewhat long, constitutional environmental law, as distinct from the routine constitutional aspects of administrative law, tends to emerge from three specific features of the federal statutes, which in turn provide the structuring of this Article. Part II explores the constitutional consequences of cooperative federalism, Congress's deliberate decision to not only allow but actively encourage state involvement in implementing federal environmental requirements. As a result, federal environmental law has raised significant issues regarding the balance between Congress's Commerce Clause authority and states' Tenth Amendment rights, federal preemption, federal sovereign immunity from state regulation, the dormant Commerce Clause, and the Compact Clause. Part III, in turn, examines environmental citizen suits, Congress's expansion of civil rights causes of action to allow individual citizens and private organizations help to enforce environmental

Funk, Federal and State Superfunds: Cooperative Federalism or Federal Preemption, 16 ENVTL. L. 1, 1–3 (1985) (discussing state and federal statutes that impact and address environmental justice). Other scholarly contributions are cited throughout this Article.

⁸ E.g., Roderic O'Gorman, *Environmental Constitutionalism: A Comparative Study*, 6 TRANSNAT'L ENVTL. L. 435, 435–62 (2017) (discussing the phenomena of environmental laws being built into constitutions across the world).

⁹ E.g., Carl Bruch et al., Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa, 26 COLUM. J. ENVTL. L. 131, 132–33 (2001) (considering ways in which constitutional provisions in African countries may be used to further environmental law).

¹⁰ In many ways, this Article is the next step in my own constitutional environmental law scholarship and is indebted to both my 2004 (first edition) and 2009 (second edition) book, *The Clean Water Act and the Constitution: Legal Structure and the Public's Rights to a Clean and Healthy Environment* (Environmental Law Institute Press) and the many articles on constitutional environmental law that I have written both before and after that book.

law requirements, creating a separate set of constitutional boundary issues. When citizens can bring enforcement actions in federal courts, they raise issues of states' Eleventh Amendment sovereign immunity, federal sovereign immunity, and, above all, constitutional standing. Finally, environmental enforcement by governments against private entities not only raises classic constitutional issues common to all federal administrative enforcement, such as the Fourth Amendment's protection against unreasonable searches and seizures and the Seventh Amendment's right to a jury trial, but also directly influences use of private property, creating recurring issues of constitutional takings. Part IV explores takings jurisprudence as it has played out across environmental statutes.

As these Parts together make clear, federal environmental law practitioners and scholars must be well-versed in a wide range of constitutional law doctrines. The resulting weaving of statutory and constitutional legal issues created the tapestry now recognized as constitutional environmental law. This sub-discipline, moreover, stands poised to expand once again, as environmental plaintiffs once again are trying to convince the federal courts to recognize a fundamental right to a functional environment within the U.S. Constitution.¹¹

II. THE CONSTITUTIONAL MESSINESS OF COOPERATIVE FEDERALISM

The United States protects its environment through a fairly comprehensive array of federal legislation—the National Environmental Policy Act of 1969¹² (NEPA), the Clean Air Act¹³ (CAA), the Federal Water Pollution Control Act, better known as the Clean Water Act¹⁴ (CWA), the Resource Conservation and Recovery Act of 1976¹⁵ (RCRA), which amended the Solid Waste Disposal Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980¹⁶ (CERCLA), and many others. As a constitutional matter, it would have been fairly easy for Congress to expressly preempt state law, completely taking over these areas of environmental regulation.

As constitutional issues go, express preemption under the Supremacy Clause¹⁷ is a fairly easy analysis. Indeed, on the occasions when Congress *has* expressly preempted some aspect of state environmental regulation, the federal courts have generally had no problem displacing state law. For example, CERCLA expressly preempts state statutes of limitation—but not statutes of repose¹⁸—in favor of a

¹¹ See generally Juliana v. United States, 217 F. Supp. 3d 1224, 1271–72 (D. Or. 2016) (discussed at the end of this Article).

^{12 42} U.S.C. §§ 4321–4370h (2012).

¹³ Id. §§ 7401–7671q.

¹⁴ 33 U.S.C. §§ 1251–1388 (2012).

¹⁵ 42 U.S.C. §§ 6901–6992k (2012) (amending Solid Waste Disposal Act, Pub. L. No. 89-272, 79 Stat. 992 (1965)).

¹⁶ Id. §§ 9601–9675.

¹⁷ The Supremacy Clause of the U.S. Constitution states that "[t]his Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land; . . . any Thing in the Constitution or Laws of any State to the contrary notwithstanding." U.S. CONST. art. VI, cl. 2.

¹⁸ CTS Corp. v. Waldburger, 573 U.S. 1, 17–18 (2014).

federal discovery rule.¹⁹ The CWA expressly preempts state regulation of marine sanitation devices.²⁰ Many of the federal environmental statutes expressly preempt states from imposing environmental requirements that would be less stringent than federal law.²¹ Perhaps most contentious has been the preemption provision in the Federal Insecticide, Fungicide, and Rodenticide Act²² (FIFRA), which expressly preempts state labeling or packaging requirements for pesticides,²³ because it creates a fairly complex relationship between federal regulatory law and state tort law.²⁴

For the most part, however, Congress has chosen *not* to expressly preempt state regulation through its environmental statutes. Instead, it created structures of cooperative federalism.²⁵ These statutory provisions define specific regulatory roles that Congress preferred states to play—setting water quality standards²⁶ and issuing permits²⁷ under the CWA, devising implementation plans to meet National Ambient Air Quality Standards under the CAA,²⁸ management of non-hazardous solid waste under RCRA,²⁹ coastal zone management under the Coastal Zone Management Act of 1972,³⁰ and many others. *Sharing* regulatory authority with the states, it turns out, is a whole lot messier, constitutionally, than express federal preemption.³¹ This Part explores five of the constitutional federalism issues that

¹⁹ 42 U.S.C. § 9658(a)(2) (2012).

²⁰ 33 U.S.C. § 1322(f)(1)(A), (n)(6)(A) (2012).

²¹ E.g., id. § 1370 (containing the CWA's statement that a "[s]tate or political subdivision or interstate agency may not adopt or enforce any effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance which is less stringent that the effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance under this chapter").

²² 7 U.S.C. §§ 136–136y (2012).

²³ Id. § 136v(b).

²⁴ Bates v. Dow Agrosciences LLC, 544 U.S. 431, 442–53 (2005) (holding that FIFRA did not preempt state-law tort claims for defective design, defective manufacture, negligent testing, breach of express warranty, and violation of Texas Deceptive Trade Practices Act (DTPA), but that it might preempt state-law fraud and failure-to-warn claims); Wis. Pub. Intervenor v. Mortier, 501 U.S. 597, 606–10 (1991) (holding that FIFRA does not preempt local governmental regulation of pesticide use).

²⁵ E.g., California v. United States, 438 U.S. 645, 650 (1978) (characterizing the Reclamation Act of 1902 as a cooperative federalism statute); Hodel v. Va. Surface Mining & Reclamation Ass'n, (VSMRA) 452 U.S. 264, 288–89 (1981) (characterizing the Surface Mining Control & Reclamation Act (SMCRA) as a cooperative federalism statute); Fed. Energy Regulatory Comm'n v. Mississippi, 456 U.S. 742, 767 (1982) (characterizing the Public Utilities Regulatory Policies Act as a cooperative federalism statute); New York v. United States, 505 U.S. 144, 167–68 (1992) (listing the CWA, Occupational Safety and Health Act, RCRA, and the Alaska National Interest Lands Conservation Act as cooperative federalism statutes) (citations omitted); Envtl. Prot. Agency v. EME Homer City Generation, L.P., 572 U.S. 489, 510–11, 537 (2014) (describing the CAA as a cooperative federalism statute).

²⁶ 33 U.S.C. § 1313(c), (d) (2012).

²⁷ Id. §§ 1342(b), 1344(d).

²⁸ 42 U.S.C. § 7402(a) (2012).

²⁹ Id. §§ 6941-6949a.

³⁰ 16 U.S.C. § 1454 (2012).

³¹ Environmental federalism has prompted significant amounts of scholarship—over 1,000 articles, according to Westlaw. For representative examples, see generally Erin Ryan, FEDERALISM AND THE TUG OF WAR WITHIN (2012); Erin Ryan, The Spending Power and Environmental Law After Sebellius, 85 U. Colo. L. Rev. 1003 (2014); Brigham Daniels, Environmental Regulatory Nukes, 2013 UTAH L. Rev. 1505 (2013); Robin Kundis Craig, Federalism Challenges to CERCLA: An Overview, 41 Sw. L.

environmental cooperative federalism has raised: the balance between the Commerce Clause and the Tenth Amendment; the tension between implied preemption and savings clauses with respect to the continued operation of state common law; federal sovereign immunity from state permitting and enforcement; the dormant Commerce Clause; and the Compact Clause.

A. The Commerce Clause and the Tenth Amendment

As the United States Supreme Court itself has noted, "the task of ascertaining the constitutional line between federal and state power has given rise to many of the Court's most difficult and celebrated cases."³² The Commerce Clause and the Tenth Amendment undergird much federalism litigation and have interacted frequently with federal environmental statutes.³³

The Commerce Clause states that "Congress shall have Power... [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." The Framers intended the Commerce Clause to promote free trade among the states and thus render the United States a single commercial entity, but it also provides most of Congress's authority to enact environmental statutes. Commerce Clause jurisprudence seeks to strike a balance between the states' "reasonable exercise of [their] police powers over local affairs" and "matters of local concern" and the federal government's power to oversee matters of "national interest[]." Thus, federal power over interstate commerce "may not be extended so as to embrace effects upon interstate commerce so indirect and remote that to embrace them, in view of our complex society, would effectually obliterate the

REV. 617 (2012); Robert L. Glicksman, From Cooperative to Inoperative Federalism: The Perverse Mutation of Environmental Law and Policy, 41 WAKE FOREST L. REV. 719 (2006); Jonathan H. Adler, Judicial Federalism and the Future of Environmental Regulation, 90 IOWA L. REV. 377 (2005); Dean B. Suagee, Tribal Self-Determination and Environmental Federalism: Cultural Values as a Force for Sustainability, 3 WIDENER L. SYMP. J. 229 (1998); Robert H. Abrams, Superfund and the Evolution of Brownfields, 21 WM. & MARY ENVIL. L. & POL'Y REV. 265 (1997); Robert V. Percival, Environmental Federalism: Historical Roots and Contemporary Models, 54 MD. L. REV. 1141 (1995).

³² New York, 505 U.S. 144, 155 (1992).

³³ For discussions of the Commerce Clause and the Tenth Amendment and their relation to environmental law, see generally David M. Metres, Note, The National Impact Test: Applying Principled Commerce Clause Analysis to Federal Environmental Regulation, 61 HASTINGS L.J. 1035 (2010); Jennifer A. Maier, Comment, Outgrowing the Commerce Clause: Finding Endangered Species a Home in the Constitutional Framework, 36 GOLDEN GATE U. L. REV. 489 (2006); Mollie Lee, Note, Environmental Economics: A Market Failure Approach to the Commerce Clause, 116 YALE L.J. 456 (2006); Christine A. Klein, The Environmental Commerce Clause, 27 HARV. ENVIL. L. REV. 1 (2003); Jamie Y. Tanabe, The Commerce Clause Pendulum: Will Federal Environmental Law Survive in the Post-SWANCC Epoch of "New Federalism"?, 31 ENVTL. L. 1051 (2001); Charles Tiefer, After Morrison, Can Congress Preserve Environmental Laws From Commerce Clause Challenges?, 30 Envtl. L. Rep. (Envtl. Law Inst.) 10,888 (2000); Lydia B. Hoover, The Commerce Clause, Federalism and Environmentalism: At Odds After Olin?, 21 WM. & MARY ENVTL. L. & POL'Y REV. 735 (1997); Peter A. Lauricella, The Real "Contract with America": The Original Intent of the Tenth Amendment and the Commerce Clause, 60 ALB. L. REV. 1377 (1997); John P. Dwyer, The Commerce Clause and the Limits of Congressional Authority to Regulate the Environment, 25 Envtl. L. Rep. (Envtl. Law Inst.) 10,421 (1995).

³⁴ U.S. CONST. art. I, § 8, cl. 3.

³⁵ Great Atl. & Pac. Tea Co. v. Cottrell, 424 U.S. 366, 370–71 (1976).

distinction between what is national and what is local and create a completely centralized government."36

Balancing the Commerce Clause is the Tenth Amendment, which provides that "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."³⁷ The Tenth Amendment functions as the outer boundary of federal power and hence immediately raises questions of how far federal Commerce Clause authority can extend. The U.S. Supreme Court emphasized the close relationship between these two provisions in *New York v. United States*,³⁸ noting that the Commerce Clause and Tenth Amendment analyses

are mirror images of each other. If a power is delegated to Congress in the Constitution, the Tenth Amendment expressly disclaims any reservation of that power to the States; if a power is an attribute of state sovereignty reserved by the Tenth Amendment, it is necessarily a power the Constitution has not conferred on Congress.³⁹

Nevertheless, the relationship between these two constitutional provisions has evolved over time. Until 1937, Congress' Commerce Clause authority was limited to regulating activities that directly affected interstate commerce. In 1937, however, the U.S. Supreme Court began to accord the federal government much broader regulatory authority in decisions such as *National Labor Relations Board v. Jones & Laughlin Steel Corp.* As the Court emphasized in that case, "[t]he congressional authority to protect interstate commerce from burdens and obstructions... is plenary and may be exerted to protect interstate commerce 'no matter what the source of the dangers which threaten it." Thus, according to the *Jones & Laughlin Steel* Court, Congress possessed expansive powers to regulate not only interstate commerce itself but also intrastate activities that affect interstate commerce.

This understanding of the Commerce Clause provided the constitutional law foundation for Congress when it began to enact the federal environmental statutes in the late 1960s. Congress had broad Commerce Clause authority, and if Congress wanted to induce state participation in federal regulatory programs, Congress could "attach conditions on the receipt of federal funds" or "offer States the choice of regulating [an] activity according to federal standards or having state law preempted by federal regulation," but it could not "simply 'commandee[r] the

³⁶ United States v. Lopez, 514 U.S. 549, 557 (1995) (quoting Nat'l Labor Relations Bd. v. Jones & Laughlin Steel Corp., 301 U.S. 1, 37 (1937)).

³⁷ U.S. CONST. amend. X.

³⁸ 505 U.S. 144 (1992).

³⁹ Id. at 156

⁴⁰ See, e.g., A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495, 550 (1935) (striking down statutes regulating allowable hours and wages because those issues were too remotely related to interstate commerce).

⁴¹ Jones & Laughlin Steel, 301 U.S. at 36–37 (quoting Mandou v. New York, New Haven, & Hartford R.R. Co. (Second Employers' Liability Cases), 223 U.S. 1, 51 (1912)).

⁴² *Id.* at 37.

legislative processes of the States by directly compelling them to enact and enforce a federal regulatory program."⁴³

Congress stayed well within these constitutional boundaries in the federal environmental statutes. For example, in *Hodel v. Virginia Surface Mining and Reclamation Ass'n (VSMRA)*, the Supreme Court upheld the federal Surface Mining Control and Reclamation Act of 1977⁴⁴ (SMCRA) against allegations that it unconstitutionally intruded upon state regulatory authority. ⁴⁵ Notably, Congress had explicitly found that surface mining operations affected interstate commerce,

by destroying or diminishing the utility of land for commercial, industrial, residential, recreational, agricultural, and forestry purposes, by causing erosion and landslides, by contributing to floods, by polluting the water, by destroying fish and wildlife habitats, by impairing natural beauty, by damaging the property of citizens, by creating hazards dangerous to life and property by degrading the quality of life in local communities, and by counteracting governmental programs and efforts to conserve soil, water, and other natural resources. 46

Moreover, "coal is a commodity that moves in interstate commerce," and "nationwide 'surface mining and reclamation standards are essential in order to insure that competition in interstate commerce among sellers of coal produced in different States will not be used to undermine the ability of the several States to improve and maintain adequate standards on coal mining operations within their borders." As a result, the SMCRA was constitutional.

In California Coastal Commission v. Granite Rock Co.,⁴⁹ the U.S. Supreme Court specifically distinguished environmental regulation from land use planning with respect to the Commerce Clause/Tenth Amendment balance, concluding that "[l]and use planning in essence chooses particular uses for the land; environmental regulation, at its core, does not mandate particular uses of the land but requires only that, however the land is used, damage to the environment is kept within prescribed limits." While land use planning is presumptively a *state* prerogative, environmental regulation clearly could be the subject of federal statute,⁵¹ and the VSMRA Court "agree[d] with the lower federal courts that have uniformly found the power conferred by the Commerce Clause broad enough to permit congressional regulation of activities causing air or water pollution "⁵²

For a time, therefore, the Commerce Clause/Tenth Amendment limitations on federal environmental law were functionally insignificant. However, in 1995, the

⁴³ New York, 505 U.S. 144, 161,167 (1992) (quoting South Dakota v. Dole, 483 U.S. 203, 206 (1987); VSMRA, 452 U.S. 264, 288 (1981)).

^{44 30} U.S.C. §§ 1201–1279 (2012).

⁴⁵ *VSMRA*, 452 U.S. at 291.

⁴⁶ *Id.* at 277 (quoting 30 U.S.C. § 1201(c)).

⁴⁷ *Id.* at 281–82 (quoting 30 U.S.C. §1201(g)).

⁴⁸ *Id.* at 268.

⁴⁹ 480 U.S. 572 (1987).

⁵⁰ *Id.* at 587.

⁵¹ See id. at 588.

⁵² VSMRA, 452 U.S. at 282.

U.S. Supreme Court decided *United States v. Lopez*,⁵³ revitalizing Commerce Clause challenges to the federal environmental statutes. In that case, the Court invalidated, on Commerce Clause grounds, the Gun Free School Zones Act of 1990,⁵⁴ in the process "identif[ying] three broad categories of activity that Congress may regulate under its commerce power."⁵⁵ "First, Congress may regulate the use of the channels of interstate commerce."⁵⁶ "Second, Congress is empowered to regulate and protect the instrumentalities of interstate commerce, or persons and things in interstate commerce, even though the threat may come only from intrastate activities."⁵⁷ "Finally, Congress' commerce authority includes the power to regulate those activities having a substantial relation to interstate commerce."⁵⁸

Lopez inspired new constitutional challenges to many federal environmental statutes, especially those statutes, like the Endangered Species Act (ESA)⁵⁹ and

⁵³ 514 U.S. 549 (1995). The *Lopez* decision inspired much commentary. Some of the discussions regarding its federalism implications include: Eric R. Claeys, The Living Commerce Clause: Federalism in Progressive Political Theory and the Commerce Clause After Lopez and Morrison, 11 WM. & MARY BILL RTS. J. 403 (2002); Bill Swinford & Eric N. Waltenburg, The Supreme Court and the States: Do Lopez and Printz Represent a Broader Pro-State Movement?, 14 J.L. & Pol. 319 (1998); Julian Epstein, Evolving Spheres of Federalism After U.S. v. Lopez and Other Cases, 34 HARV. J. LEGIS. 525 (1997); Russell F. Pannier, Lopez and Federalism, 22 WM. MITCHELL L. REV. 71 (1996); Ann Althouse, Enforcing Federalism After United States v. Lopez, 38 ARIZ. L. REV. 793 (1996); Debbie Ellis, A Lopez Legacy?: The Federalism Debate Renewed, But Not Resolved, 17 N. ILL, U. L. REV, 85 (1996); Rachel Elizabeth Smith, Note, United States v. Lopez: Reaffirming the Federal Commerce Power and Remembering Federalism, 45 CATH. U. L. REV. 1459 (1996); Michael J. Trapp, Note, A Small Step Towards Restoring the Balance of Federalism: A Limit to Federal Power Under the Commerce Clause United States v. Lopez, 64 U. CIN. L. REV. 1471 (1996); Gregory W. O'Reilly & Robert Drizin, United States v. Lopez: Reinvigorating the Federal Balance by Maintaining the States' Role as the "Immediate and Visible Guardians" of Security, 22 J. LEGIS. 1 (1996); Eric W. Hagen, Note, United States v. Lopez: Artificial Respiration for the Tenth Amendment, 23 PEPP. L. REV. 1363 (1996); Anthony B. Ching, Travelling Down the Unsteady Path: United States v. Lopez, New York v. United States, and the Tenth Amendment, 29 LOY. L.A. L. REV. 99 (1995).

⁵⁴ 18 U.S.C. § 922(q) (Supp. II 1994).

⁵⁵ Lopez, 514 U.S. at 558.

⁵⁶ *Id*.

⁵⁷ *Id*.

⁵⁸ *Id.* at 558–59.

⁵⁹ 16 U.S.C. §§ 1531-1544 (2012). See People for the Ethical Treatment of Prop. Owners v. U.S. Fish & Wildlife Serv., 852 F.3d 990, 1000-06 (10th Cir. 2017), cert. denied, 138 S. Ct. 649 (2018); Markle Interests v. U.S. Fish & Wildlife Serv., 827 F.3d 452, 475-78 (5th Cir. 2016), cert. granted and vacated on other grounds, 139 S. Ct. 590 (2018); San Luis & Delta-Mendota Water Auth. v. Salazar, 638 F.3d 1163, 1174-77 (9th Cir. 2011); Alabama-Tombigbee Rivers Coal. v. Kempthorne, 477 F.3d 1250, 1271-77 (11th Cir. 2007), cert. denied, 552 U.S. 1097 (2008); Rancho Viejo, LLC v. Norton, 323 F.3d 1062, 1064-76 (D.C. Cir. 2003); GDF Realty Invs., Ltd. v. Norton, 326 F.3d 622, 636-41 (5th Cir. 2003); Gibbs v. Babbitt, 214 F.3d 483, 490-99 (4th Cir. 2000); Nat'l Ass'n of Home Builders v. Babbitt, 130 F.3d 1041, 1046-57 (D.C. Cir. 1997); Shields v. Babbitt, 229 F. Supp. 2d 638, 659-64 (W.D. Tex. 2000), vacated sub nom. Shields v. Norton, 289 F.3d 832 (5th Cir. 2000), cert. denied sub nom. Schuele v. Norton, 537 U.S. 1071 (2002); Bldg. Indus. Ass'n of Superior Cal. v. Babbitt, 979 F. Supp. 893, 906-08 (D.D.C. 1997) (all except Shields v. Babbitt upholding the ESA against post-Lopez Commerce Clause challenges); see also Christopher S. Turner, Gibbs v. Babbitt: The Vitality of Endangered Species Protection in the Lopez Era, 15 J. NAT. RESOURCES & ENVTL. L. 301, 301, 303 (2000–2001) (analyzing application of Lopez to ESA cases); Rob Strang, Note, Gibbs v. Babbitt: The Taking of Red Wolves on Private Land, A Post-Lopez Challenge to the Endangered Species Act, 14 Tul. Envtl. L.J. 229, 241 (2000) (using post-Lopez cases to argue that Lopez gives the courts latitude to uphold regulation of activities that may not normally be considered interstate commerce); Gavin R. Villareal, Note, One Leg

CERCLA,⁶⁰ that can interfere with commercial development and land use. Nor have these challenges completely abated, and courts continue to debate whether and how the Commerce Clause limits the scope of federal environmental law, generating more constitutional environmental law in the process.⁶¹ Perhaps the longest-running controversy that can be directly traced to Lopez is the scope of the CWA's "waters of the United States" and, hence, the scope of federal jurisdiction under the Act. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 63 the United States Court of Appeals for the Seventh Circuit squarely teed up the post-Lopez Commerce Clause issue with respect to the CWA's application to isolated waters used by migratory birds, finding Commerce Clause support for such jurisdiction.⁶⁴ Although the U.S. Supreme Court decided its review on statutory, not constitutional, grounds, it refused to accord the Corps' interpretation of "waters of the United States" Chevron deference because that interpretation threatened to violate the Commerce Clause and undermine the demands of federalism.⁶⁵ According to the Court, the Migratory Bird Rule raised "significant constitutional questions," because "[p]ermitting respondents to claim federal jurisdiction over ponds and mudflats falling within the 'Migratory Bird Rule' would result in a significant impingement of the States' traditional and primary power over land and water use."66 Almost twenty years later, a constitutional cloud still hovers over the CWA, although the "waters of the United States" debate has taken on a legal life of its own, spurred by the Court's fractured 2006 decision in Rapanos v. United States, 67 two controversial rulemakings, 68 and a fairly dramatic change in presidential administration in 2017.

Few constitutional environmental law scholars doubt that Congress *could* successfully establish and clarify its Commerce Clause authority over the constitutionally gray environmental regulatory issues remaining after *Lopez*. The question instead is whether it *has*. *Lopez* and its progeny create an expectation that Congress will justify its authority to enact statutes, and thus far Congress has generally been unwilling to amend the classic federal environmental statutes to make their constitutional grounding clearer. The absence of this key player in federal environmental law underscores the importance of a continuing dialogue

to Stand On: The Treaty Power and Congressional Authority for the Endangered Species Act After United States v. Lopez, 76 Tex. L. Rev. 1125, 1127 (1998) (arguing that the Commerce Clause does not give Congress the authority to support legislation as broad as the ESA).

⁶⁰ Voggenthaler v. Md. Square LLC, 724 F.3d 1050, 1059–61 (9th Cir. 2013); Freier v. Westinghouse Elec. Corp., 303 F.3d 176, 200–03 (2nd Cir. 2002); United States v. Olin Corp., 107 F.3d 1506, 1509–11 (11th Cir. 1997).

⁶¹ See, e.g., Lighthouse Res. Inc. v. Inslee, No. 3:18-cv-05005-RJB, 2018 WL 5264334, at *6-8 (W.D. Wash. 2018) (arguing that the denial of a § 401 certification under the CWA violated the Commerce Clause).

⁶² See 33 U.S.C. § 1362(7) (2012).

^{63 191} F.3d 845 (7th Cir. 1999).

⁶⁴ Id. at 850.

⁶⁵ Solid Waste Agency of N. Cook Cty., 531 U.S. at 172–74 (citing Edward J. DeBartolo Corp. v. Fla. Gulf Coast Bldg. & Constr. Trades Council, 485 U.S. 568, 575 (1988)).

⁶⁶ Id. at 174 (citing Hess v. Port Auth. Trans-Hudson Corp., 513 U.S. 30, 44 (1994)).

^{67 547} U.S. 715 (2006).

⁶⁸ Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37,053 (Jun. 29, 2015); Revised Definition of "Waters of the United States," 84 Fed. Reg. 4145 (Feb. 14, 2019).

between the courts and the legislature as constitutional jurisprudence evolves over time.

B. Implied Preemption, Savings Clauses, and the Common Law

Under the Supremacy Clause, Congress may implicitly preempt state law as well as expressly preempt it. 69 This is the most complex kind of federal preemption analysis, in part because the U.S. Supreme Court has recognized several different pathways to implicit preemption, all of which focus upon Congress's overall purpose in enacting the federal legislation. For example, "[t]he scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it,"70 a type of implicit preemption generally known as field preemption. For example, the Natural Gas Act of 1938,⁷¹ a "comprehensive scheme of federal regulation" that gives the Federal Energy Regulatory Commission (FERC) "exclusive jurisdiction over the transportation and sale of natural gas in interstate commerce for resale," embodies a congressional intent to occupy the field of interstate natural gas regulation because it gives FERC authority to regulate almost every aspect of natural gas transportation and sale.⁷² Courts will also imply a congressional intent to preempt state law if "the Act of Congress . . . touch[es] a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject."73 Finally, courts will find implicit preemption if "the object sought to be obtained by the federal law and the character of obligations imposed by it . . . reveal" Congress's intent to preempt state law. 74

Implicit preemption tends to be rare in federal environmental law, however. Because Congress intended these statutes to work through cooperative federalism, many of their preemption-related provisions actually function as "saving clauses" that preserve states' rights to regulate. For example, the CWA's first section preserves "the authority of each State to allocate quantities of water within its jurisdiction" and specifies that nothing in the CWA "shall be construed to supersede or abrogate rights to quantities of water which have been established by any State." The CWA thus distinguishes between water rights, which remain under state control, and water quality, which is the CWA's subject. The

⁶⁹ Ray v. Atl. Richfield Co., 435 U.S. 151, 157-58, 167-68 (1978).

⁷⁰ Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947) (citing Pa. R.R. Co. v. Public Serv. Comm'n, 250 U.S. 566, 569 (1919)); Cloverleaf Butter Co. v. Patterson, 315 U.S. 148, 156 (1942)); see also Ray, 435 U.S. at 157.

⁷¹ 15 U.S.C. §§ 717–717w (2012).

⁷² See Schneidewind v. ANR Pipeline Co., 485 U.S. 293, 300–04 (1988) (discussing the powers FERC is given to regulate).

⁷³ Rice, 331 U.S. at 230 (citing Hines v. Davidowitz, 312 U.S. 52, 62–63 (1941)); see also Ray, 435 U.S. at 157.

⁷⁴ Rice, 331 U.S. at 230 (citing S. R.R. Co. v. R.R. Comm'n, 236 U.S. 439, 446 (1915); Charleston & W.C. R.R. Co. v. Varnville Co., 237 U.S. 597, 601–04 (1915); N.Y. Cent. R.R. Co. v. Winfield, 244 U.S. 147, 149, 150, 153 (1917); Napier v. Atl. Coast Line R.R. Co., 272 U.S. 605, 611 (1926)); see also Ray, 435 U.S. at 157–58.

⁷⁵ 33 U.S.C. § 1251(g) (2012).

⁷⁶ *Id.*; see also 33 U.S.C. § 1251(a) (2012) (compare the water quality language of subsection (a) with the water quantity language of subsection (g)).

provisions of environmental statutes that prohibit states from enacting less stringent regulation also implicitly *permit* states to enact more stringent regulation than federal law requires.⁷⁷ Environmental citizen suit provisions, discussed in more detail in Part II, almost universally *preserve* plaintiffs' state-law causes of action rather than preempting them.⁷⁸

The savings provisions in the federal environmental statutes have allowed states to create large operating spaces of their own within environmental law. For example, California prohibits land disposal of biosolids through its Integrated Waste Management Act, and the United States District Court for the Central District of California has upheld this ban against claims that the CWA preempts such prohibitions—although the California Constitution might forbid them.⁷⁹ The savings clauses in environmental citizen suit provisions generally leave state tort law fully in force to provide redress when pollution or other environmental mishaps harm persons or property. As one example, the United States District Court for the Eastern District of Virginia relied on the CWA's savings clause to conclude that the CWA does not preempt state nuisance, trespass, or negligence claims in connection with the spraying or spreading of sewage sludge on land.⁸⁰

Nevertheless, not all implied preemption claims in environmental law fail. In particular, in areas where federal control is clearly dominant—such as is true for regulation of vessels on the ocean—courts will still preempt state law. Thus, when the State of Washington attempted to regulate oil tankers more stringently than federal law requires in an attempt to better protect itself from oil spills, the U.S. Supreme Court reversed the normal Supremacy Clause presumption of non-preemption and narrowly construed the savings clauses in both the Ports and Waterways Safety Act⁸¹ and the Oil Pollution Act of 1990⁸² (OPA) in order to "respect[] the established federal-state balance in matters of maritime commerce between the subjects as to which the States retain concurrent powers and those over which the federal authority displaces state control." Washington was "regulat[ing] in an area where there has been a history of significant federal presence," and its laws were preempted.

Cooperative federalism and savings clauses, therefore, cannot completely eliminate the Supremacy Clause's shadow, prompting new preemption challenges

⁷⁷ U.S. Steel Corp. v. Train, 556 F.2d 822, 830 (7th Cir. 1977).

⁷⁸ See infra Part II and accompanying discussion. For example, the CWA's citizen suit provision emphasizes that "[n]othing... shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any effluent standard or limitation or to seek other relief (including relief against the Administrator or a State agency)." 33 U.S.C. § 1365(e).

⁷⁹ City of Los Angeles v. Cty. of Kern, 509 F. Supp. 2d 865, 894 (C.D. Cal. 2007) (holding that "merely because the Clean Water Act *does not preempt* local bans on land application [of biosolids] does not mean that it *expressly authorizes* them despite state constitutional limitations to the contrary").

Wyatt v. Sussex Surrey L.L.C., 482 F. Supp. 2d 740, 745–46 (E.D. Va. 2007).

^{81 33} U.S.C. § 1225(a) (2012).

⁸² Id. § 2718.

⁸³ See United States v. Locke, 529 U.S. 89, 106 (2000).

⁸⁴ Id. at 106, 108. For more in-depth discussions of this case, see Paul S. Weiland, Preemption of Environmental Law: Is the U.S. Supreme Court Heading in the Wrong Direction?, 30 Envtl. L. Rep. (Envtl. Law Inst.) 10,579 (July 2000); see generally R. Brent Walton & Daniel J. Gunter, United States v. Locke: The Supreme Court Preempts States from Protecting Their Navigable Waters and Marine Resources From Oil Tanker Spills, 15 J. ENVTL. L. & LITIG. 37 (2000).

to test—successfully or unsuccessfully—the exact contours of the operating spaces that Congress has left for states. When Congress is not expressly clear about its intent to preempt—or conversely, its intent to preserve—state law, the U.S. Constitution thus remains a potential limit on state regulatory authority, promoting the continual creation of constitutional environmental law in ways that comprehensive displacement of state regulatory authority would not.

C. Federal Sovereign Immunity and State Regulation of Federal Facilities

According to the U.S. Environmental Protection Agency (EPA) in its 2009, and apparently last, report on federal facilities' environmental compliance,

the U.S. government owns and/or operates more than 42,000,000 acres of land with 922,000 buildings, leases, and structures. Federal land ranges from forests, parks, and historic monuments to office buildings, hospitals, hydroelectric dams, and prisons. Operations from all types of federal facilities can generate pollution, create waste and impact the environment.⁸⁵

These federal facilities must comply with federal environmental laws, and, "[a]s of FY08, the EPA and states track[ed] more than 12,000 permits at nearly 11,000 sites, including underground storage tanks, community water systems, and air emissions sources." For example, under the Emergency Planning and Community Right to Know Act (EPCRA), 7265 federal facilities must report their releases of hazardous materials to the Toxics Release Inventory. 88

While the EPA often still takes the lead in enforcing federal environmental requirements against federal facilities, ⁸⁹ as states increasingly took over environmental permitting programs and enforcement authority, federal sovereign immunity in connection with these facilities became a serious constitutional issue. Sovereign immunity is a penumbral constitutional right of the United States, deriving from an English doctrine that "the King could do no wrong." The federal courts have always required a plaintiff suing the federal government to demonstrate that the United States has waived its sovereign immunity and that the plaintiff's case falls within that waiver. ⁹¹ Only Congress can waive U.S. sovereign immunity ⁹²

⁸⁵ OFFICE OF ENF'T & COMPLIANCE ASSISTANCE, U.S. ENVIL. PROTECTION AGENCY, THE 2008 STATE OF FEDERAL FACILITIES: AN OVERVIEW OF ENVIRONMENTAL COMPLIANCE AT FEDERAL FACILITIES 5 (2009) [hereinafter 2009 EPA FEDERAL FACILITIES REPORT].

⁸⁶ *Id.*; *see also* Exec. Order No. 12,088, § 1–102, 43 Fed. Reg. 47,707 (Oct. 13, 1978) (requiring all federal facilities to comply "with applicable pollution control standards," including those in the Toxic Substances Control Act, the CWA, the Safe Drinking Water Act, the CAA, the Noise Control Act, RCRA, and FIFRA).

^{87 42} U.S.C. §§ 11001–11050 (2012).

⁸⁸ See 2009 EPA FEDERAL FACILITIES REPORT, supra note 85, at 5.

⁸⁹ See generally id.; Enforcement at Federal Facilities, U.S. ENVTL. PROTECTION AGENCY, https://perma.cc/E9KW-U5S4 (last updated July 13, 2018).

⁹⁰ Seminole Tribe of Fla. v. Florida, 517 U.S. 44, 171 (1996) (Souter, J., dissenting).

⁹¹ See United States v. Sherwood, 312 U.S. 584, 586 (1941); Price v. United States, 174 U.S. 373, 375–76 (1899) ("It is an axiom of our jurisprudence. The Government is not liable to suit unless it consents thereto, and its liability in suit cannot be extended beyond the plain language of the statute authorizing it."); Schillinger v. United States, 155 U.S. 163, 166 (1894); United States v. Clarke, 33 U.S.

and it must do so unequivocally.⁹³ In addition, "[C]ongress has an absolute discretion to specify the cases and contingencies in which the liability of the government is submitted to the courts for judicial determination."⁹⁴ As a result, the federal courts construe any waiver of sovereign immunity strictly and in favor of the United States.⁹⁵

Environmental sovereign immunity issues came to a head when states began to assume permitting authority under various federal statutes and then attempted to force federal facilities to obtain state permits. In general, the relevant waivers of sovereign immunity from state permitting requirements must come from the various environmental statutes' federal facilities provisions. The U.S. Supreme Court addressed the federal sovereign immunity issue for state permitting in 1976 in two companion cases—Hancock v. Train, which dealt with the CAA, and U.S. Environmental Protection Agency v. California ex rel. State Water Resources Control Board, which dealt with the CWA. In both cases, the Court held that the relevant Act's federal facilities provision was not specific enough to subject federal facilities to state permitting processes. However, Congress then amended those two provisions to make the waiver more explicit. However,

436, 444 (1834) ("As the United States are not suable of common right, the party who institutes such suit must bring his case within the authority of some act of congress, or the court cannot exercise jurisdiction over it."); Beamon v. Brown, 125 F.3d 965, 967 (6th Cir. 1997); Preferred Risk Mut. Ins. Co. v. United States, 86 F.3d 789, 791–92 (8th Cir. 1996), cert. denied, 520 U.S. 1116 (1997); Fostvedt v. United States, 978 F.2d 1201, 1202–03 (10th Cir. 1992), cert. denied, 507 U.S. 988 (1993) (quoting United States v. Testan, 424 U.S. 392, 399 (1976) (quoting Sherwood, 312 U.S. at 586)); McCarty v. United States, 929 F.2d 1085, 1087 (5th Cir. 1991); Voluntary Purchasing Grps., Inc. v. Reilly, 889 F.2d 1380, 1385 (5th Cir. 1989); see also Robin Kundis Craig, Comment, Of Fish, Federal Dams, and State Protections: A State's Options Against the Federal Government for Dam-Related Fish Kills on the Columbia River, 26 ENVTL. L. 355, 369 (1996) (discussing the basic principles of sovereign immunity); Kenneth Culp Davis, Sovereign Immunity Must Go, 22 ADMIN. L. REV. 383, 384 (1970) (discussing the role of the courts in sovereign immunity jurisprudence).

- ⁹² Block v. North Dakota *ex rel*. Bd. Of Univ. & Sch. Lands, 461 U.S. 273, 280 (1983); Dalehite v. United States, 346 U.S. 15, 30 (1953); Presidential Gardens Assocs. v. United States *ex rel*. Sec'y of Hous. & Urban Dev., 175 F.3d 132, 139 (2d Cir. 1999) (citing Millares Guiraldes de Tineo v. United States, 137 F.3d 715, 719 (2nd Cir. 1998)); Sprecher v. Graber, 716 F.2d 968, 973 (2nd Cir. 1983).
- ⁹³ U.S. Dep't of Energy v. Ohio, 503 U.S. 607, 615 (1992) (citing United States v. Mitchell, 445 U.S. 535, 538–39 (1980)); *Beamon*, 125 F.3d at 967; *Preferred Risk Mut. Ins. Co.*, 86 F.3d at 792; Alaska v. Babbitt, 38 F.3d 1068, 1072 (9th Cir. 1994) (quoting United States v. Nordic Village, Inc., 503 U.S. 30, 34 (1992)); *Fostvedt*, 978 F.2d at 1203 (citing United States v. King, 395 U.S. 1, 4 (1969)).
 - 94 Schillinger, 155 U.S. at 166.
- 95 Orff v. United States, 545 U.S. 596, 601–02 (2005); U.S. Dep't of Energy, 503 U.S. at 615 (quoting McMahon v. United States, 342 U.S. 25, 27 (1951)); Block, 461 U.S. at 287; Babbitt, 38 F.3d at 1072 (quoting Nordic Village, Inc., 503 U.S. at 34); Fostvedt, 978 F.2d at 1202 (citing Ruckelshaus v. Sierra Club, 463 U.S. 680, 685 (1983)); McCarty, 929 F.2d at 1087.
- ⁹⁶ E.g., CWA, 33 U.S.C. § 1323(a) (2012); CAA, 42 U.S.C. § 7418(a) (2012); RCRA, 42 U.S.C. § 6961 (2012).
 - 97 426 U.S. 167, 168 (1976).
 - ⁹⁸ 426 U.S. 200, 201–02 (1976).
- ⁹⁹ Hancock, 426 U.S. at 198–99; California ex rel. State Water Res. Control Bd., 426 U.S. at 227–28.
- ¹⁰⁰ Clean Air Act Amendments of 1977, Pub. L. No, 95-95, § 116, 91 Stat. 685, 711 (1977); Clean Water Act of 1977, Pub. L. No. 95-217, §§ 60, 61(a), 91 Stat. 1566, 1597 (1977) (amending 33 U.S.C. § 1323).

The next issue was whether federal facilities could be held liable for state-assessed civil penalties. In 1992, in *U.S. Department of Energy v. Ohio*, the U.S. Supreme Court decided this issue in the context of both the CWA and RCRA, deciding once again that the waivers of sovereign immunity were not broad enough to subject federal facilities to state-issued (or indeed any) civil penalties.¹⁰¹ Congress amended RCRA's federal facilities provision to fix the problem,¹⁰² but it has not amended the CWA's.

The federal sovereign immunity doctrine thus challenges and, under many statutes, still limits states' constitutional ability to become full-fledged environmental regulators. In particular, because Congress has to be exceptionally—one might argue excessively—clear in drafting its waivers of federal sovereign immunity, assertions of state authority pursuant to the most natural readings of federal facilities provisions can still prompt constitutional challenges to that authority. Again, therefore, cooperative federalism generates constitutional environmental law.

D. Dormant Commerce Clause

Because the U.S. Constitution's Commerce Clause gives authority over interstate commerce to Congress, it also restricts the states from discriminating in trade or from enacting protectionist laws—the effects of the so-called dormant Commerce Clause. According to the U.S. Supreme Court, the Interstate Commerce Clause "has long been understood... to provide 'protection from state legislation inimical to the national commerce [even] where Congress has not acted." In 2008, it emphasized that "[t]he modern law of what has come to be called the dormant Commerce Clause is driven by concern about 'economic

¹⁰¹ U.S. Dep't of Energy, 503 U.S. 607, 621–27 (1992). For more detailed discussions of this decision, see Mirth White, Can Congress Draft a Statute Which Forces Federal Facilities to Comply With Environmental Laws in Light of the Holding in United States Department of Energy v. Ohio?, 15 WHITTIER L. REV. 203, 211–15 (1994); Daniel Horne, Note, Federal Facility Environmental Compliance After United States Department of Energy v. Ohio, 65 U. COLO. L. REV. 631, 635–37 (1994); Rebecca Heintz, Note, Federal Sovereign Immunity and Clean Water: A Supreme Misstep, 24 ENVIL. L. 263, 264–65 (1994); Gregory J. May, U.S. Department of Energy v. Ohio and the Federal Facility Compliance Act of 1992: The Supreme Court Forces a Hazardous Compromise in CWA and RCRA Enforcement Against Federal Agencies, 4 VILL. ENVIL. L.J. 363, 364–65 (1993); Karen M. Matson, Note, Waiver of Sovereign Immunity—Did Congress Intend to Exempt Federal Facilities From Civil Penalties Under the Clean Water Act? United States Department of Energy v. Ohio, 112 S. Ct. 1627 (1992), 28 LAND & WATER L. REV. 489, 489–90 (1993); Peter McKenna, States May Not Impose Civil Penalties on the U.S. Government for Violations of State Statutes Promulgated Under the Authority of the Clean Water Act and the Resource Conservation and Recovery Act, 23 SETON HALL L. REV. 762, 775–77 (1993).

¹⁰² Federal Facility Compliance Act of 1992, Pub. L. No. 102-386, § 102(a), (b), 106 Stat. 1505, 1505–06 (Oct. 6, 1992) (amending 42 U.S.C. § 6961).

¹⁰³ See, e.g., Sporhase v. Nebraska ex rel. Douglas, 458 U.S. 941, 956–60 (1982) (groundwater); Kassel v. Consol. Freightways Corp. of Del., 450 U.S. 662, 669–79 (1981) (trailer requirements for commercial trucking); Hughes v. Oklahoma, 441 U.S. 322, 336–38 (1979) (transporting or shipping minnows) (all striking down state laws that burdened interstate commerce).

¹⁰⁴ Barclays Bank PLC v. Franchise Tax Bd. of Cal., 512 U.S. 298, 310 (1994) (quoting S. Pac. Co. v. Arizona *ex rel*. Sullivan, 325 U.S. 761, 769 (1945)).

protectionism—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors." ¹⁰⁵

With this principle as the touchstone, dormant Commerce Clause challenges are evaluated in two steps. First, if state legislation facially discriminates against interstate commerce, it is "virtually *per se* invalid." The federal courts will uphold such a law "only if it 'advances a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives." Second, if a state law appears to regulate even-handedly but indirectly affects interstate commerce, it is evaluated under the *Pike v. Bruce Church*, *Inc.* 108 balancing test. Under this test:

Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits... If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities. ¹⁰⁹

State laws are almost always constitutional under Pike balancing. 110

In environmental law, the dormant Commerce Clause has been especially important in the context of solid waste, which, as noted, RCRA generally leaves to the states. In a series of decisions spanning almost twenty years, the U.S. Supreme Court has repeatedly emphasized that waste disposal is a commercial or economic activity and thus that, under the dormant Commerce Clause, state and local governments cannot discriminate against out-of-state waste in their waste disposal plans.¹¹¹ These decisions overturned virtually every attempt states made to

¹⁰⁵ Dep't of Revenue of Ky. v. Davis, 553 U.S. 328, 337–38 (2008) (quoting New Energy Co. of Ind. v. Limbach, 486 U.S. 269, 273–74 (1988)).

 ¹⁰⁶ Id. at 338–39 (2008) (citing Or. Waste Sys., Inc. v. Dep't of Envtl. Quality of Or., 511 U.S. 93, 99 (1994)); Wyoming v. Oklahoma, 502 U.S. 437, 454–55 (1992); Brown-Forman Distillers Corp. v. N.Y. State Liquor Auth., 476 U.S. 573, 579 (1986); Philadelphia v. New Jersey, 437 U.S. 617, 624 (1978).

 ¹⁰⁷ Dep't of Revenue of Ky., 553 U.S. at 338–39 (quoting Or. Waste Sys., Inc., 511 U.S. at 100–01).
 108 397 U.S. 137 (1970).

¹⁰⁹ *Id.* at 142 (citations omitted); *see also Dep't of Revenue of Ky.*, 553 U.S. at 338–39 (reciting this same test)

¹¹⁰ But see Levy v. Rowland, 359 F. Supp. 2d 267, 273 (E.D.N.Y. 2005) (suggesting that the burdens on interstate commerce caused by Connecticut's moratorium on transmission of electricity to New York via high-voltage fiber optic cables outweighed the alleged environmental benefits to Connecticut citizens of the moratorium).

¹¹¹ See, e.g., C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 393 (1994) (holding that a town ordinance that required handling of solid waste at the town's transfer station violated the dormant Commerce Clause); Or. Waste Sys., Inc. v. Dep't. of Envtl. Quality of Or., 511 U.S. at 108 (holding that Oregon violated the dormant Commerce Clause by imposing a \$2.50 per ton surcharge on in-state disposal of waste generated out of the state); Fort Gratiot Sanitary Landfill, Inc. v. Mich. Dep't of Nat. Res., 504 U.S. 353, 367–68 (1992) (holding that a Michigan statute that prohibited private landfill operators from accepting solid waste that originated outside of the county in which the landfill was located violated the dormant Commerce Clause); Chemical Waste Mgmt., Inc. v. Hunt, 504 U.S. 334, 346 (1992) (finding that an Alabama statute that imposed an additional fee on all hazardous wastes generated outside Alabama discriminated against interstate commerce in violation of the Constitution);

distinguish between in-state and out-of-state waste, despite the burdens—economic, environmental, and in terms of land use—that importation of another state's waste can impose on the receiving state's landfills and other waste treatment facilities. Only in 2007, in *United Haulers Ass'n, Inc. v. Oneida-Herkimer Solid Waste Management Authority*,¹¹² did the Court give states a constitutional break, upholding local "flow control" ordinances that directed trash to government-owned waste processing facilities.¹¹³ Thus, somewhat perversely, in a cooperative federalism scheme designed specifically to encourage state participation, the dormant Commerce Clause constitutionally limits state creativity.

The dormant Commerce Clause can also limit *interstate* creativity, as both Bill Funk and I were exploring almost simultaneously—he in the context of regional cap-and-trade programs for greenhouse gases, ¹¹⁴ I in the context of multistate agreements and projects related to renewable energy. ¹¹⁵ Bill identified two aspects of the Regional Greenhouse Gas Initiative (RGGI) that could run afoul of the dormant Commerce Clause: offsets and leakage. ¹¹⁶ With regard to offsets, the RGGI

limits the location of offset projects to participating states or nonparticipating states whose regulatory agency has entered into a memorandum of understanding to carry out certain obligations, including auditing and enforcement of offset terms. By distinguishing between participating states and nonparticipating states, the Model Rule facially discriminates against interstate commerce in offsets. ¹¹⁷

Hence, it would seem to violate the dormant Commerce Clause. ¹¹⁸ Nevertheless, "the restriction is not protectionist in intent or effect," and, pursuant to the *Dean Milk Co. v. City of Madison* ¹¹⁹ line of cases, "reasonable attempts to provide equivalent out-of-state safeguards as are provided with respect to in-state entities are not discriminatory merely because they differ in certain ways or involve an added cost attributable to the difficulty of out-of-state enforcement." ¹²⁰

Leakage, in turn, arises "[b]ecause generators within RGGI must have allowances for their CO₂ emissions, which will increase their costs," incentivizing them "to import 'dirty' electricity rather than pay the higher price for 'clean'

City of Philadelphia v. New Jersey, 437 U.S. 617, 628 (1978) (holding that a New Jersey statute that prohibited importation of most solid and liquid waste that originated or was collected outside of the state violated the dormant Commerce Clause). *But see* Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 472 (1981) (upholding a Minnesota statute that banned the retail sale of milk in plastic, nonreturnable, nonrefillable containers).

^{112 550} U.S. 330 (2007).

¹¹³ Id. at 334.

¹¹⁴ Constitutional Implications of Regional CO₂, supra note 7, at 362–69.

¹¹⁵ Robin Kundis Craig, Constitutional Contours for the Design and Implementation of Multistate Renewable Energy Programs and Projects, 81 U. Colo. L. Rev. 771, 792–96 (2010).

¹¹⁶ Constitutional Implications of Regional CO₂, supra note 7, at 362–64.

¹¹⁷ Id. at 362.

¹¹⁸ Id.

¹¹⁹ 340 U.S. 349 (1951).

¹²⁰ Constitutional Implications of Regional CO₂, supra note 7, at 362–63 (citing Dean Milk v. City of Madison, 340 U.S. 349 (1951)).

electricity generated within the RGGI area."¹²¹ One of the potential solutions to the leakage problem would be to ban electricity generated in non-RGGI states from the RGGI area, ¹²² but "[t]his facial discrimination would almost surely violate the Dormant Commerce Clause because it would impose the most extreme burden on interstate commerce (a ban) in order to achieve the local purpose."¹²³ Similarly, a "hybrid approach would require LSEs to obtain allowances for any power purchased from outside RGGI... [which] would also be facially discriminatory and could be upheld, if at all, only under the theory underlying the compensatory tax doctrine."¹²⁴

The dormant Commerce Clause also dogs multistate arrangements regarding renewable energy. "A number of dormant Commerce Clause cases have involved energy production, and they systematically conclude that states cannot create legal requirements or preferences based on the source of the fuel or energy." "Nor can states 'hoard' state-created energy within their borders." As a result,

multistate renewable energy arrangements could implicate the dormant Commerce Clause in a number of ways. Clearly, at the state level, [Renewable Portfolio Standard] requirements that favor in-state [Renewable Energy Credits] or forbid out-of-state RECs could run afoul of the dormant Commerce Clause. Similarly, multistate agreements that allow REC trading within the consortium but prohibit RECs from other states could raise constitutional concerns. Finally, multistate arrangements that favor—either through RECs, transmission access, or taxes or other financial incentives—renewable energy produced in certain states and to disfavor renewable energy produced in others could raise dormant Commerce Clause concerns. ¹²⁷

Thus, Bill Funk and I agree that creative multistate attempts to deal with climate change and to promote the decarbonization of the United States' energy supply could fairly easily run afoul of the dormant Commerce Clause, potentially thwarting first-best regulatory structures for dealing with this most pressing of environmental problems.

E. The Compact Clause and Interstate Agreements

If the dormant Commerce Clause can interfere with interstate creativity, the Compact Clause gives states a constitutional mechanism for pursuing new kinds of arrangements—so long as they have Congress's blessing. The U.S. Constitution's Interstate Compact Clause provides that:

¹²¹ Id. at 363.

¹²² See id. at 366.

¹²³ Id

¹²⁴ *Id.* at 366 & n.57 (citing Henneford v. Silas Mason Co., 300 U.S. 577 (1937)) ("upholding Washington State's use tax on imported goods to compensate for the State's sales tax against a dormant commerce clause challenge").

¹²⁵ Craig, *supra* note 115, at 793.

¹²⁶ Id. at 794.

¹²⁷ Id. at 795.

No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay. ¹²⁸

As the italicized language indicates, the Interstate Compact Clause operates as an explicit restriction on state authority. States entering into any kind of environmental agreement among themselves need to consider whether Congress's approval is necessary, because multistate agreements deemed interstate compacts for purposes of this clause are unconstitutional without such approval. ¹²⁹

The U.S. Supreme Court's first—but still guiding—statement about the applicability of the Interstate Compact Clause derives from the 1893 case of *Virginia v. Tennessee*. ¹³⁰ In this case, Virginia sought to void an 1802–1803 agreement with Tennessee regarding the border between the two states on the grounds that the agreement was an interstate compact that Congress had not approved. ¹³¹ The Court created a legal touchstone that interstate agreements need Congress's approval when they "tend[] to the increase of political power in the States, which may encroach upon or interfere with the just supremacy of the United States." ¹³² Because states' agreements regarding borders could encroach "upon the full and free exercise of Federal authority," they require Congress's consent. ¹³³

In contrast, in 1985, the Supreme Court determined that Massachusetts and Connecticut had not formed an interstate compact when both enacted statutes that allowed regional but out-of-state bank holding companies to purchase banks and bank holding companies within each state's borders. 134 Whatever agreement existed did not infringe upon either federal supremacy or other states' sovereignty, and hence Congress's consent would not be required. 135 Similarly, in 2002, the United States Court of Appeals for the Fourth Circuit concluded that the Master Settlement Agreement in the state tobacco litigation, which involved forty-six states and most of the major tobacco manufacturers, was not an interstate compact requiring Congress's approval. 136 As the court explained, while "the Master Settlement Agreement may result in an increase in bargaining power of the States vis-a-vis the tobacco manufacturers, . . . this increase in power does not interfere with federal supremacy because the Master Settlement Agreement 'does not purport to authorize the member States to exercise any powers they could not exercise in its absence."137 "In addition, the Master Settlement Agreement does not derogate from the power of the federal government to regulate tobacco," especially because

¹²⁸ U.S. CONST. art. I, § 10, cl. 3 (emphasis added).

¹²⁹ West Virginia *ex rel*. Dyer v. Sims, 341 U.S. 22, 27–28 (1951).

^{130 148} U.S. 503 (1893).

¹³¹ Id. at 517.

¹³² *Id.* at 519.

¹³³ Id. at 520.

¹³⁴ Ne. Bancorp, Inc. v. Bd. of Governors of Fed. Reserve Sys., 472 U.S. 159, 175–76 (1985).

¹³⁵ See id. at 176.

¹³⁶ See Star Sci., Inc. v. Beales, 278 F.3d 339, 345, 360 (4th Cir. 2002).

¹³⁷ Id. at 360 (quoting U.S. Steel Corp v. Multistate Tax Comm'n, 434 U.S. 452, 473 (1978)).

the Master Settlement Agreement anticipated—and expressly subordinated itself to—any future federal statutes regulating tobacco. 138

In examining the constitutional implications of the RGGI, Bill Funk concluded that it did not need Congress's consent as an interstate compact. Analogizing to the Multi-State Tax Commission at issue in *U.S. Steel Corp. v. Multistate Tax Commission*, ¹³⁹ he concluded that:

RGGI does not limit the federal government's authority to regulate CO₂ in any way it sees fit. Like the Commission, RGGI, Inc.—the entity created to support development and implementation of the RGGI program—does not impinge on federal supremacy. No state has delegated its sovereign powers to RGGI, Inc., nor can RGGI, Inc. exercise any powers over the states. It acts at most in a ministerial and advisory capacity, much like the Commission. All of RGGI's actual powers stem solely from individual states' laws, which—as was the case under the Compact—are "nothing more than reciprocal legislation" with no capacity to bind other member states.

This similarity between RGGI and the Compact suggests that RGGI does not violate the Compact Clause because it lacks congressional consent.¹⁴⁰

In contrast, "[m]ost multistate cooperative agreements involving electricity have proceeded as interstate compacts" and probably need to, given the pervasiveness of federal regulation in this area. 141

However, even when congressionally approved interstate compacts are not *required*, congressional approval can confer constitutional benefits on the compacting states and their created regulatory regime. First, "the existence of an interstate compact affects the application of the Supremacy Clause and the federal preemption analysis. Interstate compacts approved by Congress become federal law, with the result that other federal statutes cannot automatically preempt a compact." Second, "congressional approval of an interstate compact and its status as federal law insulates multistate programs from dormant Commerce Clause scrutiny." As such, a congressionally approved interstate compact represents cooperative federalism at the multistate level, providing a constitutional mechanism for interstate creativity to accomplish aims that the U.S. Constitution might not otherwise allow.

¹³⁸ Id.

¹³⁹ 434 U.S. 452, 456–57 (1978); see *Constitutional Implications of Regional CO*₂, *supra* note 7, at 358–60, for a discussion of the test used to determine when interstate compacts are valid without Congress' approval.

¹⁴⁰ Constitutional Implications of Regional CO₂, supra note 7, at 360. I was less convinced. See Craig, supra note 115, at 820–22. The courts have not (yet) decided the issue.

¹⁴¹ Craig, *supra* note 115, at 819 (citing Seattle Master Builders Ass'n v. Pac. Nw. Elec. Power & Conservation Planning Council, 786 F.2d 1359, 1363–66 (9th Cir. 1986); Safe Harbor Water Power Corp. v. Fed. Power Comm'n, 124 F.2d 800, 806–08 (3rd Cir. 1941)).

¹⁴² Id. at 827.

¹⁴³ *Id.* at 828–29 (citing Intake Water Co. v. Yellowstone River Compact Comm'n, 769 F.2d 568, 569–70 (9th Cir. 1985)).

III. CITIZEN SUITS AND THE LIMITS OF FEDERAL COURT JURISDICTION

Environmental citizen suit provisions are in some ways Congress's clearest statements that the environment is everybody's business, because Congress allows private individuals and organizations to help ensure that regulated entities meet federal environmental requirements. Citizen suits first became important in connection with NEPA, which imposes duties—most notably the Environmental Impact Statement (EIS) requirement on federal agencies. Because NEPA apples to federal agencies, private individuals and entities can challenge federal agency compliance through the federal Administration Procedure Act's 145 (APA's) judicial review provisions. 146

Beginning with the CAA in 1970,¹⁴⁷ Congress expanded the rights of private enforcers beyond the APA by including citizen suit provisions in most of the federal environmental statutes.¹⁴⁸ Although these provisions are all similar, the CWA's is one of the most typical—and the most used. It provides that:

[A]ny citizen may commence a civil action on his own behalf—

- (1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of (A) an effluent standard or limitation under this chapter or (B) an order issued by the Administrator or a State with respect to such a standard or limitation, or
- (2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an effluent standard or limitation, or such an order, or to order the Administrator to perform any such act or duty, as the case may be, and to apply any appropriate civil penalties under section 1319(d) of this title. 149

^{144 42} U.S.C. § 4332(C) (2012).

¹⁴⁵ 5 U.S.C. §§ 551–559, 701–706, 1305, 3105, 3344, 4301, 5335, 5372, 7521 (2012).

¹⁴⁶ Id. §§ 701–706.

¹⁴⁷ See 42 U.S.C. § 7604 (the CAA's citizen suit provision).

¹⁴⁸ See Hallstrom v. Tillamook Cty., 493 U.S. 20, 23 n.1 (1989) (listing the following statutes as having similar citizen suit provisions as that in RCRA, 42 U.S.C. § 6972 (2012): Toxic Substances Control Act, 15 U.S.C. § 2619 (2012); ESA, 16 U.S.C. § 1540(g) (2012); SMCRA, 30 U.S.C. § 1270 (2012); Deep Seabed Hard Mineral Resources Act, 30 U.S.C. § 1427 (2012); Deepwater Port Act, 33 U.S.C. § 1515 (2012); Act to Prevent Pollution from Ships, 33 U.S.C. § 1910 (2012); CWA, 33 U.S.C. § 1365 (2012); Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. § 1415 (2012); Safe Drinking Water Act, 42 U.S.C. § 300j–8 (2012); Noise Control Act, 42 U.S.C. § 4911 (2012); Energy Policy and Conservation Act, 42 U.S.C. § 6305 (2012); Ocean Thermal Energy Conversion Act, 42 U.S.C. § 9124 (2012); CERCLA, 42 U.S.C. § 9659 (2012); Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11046 (2012); Outer Continental Shelf Lands Act Amendments of 1978, 43 U.S.C. § 1349 (2012); Natural Gas Pipeline Safety Act Amendments of 1976, 49 U.S.C. App. § 60121 (2012)).

¹⁴⁹ 33 U.S.C. § 1365(a) (2012).

A "citizen" entitled to bring such actions is "a person or persons having an interest which is or may be adversely affected."¹⁵⁰ Civil penalties assessed in a citizen suit are payable to the U.S. Treasury; however, to encourage citizen suits, Congress made litigation costs, "including reasonable attorney and expert witness fees," available to plaintiffs "whenever the court determines such award is appropriate."¹⁵¹

Citizen enforcement, it turns out, has significantly added to the effectiveness of environmental law. As Russell E. Train, the second Administrator of the EPA, observed, "[c]itizen concern and citizen action were key ingredients both of our nation's rapid development of environmental protection policies and of the effective implementation of those policies." [M]any established citizen environmental organizations played an active and effective role, indeed a crucial one, in monitoring and promoting the enforcement of environmental laws, especially in the early 1970s during initial implementation of the EIS process in federal decision making." In 2003, Professor James R. May estimated that citizens had filed over 2,000 environmental citizen suits since 1970, 154 resulting in about 1,500 reported federal court decisions, which represented at that point "roughly 3 in 4 (75%) of all reported civil environmental decisions." 155 Between 1995 and 2002, citizens were responsible for "315 compliance-forcing judicial consent orders[] under the CWA and CAA alone,"156 and "[d]uring the same period, under all environmental statutes, citizens ... submitted more than 4,500 notices of intent to sue,"157 about eight-ninths of which were directed at members of the regulated community and the rest directed at implementing agencies. 158

However, citizen suits also raise constitutional issues related to the federal courts' jurisdiction to hear environmental lawsuits. For example, because citizen suit provisions allow private entities to sue governments, federal sovereign immunity and state Eleventh Amendment immunity become recurring issues. 159 Perhaps most importantly, however, environmental citizen suits test federal courts' Article III jurisdiction over "cases and controversies" and have been the primary driver of federal court standing jurisprudence since the 1970s. 160

¹⁵⁰ Id. § 1365(g).

¹⁵¹ Id. § 1365(d).

¹⁵² RUSSELL E. TRAIN, POLITICS, POLLUTION, AND PANDAS: AN ENVIRONMENTAL MEMOIR 94 (2003).

¹⁵³ Id. at 95.

¹⁵⁴ James R. May, Now More Than Ever: Environmental Citizen Suit Trends, 33 Envtl. L. Rep. (Envtl. Law Inst.) 10,704, 10,704 (2003).

¹⁵⁵ Id. at 10,706.

¹⁵⁶ James R. May, Now More Than Ever: Trends in Environmental Citizen Suits at 30, 10 WIDENER L. REV. 1, 4 (2003).

¹⁵⁷ Id.

¹⁵⁸ See id.

¹⁵⁹ See id. at 4, 11.

¹⁶⁰ *Id.* at 7–8, 33–34.

A. Federal Sovereign Immunity in the Context of Citizen Suits

As is true for state enforcement against federal facilities, when private citizens attempt to sue federal facilities and federal agencies, ordinary principles of federal sovereign immunity apply. Most environmental citizen suit provisions allow for at least some suits against at least some federal entities. Thus, for example, most citizen suit provisions in the federal pollution control statutes clearly waive the EPA's sovereign immunity in suits to compel the Administrator to complete his or her nondiscretionary duties under the relevant statute. Most environmental citizen suit provisions also allow lawsuits against federal agencies that violate the relevant statute. 162

The exact wording of an environmental citizen suit provision is critical to the scope of its waiver of sovereign immunity. For example, despite the U.S. Supreme Court's decision in *U.S. Department of Energy* with respect to civil penalties under the CWA and RCRA, the United States District Court for the Middle District of Tennessee nevertheless held that citizens could seek civil penalties against federal facilities under the CAA, distinguishing that statute's language. ¹⁶³ The United States District Court for the Eastern District of California, through somewhat contorted reasoning, held that although the U.S. Army Corps of Engineers' (Army Corps' or Corps') violation of its Incidental Take Statement under the ESA would *not* fall within that Act's citizen suit provision's waiver of sovereign immunity, the Corps' taking of protected fish without Statement protection violated the Act itself and hence *did* fall within the waiver of sovereign immunity. ¹⁶⁴

Sovereign immunity challenges continue to block several kinds of citizen suits. The CWA's citizen suit provision, for example, does not mention the Army Corps, one of the two federal agencies that implement the Act. 165 As a result, the CWA's waiver of sovereign immunity does not extend to the Corps, 166 just the EPA, and it does not allow citizens to seek civil penalties for federal facilities' past violations of the Act. 167 More generally, compliance with a citizen suit provision's procedural requirements are part of the relevant waiver of sovereign immunity, and hence failure to comply with those requirements in a case against a federal

¹⁶¹ Sierra Club v. U.S. Envtl. Prot. Agency, 850 F. Supp. 2d 300, 303 (D.D.C. 2012) (CAA); Sierra Club v. Johnson, 500 F. Supp. 2d 936, 940–41 (N.D. Ill. 2007) (CAA).

¹⁶² See, e.g., 33 U.S.C. § 1365(a) (CWA); 42 U.S.C. § 6972(a) (RCRA); 42 U.S.C. § 7604(a)(1)–(2) (CAA); see also Sierra Club, 850 F. Supp. 2d at 303 (CAA citizen suit against the EPA).

¹⁶³ United States v. Tenn. Air Pollution Control Bd., 967 F. Supp. 975, 978–82 (M.D. Tenn. 1997). But see Sierra Club v. Tenn. Valley Auth., 430 F.3d 1337, 1353–56 (11th Cir. 2005); City of Jacksonville v. U.S. Dep't of the Navy, 348 F.3d 1307, 1314–20 (11th Cir. 2003) (both holding that the CAA did not waive federal sovereign immunity from punitive penalties). Notably, at least one court has held that the waiver of immunity for environmental suits against the TVA comes from other places. Tenn. Clean Water Network v. Tenn. Valley Auth., 206 F. Supp. 3d 1280, 1297–98 (M.D. Tenn. 2016).

¹⁶⁴ S. Yuba River Citizens League v. Nat'l Marine Fisheries Serv., 629 F. Supp. 2d 1123, 1131–35 (E.D. Cal. 2009).

¹⁶⁵ 33 U.S.C. § 1365(a) (2012).

Cascade Conservation League v. M.A. Segale, Inc., 921 F. Supp. 692, 696–98 (W.D. Wash.
 1996); All. to Save the Mattaponi v. U.S. Army Corps of Eng'rs, 515 F. Supp. 2d 1, 5–6 (D.D.C. 2007);
 Nw. Envtl. Def. Ctr. v. U.S. Army Corps of Eng'rs, 118 F. Supp. 2d 1115, 1120 (D. Or. 2000).

¹⁶⁷ Sierra Club v. Lujan, 972 F.2d 312, 316 (10th Cir. 1992).

defendant gives rise to a sovereign immunity defense. ¹⁶⁸ In addition, the issue of whether a federal agency has a nondiscretionary duty or not can be critical to whether Congress has waived its sovereign immunity from suit. ¹⁶⁹ As such, federal sovereign immunity serves to preclude some citizen enforcement of federal environmental law, limiting full citizen participation in enforcement.

B. State Eleventh Amendment Immunity

As is true in the CWA language quoted in the introduction to this Part, most environmental citizen suit provisions allow citizen-plaintiffs to sue states for violations of the federal environmental statutes, so long as such lawsuits are consistent with the Eleventh Amendment. That Amendment provides that "[t]he Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State. The Geral court against a state by citizens of another state or of a foreign country. However, the U.S. Supreme Court has long interpreted the Eleventh Amendment as also barring suits in federal court by citizens against their own state. However, the Eleventh Amendment does not bar suits by the federal government against states in federal court (allowing, in the environmental law context, federal enforcement against states), nor does it address the issue of states' vulnerability to suit in their own courts, which is a matter of state sovereign immunity law.

¹⁶⁸ See Humane Soc'y of the U.S. v. McCarthy, 209 F. Supp. 3d 280, 287–88 (D.D.C. 2016); Envtl. Integrity Project v. U.S. Envtl. Prot. Agency, 160 F. Supp. 3d 50, 62 (D.D.C. 2015).

¹⁶⁹ Sierra Club v. Wheeler, 330 F. Supp. 3d 407, 417–21 (D.D.C. 2018) (holding that the CAA's citizen suit provision does not waive sovereign immunity in lawsuits about discretionary actions); Friends of the Earth v. U.S. Envtl. Prot. Agency, 934 F. Supp. 2d 40, 48–49 (D.D.C. 2013) (holding that the EPA does not have a mandatory duty to make a determination as to whether lead emissions from general aviation aircraft engines using aviation gasoline endangered the public health or welfare under the CAA, and hence that the Act does not waive its sovereign immunity from suit); Am. Rd. & Transp. Builders Ass'n v. U.S. Envtl. Prot. Agency, 865 F. Supp. 2d 72, 81–82 (D.D.C. 2012) (holding that there was no waiver of sovereign immunity to review the EPA's CAA nonroad preemption rules); United States v. Sensient Colors, Inc., 649 F. Supp. 2d 309, 332 (D.N.J. 2009) (holding that CERCLA's citizen suit provision does not waive the EPA's sovereign immunity if there is no nondiscretionary duty at issue).

¹⁷⁰ See supra note 149 and accompanying text.

U.S. CONST., amend. XI.

¹⁷² *Id*.

¹⁷³ See, e.g., P.R. Aqueduct & Sewer Auth. v. Metcalf & Eddy, Inc., 506 U.S. 139, 144-46 (1993).

¹⁷⁴ See Pennsylvania v. Union Gas Co., 491 U.S. 1, 11 (1989) (citing Employees v. Mo. Dep't of Pub. Health & Welfare, 411 U.S. 279, 285–86 (1973)); United States v. Mississippi, 380 U.S. 128, 140–41 (1965); Principality of Monaco v. Mississippi, 292 U.S. 313, 329 (1934); Equal Emp't Opportunity Comm'n v. Bd. of Supervisors for the Univ. of. La. Sys., 559 F.3d 270, 272 (5th Cir. 2009); Chao v. Va. Dep't of Transp., 291 F.3d 276, 280 (4th Cir. 2002).

¹⁷⁵ E.g., Texas Comm'n on Envtl. Quality v. Bonser-Lain, 438 S.W.3d 887, 892–95 (Tex. Ct. App. 2014) (deciding that the Texas Water Code did not waive the TCEQ's sovereign immunity regarding greenhouse gas regulation); Dresser Indus., Inc. v. Commonwealth, Dept. Envtl. Res., 604 A.2d 1177, 1180–81 (Pa. Commw. Ct. 1992) (concluding that Pennsylvania's Clean Streams Law waived the Department's sovereign immunity).

The Eleventh Amendment preserves states' sovereign immunity. ¹⁷⁶ However, because under the U.S. Constitution's Supremacy Clause federal law can displace state law, it is sometimes possible for Congress to abrogate states' Eleventh Amendment sovereign immunity. Congress has most clearly exercised this power pursuant to the Fourteenth Amendment, ¹⁷⁷ which was added to the Constitution after the Civil War. However, in 1996, in *Seminole Tribe of Florida v. Florida*, the U.S. Supreme Court held that Congress could not abrogate states' Eleventh Amendment sovereign immunity through the Indian Commerce Clause, ¹⁷⁸ which also eliminated abrogation through the Interstate Commerce Clause, ¹⁷⁹ the basis of most of the federal environmental statutes. As a result, environmental citizen suits against states or state agencies in federal court must either find a waiver of Eleventh Amendment immunity or make use of an exception, ¹⁸⁰ such as the Ex parte *Young* doctrine. ¹⁸¹ Otherwise, the suit is barred. ¹⁸²

Like federal sovereign immunity, therefore, Eleventh Amendment immunity can limit citizen enforcement of the federal environmental statutes. ¹⁸³ However, it is also important to remember that citizens may have an alternative option to file an environmental lawsuit against a state in the state courts, ¹⁸⁴ an option that does not exist for citizen suits against the federal government. ¹⁸⁵

C. Standing

Article III of the U.S. Constitution gives federal courts the power to hear only "Cases" or "Controversies." Thus, as a constitutional matter, federal courts are courts of limited jurisdiction. The standing requirement helps these courts to comply with this limitation by requiring that the plaintiff have a real and personal stake in the outcome of the litigation. 187 Because standing is a matter of

¹⁷⁶ United States v. Mississippi, 380 U.S. at 140.

¹⁷⁷ Seminole Tribe of Fla. v. Florida, 517 U.S. 44, 59–60 (1996) (citing Fitzpatrick v. Bitzer, 427 U.S. 445, 455 (1976) (Fourteenth Amendment)).

¹⁷⁸ See id. at 72-73.

¹⁷⁹ Id

¹⁸⁰ See Mancuso v. N.Y. State Thruway Auth., 86 F.3d 289, 292–97 (2d Cir. 1996) (holding that the N.Y. State Thruway Authority was not a state agency under the "arm of the state" analysis).

¹⁸¹ In Ex parte *Young*, 209 U.S. 123 (1908), the U.S. Supreme Court held that the Eleventh Amendment permitted suits against state officers, rather than against the state itself, so long as the plaintiff sought only prospective (injunctive) relief. This exception has applied in several environmental citizen suits. *See*, *e.g.*, Cox v. City of Dallas, 256 F.3d 281, 307–09 (5th Cir. 2001) (allowing a RCRA citizen claim against a state official for injunctive relief).

¹⁸² See Burnette v. Carothers, 192 F.3d 52, 56–60 (2d Cir. 1999) (dismissing a CERCLA citizen suit); Martaugh v. New York, 810 F. Supp. 2d 446, 470 (N.D.N.Y. 2011) (dismissing CWA, RCRA, and CERCLA claims).

¹⁸³ *Martaugh*, 810 F. Supp. 2d at 470.

 ¹⁸⁴ E.g., Boise Cascade Corp. v. State ex rel. Or. State Bd. of Forestry, 991 P.2d 563, 566–70, 573–74 (Or. Ct. App. 1999) (allowing that the State of Oregon could be hauled into state court for ESA-related constitutional takings claims, but holding that this particular claim was not yet ripe).

¹⁸⁵ Federal sovereign immunity still applies in state court. *E.g.*, O'Neal v. Dep't of the Army of the U.S., 742 A.2d 1095, 1099–1101 (Pa. Super. 1999) (dismissing a CERCLA claim against the United States on sovereign immunity grounds).

¹⁸⁶ U.S. CONST. art. III, § 2.

¹⁸⁷ Baker v. Carr, 369 U.S. 186, 204 (1962).

constitutional jurisdiction, moreover, failure to meet the standing requirement results in dismissal of the plaintiff's suit. 188

The citizen suit provisions in federal environmental statutes and Section 702 of the federal APA potentially allow "random" unrelated third parties with no direct stake in the litigation—any person or any citizen—to sue federal agencies and regulated entities for violations of federal environmental laws, raising standing concerns. 189 The U.S. Supreme Court began addressing constitutional environmental standing in 1972, in Sierra Club v. Morton. 190 In that case, it concluded that the Constitution allowed neither "public interest" standing 191 nor standing based on the interest of the natural resource itself. 192 Instead, the plaintiff or its members must be directly injured by the action being challenged. 193 The Court further refined standing jurisprudence in its 1992 decision in Lujan v. Defenders of Wildlife, 194 articulating the three-element "irreducible constitutional minimum"195 test that continues to control citizen access to the federal courts. "First, the plaintiff must have suffered an 'injury in fact'—an invasion of a legally protected interest which is (a) concrete and particularized ... and (b) 'actual or imminent, not "conjectural" or "hypothetical" "196 "Second, there must be a causal connection between the injury and the conduct complained of—the injury has to be 'fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court." "Third, it must be 'likely,' as opposed to merely 'speculative,' that the injury will be 'redressed by a favorable decision." 198

Environmental citizen suits and environmental lawsuits pursuant to the APA have created a significant and not always wholly reconcilable body of constitutional environmental law, 199 prompting an equally significant body of

¹⁸⁸ See, e.g., Lujan v. Defs. of Wildlife, 504 U.S. 555, 560 (1992).

¹⁸⁹ 5 U.S.C. § 702 (1946); 16 U.S.C. § 1540(g) (2012).

¹⁹⁰ 405 U.S. 727, 734–41 (1972).

¹⁹¹ Id. at 739-40.

¹⁹² See id. at 741–44 (Douglas J., dissenting) (arguing in dissent that organizations like the Sierra Club should be able to speak on behalf of endangered places and resources). Relatedly, species lack standing to sue in their own right, and the U.S. Court of Appeals for the Ninth Circuit dismissed an Endangered Species Act case because the named plaintiffs—the cetacean community, a group of whales—lacked standing under both the Endangered Species Act and the APA. Cetacean Cmty. v. Bush, 386 F.3d 1169, 1171 (9th Cir. 2004).

¹⁹³ Sierra Club, 405 U.S. at 739.

¹⁹⁴ 504 U.S. 555, 558 (1992).

¹⁹⁵ Id. at 560-61.

¹⁹⁶ *Id.* (quoting and citing Allen v. Wright, 468 U.S. 737, 756 (1984); Warth v. Seldin, 422 U.S. 490, 508 (1975); Sierra Club v. Morton, 405 U.S. 727, 740–41, n. 16 (1972); Whitmore v. Arkansas, 495 U.S. 149, 155 (1990) (quoting Los Angeles v. Lyons, 461 U.S. 95, 102 (1983))).

¹⁹⁷ *Id.* (quoting Simon v. E. Ky. Welfare Rights Org., 426 U.S. 26, 41–42 (1976)).

¹⁹⁸ Id. at 561 (quoting E. Ky. Welfare Rights Org., 426 U.S. at 38).

¹⁹⁹ In just the U.S. Supreme Court, the environmental standing decisions since *Sierra Club v. Morton* include: Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361, 368 n.1 (2018) (Endangered Species Act); Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians v. Patchak, 567 U.S. 209, 224–28 (2012) (APA); Am. Elec. Power Co., Inc. v. Connecticut, 564 U.S. 410, 420 (2011) (Clean Air Act); Monsanto Co. v. Geertson Seed Farms, 561 U.S. 139, 149–156 (2010) (NEPA); Summers v. Earth Island Inst., 555 U.S. 488, 492–501 (2009) (APA challenge to Forest Service regulations); Massachusetts v. U.S. Envtl. Prot. Agency, 549 U.S. 497, 516–26 (2007) (Clean Air Act);

standing scholarship.²⁰⁰ However, standing jurisprudence also imposes basic cognitive framings on how the environment can exist within the law. Specifically, the federal court standing decisions test and articulate the kinds of interests in the environment that can find voice in the federal courts, which now range from aesthetic and recreational interests to economic and property interests.²⁰¹ Since Sierra Club v. Morton, however, environmental standing doctrine effectively forces environmental plaintiffs to frame environmental issues in terms of personal, concrete, and immediate anthropocentric values, eliding the public interest in and benefits resulting from basic protection of general ecosystem health and function.²⁰² Instead, particular environmental amenities must be valuable to a specific someone who is willing to go to court to protect them. While such persons are often easy to find, their absence means that public environmental values may never get their day in court.

IV. CONSTITUTIONAL TAKINGS CLAIMS ARISING BECAUSE THE "ENVIRONMENT" INCLUDES PRIVATE PROPERTY

Federal environmental law is applied administrative law, and, as a result, it can raise all of the general constitutional issues that all federal administrative regimes can raise. These include individual constitutional rights and civil liberties,

Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167, 180–88 (2000) (Clean Water Act); Bennett v. Spear, 520 U.S. 154, 161–66 (1997) (prudential standing under the Endangered Species Act and APA); *Defenders of Wildlife*, 504 U.S. at 560–61 (1992) (Endangered Species Act); Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 882–83 (1990) (APA action about overseas injuries to species); Middlesex Cty. Sewerage Auth. v. Nat'l Sea Clammers Ass'n, 453 U.S. 1, 16–17 (1981) (Clean Water Act and Marine Protection, Research, & Sanctuaries Act); Maryland v. Louisiana, 451 U.S. 725, 735–39 (1981) (natural gas tax); United States v. Students Challenging Regulatory Agency Procedures (SCRAP), 412 U.S. 669, 683–90 (1973) (NEPA).

Westlaw calls up well over 2,000 law review articles with "standing" in the title. For a representative range of environmental standing scholarship, see generally, Alexander Tom, Note, Standing in a Federal Agency's Shoes: Should Third-Party Action Affect Redressability under the National Environmental Policy Act?, 43 ECOLOGY L.Q. 337 (2016); Dru Stevenson & Sonny Eckhart, Standing as Channeling in the Administrative Age, 53 BOSTON COL. L. REV. 1357 (2012); Christopher Warshaw & Gregory E. Wannier, Business as Usual? Analyzing the Development of Environmental Standing Doctrine Since 1976, 5 HARV. L. & POL'Y REV. 289 (2011); Bradford Mank, Revisiting the Lyons Den: Summers v. Earth Island Institute's Misuse of Lyons's "Realistic Threat" of Harm Standing Test, 42 ARIZ. ST. L.J. 837 (2010); Bradford Mank, Standing in Monsanto Co. v. Geertson Seed Farms: Using Economic Injury as a Basis for Standing When Environmental Harm Is Difficult to Prove, 115 PENN. ST. L. REV. 307 (2010); Oliver A. Houck, Standing on the Wrong Foot: A Case for Equal Protection, 58 SYRACUSE L. REV. 1 (2007); Robin Kundis Craig, Removing "the Cloak of a Standing Inquiry": Pollution Regulation, Public Health, and Private Risk in the Injury-in-Fact Analysis, 29 CARDOZO L. REV. 149 (2007); Randall S. Abate & Michael J. Meyers, Broadening the Scope of Environmental Standing: Procedural and Informational Injury in Fact After Lujan v. Defenders of Wildlife, 12 UCLA J. ENVTL. L. & POL'Y 345 (1994); Jeffery W. Ring & Andrew F. Behrend, Using Plaintiff Motivation to Limit Standing: An Inappropriate Attempt to Short-Circuit Environmental Citizen Suits, 8 J. ENVTL. L. & LITIG. 345 (1993); Bruce B. Varney & George J. Ward, Jr., Who Can Stand Up for the Environment? Standing to Challenge Administrative Agency Actions, 7 St. Johns J. Legal COMMENT 443 (1991); Christopher D. Stone, Should Trees Have Standing? Toward Legal Rights for Natural Objects, 45 S. CAL. L. REV. 450 (1972).

²⁰¹ See Abate & Myers, supra note 200, at 357–58, 379.

²⁰² Id. at 732, 740.

especially in the enforcement context. Thus, for example, federal environmental enforcement has contributed to Fourth Amendment "administrative search" jurisprudence²⁰³ and provided the first prompt to the U.S. Supreme Court to define the Seventh Amendment right to a jury trial in the context of federal regulatory requirements.²⁰⁴

Unlike most federal regulatory regimes, however, environmental law routinely incorporates private property to fulfill its goals. Private land provides habitat for endangered and threatened species, ²⁰⁵ while water rights can interfere with the needs of aquatic species, especially in the West during drought. ²⁰⁶ The filling of wetlands on private land can also eliminate important habitat as well as degrade water quality. ²⁰⁷ Building along the coast may have to be limited in light of coastal erosion, sea-level rise, and other coastal hazards. ²⁰⁸ Water quality protection may require temporary moratoria on new development to bring runoff under control. ²⁰⁹

As was true for standing jurisprudence, federal environmental law (especially in combination with environment-related land use law) has provided the occasions to develop a substantial proportion of federal regulatory takings jurisprudence. The Fifth Amendment to the U.S. Constitution establishes that the United States shall not take "private property . . . for public use, without just compensation." This prohibition applies to the state and local governments by way of the Fourteenth Amendment's Due Process Clause. For most of U.S. history, the "takings" clause applied to the government's physical occupation of real property. In 1922, however, the U.S. Supreme Court concluded that governments could also effect unconstitutional takings of private property through regulation. Under the test that the Court eventually announced, courts evaluating a regulatory

²⁰³ See, e.g., Dow Chem. Co. v. United States, 476 U.S. 227, 229, 234–39 (1986) (upholding the EPA's use of aerial photography in CAA enforcement against a Fourth Amendment challenge).

²⁰⁴ Tull v. United States, 481 U.S. 412, 417–20, 427 (1987) (holding that enforcement actions under the CWA for penalties require a jury trial).

²⁰⁵ See, e.g., Boise Cascade Corp. v. United States, 296 F.3d 1339, 1357 (Fed. Cir. 2002).

²⁰⁶ See, e.g., Casitas Mun. Water Dist. v. United States, 543 F.3d 1276, 1284 (Fed. Cir. 2008).

²⁰⁷ See, e.g., Cooley v. United States, 324 F.3d 1297, 1307 (Fed. Cir. 2003).

²⁰⁸ See Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1008–09, 1019 (1992) (holding that when coastal building restrictions deprive a property owner of all economic use of the property, "there are good reasons for our frequently expressed belief that when the owner of real property has been called upon to sacrifice *all* economically beneficial uses in the name of the common good, that is, to leave his property economically idle, he has suffered a taking").

²⁰⁹ Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency, 535 U.S. 302, 308, 321–24 (2002).

²¹⁰ Beckett G. Cantley, Environmental Preservation and the Fifth Amendment: The Use and Limits of Conservation Easements by Regulatory Taking and Eminent Domain, 20 HASTINGS W.-N.W. J. ENVTL. L. & POL'Y 215, 217–18 (2014).

²¹¹ U.S. CONST. amend. V.

²¹² Dolan v. City of Tigard, 512 U.S. 374, 383–84 (1994); Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 481 n.10 (1987); Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 122 (1978); Chi., Burlington & Quincy R.R. Co. v. Chicago, 166 U.S. 226, 239 (1897).

²¹³ Josh Patashnik, *Physical Takings, Regulatory Takings, and Water Rights*, 51 SANTA CLARA L. REV. 365, 365 (2011) (discussing how traditional takings were seen as a physical appropriation of real property that carried a "categorical duty to compensate" the landowner).

²¹⁴ Pa. Coal Co. v. Mahon, 260 U.S. 393, 415 (1922).

taking claim balance three factors.²¹⁵ First, "[t]he economic impact of the regulation on the claimant and, [second], the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, relevant considerations."²¹⁶ The effect on actual property rights is critical, and no taking would be found if the plaintiff did not have a cognizable property interest at stake.²¹⁷ Finally, the "character of the governmental action" is also important, with the explanation that "[a] 'taking' may more readily be found when the interference with property can be characterized as a physical invasion by government . . . than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good."²¹⁸ As such, the Court has generally upheld land use and zoning regulations,²¹⁹ but "government actions that may be characterized as acquisitions of resources to permit or facilitate uniquely public functions have often been held to constitute 'takings."²²⁰

While the regulatory takings doctrine has had a complex history in the U.S. Supreme Court, it potentially limits any environmental regulatory scheme that can interfere with private land use.²²¹ Section 404 of the CWA,²²² which requires

²¹⁵ Penn Cent. Transp. Co., 438 U.S. at 124 (discussing factors that are involved in the court's fact-based inquiry on takings).

²¹⁶ *Id.* (citing Goldblatt v. Hempstead, 369 U.S. 590, 594 (1962)).

²¹⁷ See id. at 124–25 (citing United States v. Willow River Power Co., 324 U.S. 499, 511 (1945)); United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53, 60 (1913); Demorest v. City Bank Co., 321 U.S. 36, 42 (1944); Muhlker v. Harlem R.R. Co., 197 U.S. 544, 552 (1905); Joseph L. Sax, Takings and the Police Power, 74 YALE L.J. 36, 61 (1964) (discussing the "multitude of existing interests" associated with property).

²¹⁸ Penn Cent. Transp. Co., 438 U.S. at 124 (citing United States v. Causby, 328 U.S. 256, 270–71 (1946)).

²¹⁹ *Id.* at 125–26 (citing Euclid v. Amber Realty Co., 272 U.S. 365, 397 (1926); Gorieb v. Fox, 274 U.S. 603, 608 (1927); Welch v. Swasey, 214 U.S. 91 (1909); *Goldblatt*, 369 U.S. at 592–93; Eastlake v. Forest City Enters., Inc., 426 U.S. 668, 674 n.8 (1976); Miller v. Schoene, 276 U.S. 272 (1928)).

²²⁰ Id. at 128.

²²¹ For discussions of regulatory takings in the environmental law context, see John D. Echeverria & Michael C. Blumm, Horne v. Department of Agriculture: Expanding per se Takings While Endorsing State Sovereign Ownership of Wildlife, 75 MD. L. REV. 657, 658 (2016) (discussing regulatory takings in the context of wildlife regulation under the ESA); Richard J. Roddewig & W. James Hughes, Underbalanced Drilling: Can it Solve the Economic, Environmental and Regulatory Taking Problems Associated with Fracking?, 49 J. MARSHALL L. REV. 511, 527-28 (2015) (discussing the controversial regulations on land use for fracking); Cantley, supra note 210, at 223; Robin Kundis Craig, Using a Public Health Perspective to Insulate Land-Use Related Coastal Climate Change Adaptation Measures from Constitutional Takings Challenges, 66 PLAN. & ENVTL. L. 4, 4 (2014) (discussing a 2010 U.S. Supreme Court decision which held that a Florida beach project did not amount to an unconstitutional regulatory taking); Richard A. Epstein, Physical and Regulatory Takings: One Distinction Too Many, 64 STAN. L. REV. ONLINE 99, 101 (2012) (discussing the various levels of protection against government activity that are given to differing land uses); Robin Kundis Craig, Defining Riparian Rights as "Property" Through Takings Litigation: Is There a Property Right to Environmental Quality?, 42 ENVTL. L. 115, 131-32 (2012) (discussing environmental regulation's impacts on riparian rights); Patashnik, supra note 213, at 366 (discussing the importance of the Tahoe-Sierra Pres. Council U.S. Supreme Court decision in takings jurisprudence); Michael C. Blumm & J.B. Ruhl, Background Principles, Takings, and Libertarian Property: A Response to Professor Huffman, 37 ECOLOGY L.Q. 805, 816-19 (2010) (providing insight into background principles used in takings analyses); James L. Huffman, Background Principles and the Rule of Law: Fifteen Years after Lucas, 35 ECOLOGY L.Q. 1, 4-5 (2008); James L. Huffman, Beware of Greens in Praise of the Common Law, 58 CASE W. RES. L. REV. 813, 816 (2008) (discussing environmental regulatory takings in light of recent U.S. Supreme

permits when people dredge or fill waters on private property,²²³ and the ESA's critical habitat²²⁴ and species take prohibitions²²⁵ have been particularly productive at generating constitutional takings cases.²²⁶

Regulatory takings claims nevertheless remain difficult to prove, and in the environmental law context the courts have articulated several ameliorating principles of law. For example, "[o]nly when a permit is denied and the effect of the denial is to prevent 'economically viable' use of the land in question can it be said that a taking has occurred."²²⁷ Under this rule, the Army Corps' designation of property as wetlands subject to CWA regulation does not constitute a "taking," regardless of whether the designation immediately affects the property's value.²²⁸ In addition, the courts apply a "whole parcel" rule, under which they evaluate loss of value against the entire legal parcel at issue, not just the part where development

Court precedent); Hannah Jacobs Wiseman, Partial Regulatory Takings: Stifling Community Participation Under the Guise of Kelo Reform, 117 YALE L.J. POCKET PART 60 (2007) (discussing government interference of property in the Kelo U.S. Supreme Court decision); Michael C. Blumm & Lucus Ritchie, Lucas's Unlikely Legacy: The Rise of Background Principles as Categorical Takings Defenses, 29 HARV. ENVIL. L. REV. 321, 322 (2005) (discussing the importance of the Lucas decision in regulatory takings jurisprudence); Steven J. Eagle, Regulatory Takings, Public Use, and Just Compensation After Brown, 33 Envtl. L. Rep. (Envtl. Law Inst.) 10,807 (2003); J. David Breemer, Of Nominal Value: The Impact of Tahoe-Sierra on Lucas and the Fundamental Right to Use Private Property, 33 Envtl. L. Rep. (Envtl. Law Inst.) 10,331 (2003); Michael C. Blumm, Palazzolo and the Decline of Justice Scalia's Categorical Takings Doctrine, 30 B.C. ENVTL. AFF. L. REV. 137 139-40 (2002); David K. Brooks, Regulatory Takings—Where Environmental Protection and Private Property Collide, 17 NAT. RESOURCES & ENVT. 10, 10 (2002); Courtney Harrington, Penn Central to Palazzolo: Regulatory Takings Decisions and Their Implications for the Future of Environmental Regulation, 15 TUL. ENVIL. L.J. 383 384-86 (2002); Nicholas J. Johnson, Regulatory Takings and Environmental Regulatory Evolution: Toward a Macro Perspective, 6 FORDHAM ENVTL. L.J. 557, 558-59 (1995); James L. Huffman, A Coherent Takings Theory at Last: Comments on Richard Epstein's "Takings: Private Property and the Power of Eminent Domain", 17 ENVTL. L. 153 (1986).

- 222 33 U.S.C. § 1344(a) (2012).
- 223 Id.
- ²²⁴ 16 U.S.C. § 1533(a)(3) (2012).
- ²²⁵ Id. § 1538(a).

²²⁶ For § 404 of the CWA, see generally for example Cooley v. United States, 324 F.3d 1297, 1299–1300 (Fed. Cir. 2003); Res. Invs., Inc. v. United States, 85 Fed. Cl. 447, 455, 457 (2009); Norman v. United States, 63 Fed. Cl. 231, 233 (2004); Pax Christi Mem'l Gardens, Inc. v. United States, 52 Fed. Cl. 318, 319 (2002); Formanek v. United States, 18 Cl. Ct. 785, 786 (1989). For the ESA, see generally for example Casitas Mun. Water Dist. v. United States, 543 F.3d 1276, 1279–82 (Fed. Cir. 2008); Gordon v. Norton, 322 F.3d 1213, 2015 (10th Cir. 2003); *Boise Cascade Corp.*, 296 F.3d at 1341; Ideker Farms, Inc. v. United States, 136 Fed. Cl. 654, 659, 666 (2018); Klamath Irrigation v. United States, 129 Fed. Cl. 722, 724–25 (2016); Doyle v. United States, 129 Fed. Cl. 147, 149 (2016).

227 United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 127 (1985); see also Cooley, 324 F.3d at 1301–04 (holding that a taking claim was ripe if the Corps issued a final permit decision, even if the Corps later reconsidered that decision); Rybachek v. U.S. Envtl. Prot. Agency, 904 F.2d 1276, 1300 (9th Cir. 1990) (holding that a "takings" claim was not ripe when EPA had not yet applied its regulations to the parcel in question); Moore v. United States, 943 F. Supp. 603, 611–12 (E.D. Va. 1996) (holding that a "takings" claim was not ripe until there was a permit denial); United States v. Robinson, 570 F. Supp. 1157, 1166 (M.D. Fla. 1983) ("As defendants have never had a permit denied, their taking claim is not ripe for judicial relief." (citing United States v. Byrd, 609 F.2d 1204, 1211 (7th Cir. 1979)); see Robert Meltz, Wetlands Regulation and the Law of Regulatory Taking, 30 Envtl. L. Rep. (Envtl. Law Inst.) 10468 (Jun. 2000).

²²⁸ Robbins v. United States, 40 Fed. Cl. 381, 385–86 (1998).

cannot occur.²²⁹ Relatedly, mere diminution in value is not enough to prove a regulatory taking.²³⁰ Finally, the existence of a federal regulatory scheme prior to purchase is relevant in evaluating the reasonableness of the property owner's investment-backed expectations.²³¹

As a matter of adjudicated reality, the Takings Clauses have imposed only limited checks on environmental law. Takings jurisprudence, however, creates hesitations in governments contemplating new regulation—an unwillingness to exercise their full constitutional authority with respect to private property out of fear of expensive litigation, public backlash, or both. For example, only two states have taken on section 404 permitting authority under the CWA, in part because of the fears of takings liability from regulating the dredging and filling of wetlands and other waters²³²—activities generally associated with construction. Jurisprudential complexity (one might even say confusion) in specific subsets of takings cases, such as permit conditions/exactions or water rights, only increase the regulatory hesitation. While the "proper" balance between private rights and public needs is of course always subject to debate, the regulatory takings doctrine has contributed disproportionately to constitutional environmental law compared to its actual legal impact.

V. CONCLUSION: WILL THERE BE A FEDERAL CONSTITUTIONAL ENVIRONMENTAL RIGHT?

Despite the breadth and pervasiveness of constitutional environmental law, the U.S. Constitution itself provides no environmental rights.²³³ Indeed, it does not even mention the environment. Moreover, although many other countries have found a penumbral constitutional environmental right in various constitutional protections such as the right to life,²³⁴ the history of constitutional environmental

²²⁹ Forest Props., Inc. v. United States, 177 F.3d 1360, 1365 (Fed. Cir. 1999); *see also Formanek*, 18 Cl. Ct. at 794–95 (holding that the "taking" claim applied to the whole parcel when the Corps recognized throughout the permitting process that the plaintiff's development project involved the entire parcel, not just the wetlands). *But see* Fla. Rock Indus. v. United States, 8 Cl. Ct. 160, 164–65 (1985), *aff'd*, 791 F.2d 893, 904–05 (Fed. Cir. 1986), *cert. denied*, 479 U.S. 1053 (1987) (holding that the relevant property for the "taking" analysis was the nighty-eight acres out of 1,560 acres involved in the permit denial, even though the claimant eventually intended to mine the whole property).

²³⁰ See Jentgen v. United States, 657 F.2d 1210, 1213–14 (Fed. Cir. 1981); Deltona Corp. v. United States, 657 F.2d 1184, 1193 (Fed. Cir. 1981), cert. denied, 445 U.S. 1017 (1982); 1902 Atl. Ltd. v. Hudson, 574 F. Supp. 1381, 1404–05 (E.D. Va. 1983); Walcek v. United States, 49 Fed. Cl. 248, 267, 272 (finding no "taking" despite a 59.8% diminution in value); Robinson, 570 F. Supp. at 1166 (citing Deltona Corp., 657 F.2d at 1193).

²³¹ E.g., Broadwater Farms Joint Venture v. United States, 45 Fed. Cl. 154, 156–57 (1999); Brace v. United States, 48 Fed. Cl. 272, 282–83 (2000) (both holding that the claimant's investment-backed expectations were mitigated by his being on notice of the CWA's requirements).

²³² State or Tribal Assumption of the Section 404 Permit Program, U.S. ENVTL. PROTECTION AGENCY, https://perma.cc/89F9-HJD8 (last visited July 13, 2019).

²³³ Nat'l Ass'n of Home Builders, 130 F.3d 1041, 1065–66 (D.C. Cir. 1997).

²³⁴ Robin Kundis Craig, *Should There Be a Constitutional Right to a Clean/Healthy Environment?*, 34 Envtl. L. Rep. (Envtl. Law Inst.) 11,013, 11,018 (2004).

jurisprudence in the United States stands squarely against the finding of such a right within the U.S. Constitution.²³⁵

First, federal judges emphasize the U.S. Constitution's failure to mention the environment whenever plaintiffs have suggested that the federal courts should recognize a penumbral constitutional right to a clean and healthy environment, ²³⁶ which plaintiffs have done since at least 1971 through a variety of strategies.²³⁷ Second, decades of attempts to extend the Fifth and Fourteenth Amendment rights to life, ²³⁸ the Ninth Amendment protection of other fundamental rights, ²³⁹ Fifth ²⁴⁰ and Fourteenth²⁴¹ Amendment Due Process, and Fifth and Fourteenth Amendment Equal Protection²⁴² to the environment had—at least until 2016²⁴³—universally failed. In 1971, for example, the U.S. Court of Appeals for the Fourth Circuit dismissively refused to recognize a constitutional right to environmental protection to reinforce the newly enacted NEPA, concluding that "[w]hile a growing number of commentators argue in support of a constitutional protection for the environment, this newly-advanced constitutional doctrine has not yet been accorded judicial sanction; and appellants do not present a convincing case for doing so."244 Over two decades later, and despite dozens of intervening cases, the United States Court of Appeals for the Eighth Circuit could with even more assurance conclude that citizens of the United States do not "have a fundamental

²³⁵ I first discussed the issue of a constitutional right to a clean and healthy environment in 2003 and 2004. ROBIN KUNDIS CRAIG, THE CLEAN WATER ACT AND THE CONSTITUTION: LEGAL STRUCTURE AND THE PUBLIC'S RIGHT TO A CLEAN AND HEALTHY ENVIRONMENT 238–259 (2004); see Craig, supra note 234, at 11,013, 11,018. The discussion here both updates and recasts that earlier work.

²³⁶ See, e.g., National Ass'n of Home Builders, 130 F.3d at 1065 (Sentelle, J., dissenting) ("[T]he Commerce Clause empowers Congress 'to regulate commerce' not 'ecosystems.' The Framers of the Constitution extended that power to Congress, concededly without knowing the word 'ecosystems,' but certainly knowing as much about the dependence of humans on other species and each of them on the land as any ecologist today. An ecosystem is an ecosystem, and commerce is commerce.").

²³⁷ Craig, *supra* note 234, at 11,020–21.

²³⁸ See Gasper v. La. Stadium & Exposition Dist., 577 F.2d 897, 898–99 (5th Cir. 1978); In re "Agent Orange" Prod. Liab. Litig., 475 F. Supp. 928, 933–34 (E.D.N.Y. 1979); Fed. Emps. for Non-Smokers' Rights v. United States, 446 F. Supp. 181, 184–85 (D.D.C. 1978); Gasper v. La. Stadium & Exposition Dist., 418 F. Supp. 716, 718–21 (E.D. La. 1976).

²³⁹ Concerned Citizens of Neb. v. U.S. Nuclear Regulatory Comm'n, 970 F.2d 421, 426–27 (8th Cir. 1992); *In re* "Agent Orange" Prod. Liab. Litig., 475 F. Supp. at 933–34; *Gasper*, 418 F. Supp. at 721–22; Pinkney v. Ohio Envtl. Prot. Agency, 375 F. Supp. 305, 309–10 (N.D. Ohio 1974); Hagedorn v. Union Carbide Corp., 363 F. Supp. 1061, 1064–65 (N.D. W. Va. 1973); James River & Kanawha Canal Parks, Inc. v. Richmond Metro. Auth., 359 F. Supp. 611, 640–41 (E.D. Va. 1973); Tanner v. Armco Steel Corp., 340 F. Supp. 532, 535 (S.D. Tex. 1972); Envtl. Def. Fund, Inc. v. Corps of Eng'rs of U.S. Army, 325 F. Supp. 728, 739 (E.D. Ark. 1971).

²⁴⁰ In re "Agent Orange" Prod. Liab. Litig., 475 F. Supp. at 933–34; Union Carbide Corp., 363 F. Supp. at 1064–65; Richmond Metro. Auth., 359 F. Supp. at 640–41; Envtl. Def. Fund, Inc., 325 F. Supp. at 739.

²⁴¹ Valero Terrestrial Corp. v. McCoy, 36 F. Supp. 2d 724, 752–53 (N.D. W. Va. 1997); MacNamara v. Cty. Council of Sussex Cty., 738 F. Supp. 134, 142 (D. Del. 1990); *In re* "Agent Orange" Product Liability Litigation, 475 F. Supp. at 933–34; *Pinkney*, 375 F. Supp. at 310–11; *Union Carbide*, 363 F. Supp. at 1064–65; *Richmond Metro. Auth.*, 359 F. Supp. at 640–41; *Tanner*, 340 F. Supp. at 535–37; *Envtl. Def. Fund*, 325 F. Supp. at 739.

²⁴² Concerned Citizens of Neb., 970 F.2d at 427; Stop H-3 Ass'n v. Dole, 870 F.2d 1419, 1429–30 (9th Cir. 1989).

²⁴³ Juliana v. United States, 217 F. Supp. 3d 1224, 1271–72 (D. Or. 2016).

²⁴⁴ Ely v. Velde, 451 F.2d 1130, 1139 (4th Cir. 1971).

right to an environment free of non-natural radiation."²⁴⁵ Most recently, the United States District Court for the District of Columbia and the United States Court of Appeals for the District of Columbia Circuit have made clear that constitutional environmental rights arising under *state* constitutions do not create rights under the U.S. Constitution.²⁴⁶

Despite this legal wall of decisions that federal constitutional environmental rights do not exist, in 2016 the United States District Court for the District of Oregon held in *Juliana v. United States* that there is a fundamental due process right to a stable climate system, because "a stable climate system is a necessary condition to exercising other rights to life, liberty, and property."²⁴⁷ The court was careful to limit this newfound constitutional environmental right:

In framing the fundamental right at issue as the right to a climate system capable of sustaining human life, I intend to strike a balance and to provide some protection against the constitutionalization of all environmental claims. On the one hand, the phrase "capable of sustaining human life" should not be read to require a plaintiff to allege that governmental action will result in the extinction of humans as a species. On the other hand, acknowledgment of this fundamental right does not transform any minor or even moderate act that contributes to the warming of the planet into a constitutional violation. In this opinion, this Court simply holds that where a complaint alleges governmental action is affirmatively and substantially damaging the climate system in a way that will cause human deaths, shorten human lifespans, result in widespread damage to property, threaten human food sources, and dramatically alter the planet's ecosystem, it states a claim for a due process violation, To hold otherwise would be to say that the Constitution affords no protection against a government's knowing decision to poison the air its citizens breathe or the water its citizens drink. Plaintiffs have adequately alleged infringement of a fundamental right.248

Nevertheless, and despite the fact that the district court was deciding only a motion to dismiss, the *Juliana* decision has been subject to three years of legal maneuvering, with the net result that the district court's initial legal decisions are now on appeal to the United States Court of Appeals for the Ninth Circuit.²⁴⁹ After the District of Oregon denied the government's motion for interlocutory appeal in June 2017,²⁵⁰ the federal government sought mandamus orders to dismiss twice from the U.S. Court of Appeals for the Ninth Circuit²⁵¹ and once from the U.S. Supreme Court,²⁵² only to be denied in all three instances.²⁵³ In October 2018, the

²⁴⁵ Concerned Citizens of Neb., 970 F.2d at 426.

²⁴⁶ Del. Riverkeeper Network v. Fed. Energy Regulatory Comm'n, 243 F. Supp. 3d 141, 152–53 (D.D.C. 2017) (holding that environmental rights created under the Pennsylvania Constitution do not create federal due process rights), *aff'd*, 895 F.3d 102, 108–10 (D.C. Cir. 2018).

²⁴⁷ See Juliana, 217 F. Supp. 3d at 1250.

²⁴⁸ Id.

 $^{^{249}\,}$ Juliana v. United States, No. 6:15-cv-01517-AA, 2018 WL 6303774, at *3 (D. Or. Nov. 21, 2018).

²⁵⁰ Id. at *2.

²⁵¹ In re United States, 884 F.3d 830, 837–38 (9th Cir. 2018); In re United States, 895 F.3d 1101, 1106 (9th Cir. 2018).

²⁵² United States v. U.S. Dist. Court for Dist. of Or., 139 S. Ct. 1, 1 (2018).

²⁵³ *Id.*; *In re* United States, 884 F.3d at 837–38; *In re* United States, 895 F.3d at 1106.

Oregon District Court agreed to dismiss the President as a defendant and concluded that material issues of fact precluded summary judgment on standing; however, it refused to reconsider separation of powers issues and concluded that strict scrutiny would apply to the due process claim.²⁵⁴ The court again refused to certify its decision for an interlocutory appeal.²⁵⁵ In response to this new decision, the United States again appealed to the U.S. Supreme Court, which first stayed the case²⁵⁶ and then vacated its own order three weeks later.²⁵⁷ The Ninth Circuit then stepped in and stayed the case, inviting the Oregon District Court to revisit its decisions regarding an interlocutory appeal, and the district court certified the appeal.²⁵⁸ Oral argument in the Ninth Circuit took place on June 4, 2019.²⁵⁹

One can only conclude from these procedural shenanigans and the federal government's clear unwillingness to let the normal trial and appeal processes play themselves out that the prospect of fundamental constitutional rights in the environment terrifies the Trump Administration—even though the *Juliana* case might well fail Article III standing. *Juliana* may well open a new chapter in constitutional environmental law. Even if it does not, however, constitutional environmental law will continue to generate litigation and scholarship for the foreseeable future, helping to articulate the constitutional relationships between and among the federal and state governments and their citizens.

²⁵⁴ *Juliana*, 339 F. Supp. 3d 1062, 1076–80, 1084–96 (D. Or. 2018) (dismissing the President as a defendant, refusing to reconsider the separation of powers issues, and precluding summary judgment on the standing issue).

²⁵⁵ *Id.* at 1104–05.

²⁵⁶ In re United States, 139 S. Ct. 16, 16 (2018).

²⁵⁷ In re United States, 139 S. Ct. 452, 453 (2018).

²⁵⁸ *Juliana*, No. 6:15-cv-01517-AA, 2018 WL 6303774, at *3 (D. Or. Nov. 21, 2018) (referencing United States v. U.S. Dist. Court for Dist. of Or., Case No. 18-73014, Order Dated Nov. 8, 2018 (9th Cir. 2018)).

²⁵⁹ Unusually, the oral argument was recorded and the broadcast and can be viewed here: https://perma.cc/QZ29-UX7X.