Article

Filling the Sackett Gap: The Private Governance Option

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The Supreme Court's decision in Sackett v. EPA reversed fifty years of federal Clean Water Act wetlands protections and removed federal oversight from roughly half of the wetlands in the United States. This Article proposes a viable new conceptual model and tools to close the Sackett Gap—the gap between the wetlands protected before and after Sackett. Scholars have argued for federal measures to fill the Sackett Gap, but these actions face substantial challenges. Congress is unlikely to adopt new wetlands legislation, agencies are constrained by Sackett's expansive language, the end of Chevron deference, and the 2024 presidential election, and lower federal courts are constrained by the emergence of the major questions doctrine. Recognizing these constraints, scholars have turned to state and local governments, but more than half of the states limit their wetlands requirements to be no more stringent than federal requirements, and many restrict the options of local governments.

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Drawing on the private environmental governance (PEG) literature, this Article identifies viable new instruments that can fill gaps in and complement government measures. This Article explores private sector motivations to destroy wetlands and proposes a new conceptual model to identify tools that can shift those motivations. It concludes that PEG supply chain, investor, lender-, and customer-driven initiatives can be directed toward the sectors that pose the greatest wetlands threats and can create legal, economic, and social pressure for wetlands preservation. This Article focuses on the Sackett Gap, but the conceptual model and tools provide viable ways to address other emerging gaps in environmental, health, and safety regulation.

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INTRODUCTION

When the Supreme Court issued its decision in *Sackett v. EPA*, roughly half of all American wetlands that once qualified as "waters of the United States" (WOTUS) lost protection under the federal Clean Water Act (CWA).¹ Wetlands provide water quality and flood benefits, habitat for many terrestrial, aquatic, and avian species, and recreational opportunities; they reduce climate risks; and their protection serves as an indication of how modern society recognizes the value of ecosystem services and the natural environment.² If the experience following a similar narrowing of CWA wetlands protections in *National Mining Association v. Army Corps of Engineers*³ is instructive, thousands of acres of wetlands risk imminent degradation, in-fill, and destruction.⁴

An all-hands-on deck, prompt response is thus worth the effort if the goal is to avoid the swift and largely permanent destruction of large swaths of American wetlands. Many scholars and policymakers are scouring existing federal, state, and local

^{1.} See Sackett v. EPA, 143 S. Ct. 1322 (2023); Brief of Amici Curiae Water Resource Management Organizations in Support of Respondents at 6, Sackett, 143 S. Ct. 1322 (No. 21-454) ("Requiring a continuous surface water connection would . . . exclude 51% (if not more) of the Nation's wetlands."); E-mail from Stacey M. Jensen, Reg. Program Manager, U.S. Army Corps of Eng'rs, to John Goodin, Acting Dir., Off. Wetlands, Oceans & Watersheds, Env't Prot. Agency (Sept. 5, 2017) (on file with the Minnesota Law Review); see also Timothy Puko & Robert Barnes, How Supreme Court's EPA Ruling will Affect U.S. Wetlands, Clean Water, WASH. POST (May 25, 2023), https://www.washingtonpost.com/climate-environment/2023/05/25/supreme-court-epa-wetlands [https://perma.cc/6X8T-ZZJM] (noting that 118 million acres of wetlands are left unprotected). But see The Supreme Court, 2022 Term—Leading Cases, 137 HARV. L. REV. 390, 397 (2023) (critiquing the fifty-one percent figure on legal, not scientific, grounds).

^{2.} See infra notes 33–36, 41–45 and related discussion on the benefits of wetlands.

^{3. 145} F.3d 1399 (D.C. Cir. 1998).

^{4.} See ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 703 (8th ed. 2019) (noting that "at least 20,000 acres of wetlands were degraded or destroyed" in the "immediate aftermath" of the National Mining decision). The Corps of Engineers estimated that between June 1998 and September 1999, 30,000 acres of wetlands were lost as a result of the Tulloch Rule revocation. Gregory Peck, Wetland Protection Without the Tulloch Rule, 21 NAT'L WETLANDS NEWSL. 9, 9–10 (1999). These 30,000 were in addition to the USDA's assumed loss, at that time, of 100,000 acres of wetlands per year. See CLAUDIA COPELAND, CONG. RSCH. SERV., 98-150 ENR, THE CLEAN WATER ACTION PLAN: BACKGROUND AND EARLY IMPLEMENTATION 3 (1998) (estimating wetlands losses at 80,000 to 120,000 acres annually).

government authorities for sources of government protection for wetlands stripped of their protections by *Sackett*, arguing that agency officials and politicians should act.⁵ We agree. Yet this new hole in regulatory protections for wetlands—which we call the Sackett Gap—is unlikely to be filled solely by government measures at the federal, state, and local levels.⁶ *Sackett*'s language is sweeping, and the Supreme Court's narrow view of the federal role embodied in its recent precedents on the major questions and *Chevron* doctrines⁷ signal that the Court is unlikely to change course on federal wetlands protection anytime soon. Federal executive and legislative measures also face substantial

See, e.g., Richard J. Lazarus, Judicial Destruction of the Clean Water Act: Sackett v. EPA, U. CHI. L. REV. ONLINE, Aug. 11, 2023, at *1, *20, https:// lawreview.uchicago.edu/sites/default/files/2023-08/Lazarus%20ESSAY%20 POST.pdf [https://perma.cc/HB2E-N72W] (critiquing the opinions in Sackett as "the stuff of an undisciplined political campaign rally and not the kind of serious, thoughtful, careful, and rigorous legal analysis expected of Supreme Court Justices"). A variety of universities, associations, and institutes have conducted conferences recently on the implications of the Sackett decision. See, e.g., Symposium on Clean Water After Sackett, WAKE FOREST UNIV., https://web.cvent .com/event/af7309f1-94a5-4e6a-9108-da6b5727d1bd [https://perma.cc/L2X4 -469J]; IU McKinney to Host Symposium Convened with IU Maurer on Sackett v. EPA, IU ROBERT H. MCKINNEY SCH. OF L. (Oct. 30, 2023), https:// mckinneylaw.iu.edu/news/releases/2023/10/iu-mckinney-to-host-symposium -convened-with-iu-maurer-on-sackett-v-epa.html [https://perma.cc/4TLY -W2CZ]; Environmental and Natural Resources Law Symposium Sackett v. EPA: What the Supreme Court's Decision Means for Regulation and Wetlands Conservation, ASS'N OF AM. L. SCHS., https://www.aals.org/symposia/ environmental-and-natural-resources-law-symposium-sackett-v-epa-what-the -supreme-courts-decision-means-for-regulation-and-wetlands-conservation [https://perma.cc/8KP6-Q85U]; Great Lakes Freshwater Symposium: Protecting Wetlands Post Sackett Decision, UNIV. OF WIS. GREEN BAY (Sept. 20, 2023), https://uwm.edu/freshwater/event/great-lakes-freshwater-symposium -protecting-wetlands-post-sackett-decision [https://perma.cc/4MNX-3V5G]; Analyzing the Consequences of Sackett v. EPA and Looking Ahead to the Future, ENV'T L. INST., https://www.eli.org/events/analyzing-consequences-sackett-v -epa-and-looking-ahead-future [https://perma.cc/G7RM-ML3V].

^{6.} See Rachel Rothschild, The Jurisprudence of Justice Gorsuch and Future Efforts to Address Climate Change, 122 MICH. L. REV. ONLINE 48, 59–61 (2024) (advocating for state climate action in the absence of federal legislation or Supreme Court reform); Zachary D. Clopton & Nadav Shoked, Suing Cities, 133 YALE L.J. 2540, 2547 (2024) (arguing that the unique standing doctrines applicable to municipalities deter almost any action at that level); see also infra Part II.B (detailing state and local options for wetlands protection).

^{7.} See Loper Bright Enters. v. Raimondo, 144 S. Ct. 2244, 2273 (2024) (overruling Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984)).

challenges⁸: After *Sackett*, federal agencies lack the statutory authority to take major steps, the early actions of the second Trump Administration suggests that federal agency managers will not seek to use the remaining authority in protective ways, and new legislation authorizing regulatory limits is unlikely.⁹

Some states, including Wisconsin and Colorado, are increasing wetlands protections in response to Sackett, ¹⁰ but action by states is not a complete answer: more than half have provisions that require their wetlands protections to be no more stringent than the least stringent federal ones. ¹¹ Even states that theoretically have greater protections, such as California, may offer fewer practical protections than the pre-Sackett federal system without the implementation support from the Army Corps of Engineers. ¹² Like federal and state action, local government action

^{8.} For a discussion of governance challenges in the greenhouse gas context, see Jonathan B. Weiner, *Think Globally, Act Globally: The Limits of Local Climate Policies*, 155 U. PA. L. REV. 1961 (2007). *But see* Cymie Payne, *Local Regulation of Natural Resources: Efficiency, Effectiveness, and Fairness of Wetlands Permitting in Massachusetts*, 28 ENV'T L. 519, 528–33 (1998) (suggesting that local climate action can be successful in certain circumstances).

^{9.} Michael P. Vandenbergh, *Environmental Law in a Polarized Era*, 38 J. LAND USE & ENV'T L. 51–89 (2023) [hereinafter Vandenbergh, *Polarized*]; MICHAEL P. VANDENBERGH, SARAH E. LIGHT & JAMES SALZMAN, PRIVATE ENVIRONMENTAL GOVERNANCE (2024) [hereinafter VANDENBERGH ET AL., GOVERNANCE]. This is especially true given the broadly deregulatory agenda of the second Trump administration.

^{10.} See infra Part II.B.

^{11.} James McElfish, State Protection of Nonfederal Waters: Turbidity Continues, 52 ENV'T L. REP. 10679, 10687, 10689 (2022) (identifying twenty-seven states with either a stringency prohibition or a qualified stringency limitation); see Deborah A. Sivas & Sharon Driscoll, Stanford's Deborah Sivas on SCOTUS Decision that Limits EPA Powers, STAN. L. SCH.: LEGAL AGGREGATE (May 26, 2023), https://law.stanford.edu/2023/05/26/stanfords-deborah-sivas-on-scotus -decision-that-limits-of-epa-powers [https://perma.cc/5YYP-RNY2] ("Indeed, nearly half the states expressly prohibit state regulators from being more stringent than the federal regulations."); Bruce Myers et al., State Constraints: State-Imposed Limitations on the Authority of Agencies to Regulate Waters Beyond the Scope of the Federal Clean Water Act, ENV'T L. INST. 1 (May 2013), https://www.eli.org/sites/default/files/eli-pubs/d23-04.pdf [https://perma.cc/ V6VP-TRQE]. For one effort to adopt new limits on state wetlands protections, see H.B. 1054, 113th Gen. Assemb., Reg. Sess. (Tenn. 2024); Caroline Eggers, Wetlands Have Some Protections in Tennessee. The State Might Remove Them., WPLN NEWS (Feb. 15, 2024), https://wpln.org/post/wetlands-have-some -protections-in-tennessee-the-state-legislature-might-remove-them [https:// perma.cc/B6P7-P9N3].

^{12.} Jon Welner, Supreme Court Ends Protection for Most Wetlands in the U.S.—But Not In California, NAT'L L. REV. ONLINE (June 1, 2023), https://www

has practical limitations. For example, local governments have incentives to protect wetlands, but few have the regulatory tools and resources to act.¹³ When they do, the comparative ease of suits against local governments promotes maintenance of the status quo.¹⁴ Additionally, many local governments' pro-environmental actions face barriers from state legislatures.¹⁵

.natlawreview.com/article/supreme-court-ends-protection-most-wetlands-us -not-california [https://perma.cc/T39J-QMXZ]. But see Frequently Asked Questions Regarding the U.S. Supreme Court's Ruling in Sackett v. EPA, CAL. STATE WATER RES. CONTROL BD. (Oct. 23, 2023), https://www.waterboards.ca .gov/water_issues/programs/cwa401/docs/sackett-faq-external.pdf [https:// perma.cc/XDJ8-QL8V] (listing state-level authorities that California is employing to protect water quality within its borders). Other states have broader definitions for "Waters of the State" than pre-Sackett definitions of WOTUS, but do not extend permitting requirements or dredge and fill limits to the full scope of the definition. Neb. Rev. Stat. § 81-1502(21) (2024); 117 Neb. Admin. Code § 3.02 (2022); COLO. REV. STAT. § 25-8-103(19) (2024); see also E-mail from Dave Owen, Professor of L., Univ. of California Coll. of L., S.F., to Michael P. Vandenbergh, Professor of L., Vanderbilt Univ. L. Sch. (Feb. 28, 2024) (on file with the Minnesota Law Review) (describing corporate fears that transferring primary actor for wetlands regulation from the well-funded, experienced Corps of Engineers to relatively less-experienced state regulators would make permitting harder).

- 13. See Weiner, supra note 8, at 1965 (noting that local abatement actions pose local costs, yet deliver essentially no local climate benefits); Payne, supra note 8, at 520 (highlighting that some local conservation systems are managed by unpaid boards of local citizens); John R. Nolan, Death of Dillon's Rule: Local Autonomy to Control Land Use, 36 J. LAND USE & ENV'T L. 7, 8 (2020) ("Dillon's Rule . . . holds that municipalities are not sovereign entities, but merely instrumentalities of states").
 - 14. Clopton & Shoked, supra note 6, at 2571.
- See, e.g., id. at 2569 (discussing preemption-standing provisions); Maxine Joselow & Vanessa Montalbano, Red States are Blocking Blue Cities from Setting Climate Policies, WASH. POST (June 13, 2023), https://www .washingtonpost.com/politics/2023/06/13/red-states-are-blocking-blue-cities -setting-climate-policies [https://perma.cc/Y2RP-ABF5]. States have become more aggressive in their preemption of local action generally, not just in environmental law. See also Adam Friedman, Republican Lawmakers Pass Six Bills Targeting Nashville During the 2023 Legislative Session, Tenn. Lookout (Apr. 25, 2023), https://tennesseelookout.com/2023/04/25/republican-lawmakers-pass -six-bills-targeting-nashville-during-the-2023-legislative-session [https://perma .cc/5PU6-BBWC]; Ashli Blow, States Using an Old Tactic to Limit Local Power, MLK50 (Mar. 18, 2022), https://mlk50.com/2022/03/18/states-using-an-old -tactic-to-limit-local-power [https://perma.cc/J2KQ-47C5] (detailing the dangers that state preemption can pose on local communities). See generally Richard Briffault, The Challenge of New Preemption, 70 STAN. L. REV. 1995, 1997 (2018) (emphasizing the rapid spread of a new and aggressive form of state preemption of local government action); Erin Adele Scharff, Hyper Preemption: A Reordering of the State-Local Relationship?, 106 GEO. L.J. 1469, 1471 (2018) ("In recent

This Article suggests another, complementary avenue for filling the Sackett Gap. This new approach starts by reconceptualizing the sources of environmental protection. Scholars and advocates are often locked into a mental model that asks "What can government do?" with regard to protecting wetlands and addressing other environmental problems. 16 The answer in the polarized, gridlocked, post-Sackett era is "not much" at the federal, state, and local levels. Framing the question this way thus limits our ability to think creatively about viable responses.

Instead, this Article starts with a different question: "What can any organization do?" Framing the question this way, the opportunity to harness public preferences to pressure private sector actors to conform to pre-Sackett wetlands protections begins to emerge. Roughly three-quarters of the U.S. population supports greater wetlands protections, 17 and although the preferences of this supermajority are not reflected in the actions of the U.S. Supreme Court, Congress, the White House, and many state legislatures, Americans who support greater wetlands protection can act in other ways. They are not only voters, but also retail customers, investors, employees, philanthropists, managers, advocacy group members, and stakeholders in the communities in which businesses operate.

The emerging private environmental governance (PEG) literature suggests a variety of ways that individuals and organizations in these roles can create social license, market, and legal pressure on sectors that pollute or destroy natural resources. 18

years, state legislators have sought to limit local policymaking by passing increasingly broad state preemption statutes.").

^{16.} Michael P. Vandenbergh, Private Environmental Governance, 99 COR-NELL L. REV. 129-99 (2013).

^{17.} Results for 2022 Clean Water Act Research, MORNING CONSULT 1 (Sept. 2022), https://8ce82b94a8c4fdc3ea6d-b1d233e3bc3cb10858bea65ff05e18f2.ssl .cf2.rackcdn.com/48/b6/e2ecb74c413eb8309401852563c9/2208158-wff-clean -water-act-memo.pdf [https://perma.cc/8RXU-N635] (finding, prior to the Supreme Court decision on Sackett, that "after learning the facts of [Sackett], three-in-four (75%) adults nationally are supportive of protecting more waters and wetlands under the Clean Water Act").

^{18.} See Sarah E. Light, The Law of the Corporation as Environmental Law, 71 STAN. L. REV. 137, 140 (2019) ("Firm managers make decisions with profound environmental consequences long before pollution comes out of a pipe or smokestack."); Michael P. Vandenbergh & Jonathan M. Gilligan, Beyond Gridlock, 40 COLUM. ENV'T L.J. 217, 221 (2015) [hereinafter Vandenbergh & Gilligan, Gridlock (encouraging private climate governance initiatives); Errol E. Meidinger, Environmental Certification Systems and U.S. Environmental Law: Closer than

We draw on that literature to develop a strategy to buy time for the democratic process to regain its footing and enable governments to close the Sackett Gap. The principal industries that drive wetlands destruction—including homebuilding, forestry, and agriculture¹⁹—can be motivated to reduce wetlands destruction and buy time until legislative action or a new Supreme Court majority can emerge to repair what Justice Kavanaugh described as the loss of forty-five years of federal protections of wetlands in the United States.²⁰

We emphasize that PEG is not a substitute for government action. The PEG initiatives we outline in this Article will not provide adequate protection for the wetlands exposed by *Sackett*. They will not reach all industry sectors and will not provide comprehensive legal protections for those wetlands that are subject to PEG protective measures. But neither will proposals for federal, state, and local action that follow only Disney's Law: Wishing will make it so.²¹ For a resource as important as wetlands, a basket of viable approaches is necessary. PEG can fill gaps in government regulatory protections in states and localities where wetlands are at risk and can increase the likelihood of later government action.²²

The essence of this approach is using information to harness widespread public support for wetlands protection among employees, retail customers, corporate managers, retail and

You May Think, 31 ENV'T L. REP. 10162, 10164 (2001) (raising certification systems as a private alternative to government regulatory programs).

- 19. See, e.g., Sanneke van Asselen et al., Drivers of Wetland Conversion: A Global Meta-Analysis, PLOS ONE, Nov. 25, 2013, at 1, 8 (finding that common causes of wetland conversion "often include agricultural development and/or settlement expansion, associated with, for example, industrial development and infrastructure construction"); Coastal Wetland Habitat, NOAA FISHERIES (Dec. 18, 2024), https://www.fisheries.noaa.gov/national/habitat-conservation/coastal-wetland-habitat [https://perma.cc/Q64Y-KKZS].
- 20. See Sackett v. EPA, 143 S. Ct. 1322, 1362 (2023) (Kavanaugh, J., concurring) (critiquing the majority for "depart[ing] from the statutory text, from 45 years of consistent agency practice, and from this Court's precedents").
- 21. See Vandenbergh, Polarized, supra note 9, at 26 (describing the origins and effects of Disney's Law).
- 22. Michael P. Vandenbergh et al., *The Gap-Filling Role of Private Environmental Governance*, 38 VA. ENV'T L.J. 1 (2020) [hereinafter Vandenbergh et al., *Gap-Filling*]; *see* MICHAEL P. VANDENBERGH & JONATHAN M. GILLIGAN, BEYOND POLITICS: THE PRIVATE GOVERNANCE RESPONSE TO CLIMATE CHANGE 447 (2017) [hereinafter VANDENBERGH & GILLIGAN, POLITICS] (noting that PEG cannot fully fill gaps in public governance regarding climate change mitigation, but it provides viable new tools).

institutional investors, and lenders. The PEG initiatives proposed begin with simple, feasible disclosure systems to inform consumers which firms have committed to abide by the pre-Sackett wetlands definition. We demonstrate the viability of this approach by identifying multiple examples of successful certification systems, and we then demonstrate how this information can drive and magnify action through provisions in supply chain contracts, lender requirements, environmental, social, and governance (ESG) investment policies, commercial real estate leases and loans, and merger and acquisition and asset purchase agreements, among other approaches.²³

Why will a system driven by information and economic pressure be able to counteract the incentives of industry sectors to destroy wetlands? This Article examines the factors that could drive the industry sectors most responsible for wetlands degradation to comply with the pre-Sackett wetlands protections. To be profitable, many companies must engage with retail customers and employees who hold the views of the seventy-five percent of Americans who support wetlands protections.²⁴ Many other companies are bound by the pressure that consumer-facing firms then exert through supply chains, lenders, investors, insurers, and community stakeholders. Federal, state, and local politicians can gerrymander their districts, and the Supreme Court can rule in ways that depart from the preferences of three-quarters of the population, but companies cannot gerrymander their markets. Many must respond to the preferences of their customers, employees, and other stakeholders in real time or risk paying an economic price. Advocacy groups, ESG investors, and other private actors can apply market pressure that starts with the preferences of the population and extends from business-toconsumer (B2C) firms to business-to-business (B2B) firms through reputational pressure as well as retail and corporate transactions.25

^{23.} For a discussion of the role of lenders in private environmental governance, see Sarah E. Light & Christina P. Skinner, *Banks and Climate Governance*, 121 COLUM. L. REV. 1895 (2021).

^{24.} Results for 2022 Clean Water Act Research, supra note 17.

^{25.} For an empirical study demonstrating that retail customers, employees, and others assign moral responsibility to firms for the actions of their tier one and tier two suppliers, see Michael P. Vandenbergh et al., *The Moral Boundary of the Firm*, 110 IOWA L. REV. (forthcoming 2025) (on file with the Minnesota Law Review).

This Article not only identifies new PEG wetlands initiatives, but also provides examples of existing tools, such as agreements that combine the requirements for compliance with federal, state, and local environmental laws with additional provisions that can be harnessed for wetlands protection. For instance, this Article finds that many existing commercial agreements require one party to exceed government environmental requirements—such as to reduce harms arising from water pollution or wetlands destruction. This Article harnesses these existing practices in commercial transactions to propose model clauses in agreements and other private governance instruments that advocacy groups, attorneys, and business managers can use to fill the Sackett Gap. This Article also explores how private land conservation organizations can re-direct their easement and land purchase initiatives toward the most important wetlands that are exposed after the *Sackett* decision.

The remainder of this Article proceeds in five Parts. Part I explores the importance of wetlands, the Sackett decision, and the extent of the gap in federal protections for wetlands post-Sackett. Part II then explores why federal, state, and local government actions are unlikely to fill the Sackett Gap. Part III turns to private governance initiatives. It begins with an analysis of the drivers of PEG, the role of information disclosure, and the ways that private parties can act to reduce wetlands destruction by other private parties. It then demonstrates the feasibility of a PEG approach by reviewing the large number of environmental provisions in commercial agreements, proposing several initiatives that can harness retail customer, employee, investor and lender pressure, and exploring the ways that scholars, lawyers and business managers, environmental advocacy groups, and policymakers could use the PEG toolbox to fill the Sackett Gap.²⁶ Part IV explores implications beyond *Sackett*, arguing

^{26.} The structure of Part IV draws in large part from an approach to pedagogy established by former Secretary of State Madeleine Albright, which uses the concept of a "toolbox" to explore the practical levers of power and influence applicable to a given problem. While former Secretary Albright primarily used this approach to refer to policy tools, it is useful for legal tools applicable to private governance, given that they—like foreign policy tools—operate to set standards without the status of a single sovereign. See Daryl J. Levinson, Law For Leviathan: Constitutional Law, International Law, and the State 23–59 (2024) (discussing international law standard-setting in the absence of a single sovereign); Caroline Hamilton, Prof. Madeleine Albright Moves Diplomacy Simulation Online, Geo. Walsh Sch. of Foreign Serv. (Apr. 16, 2020),

that PEG can play a gap-filling role across many areas of law where governments are not following widely held public preferences. This Article concludes by suggesting that although private governance initiatives cannot fill the Sackett Gap entirely, they can preserve important wetlands in the interim and buy time for other efforts to overcome the barriers to adopting and enforcing adequate federal, state, and local government requirements.

I. WETLANDS THREATS AND PROTECTION IN THE UNITED STATES

Developing feasible new ways to protect wetlands requires understanding the value wetlands provide, why they are destroyed, and who is destroying them. Although wetlands provide numerous benefits—economic, recreational, and environmental—these benefits are often not monetized and are frequently shared in common, while the costs of their preservation are financial and borne by individual landowners. Fundamental perspectives on individual liberty and government intrusion also drive much of the discourse on wetlands. The role of small landowners and the threat of arbitrary criminal prosecution are front-and-center in Justice Alito's *Sackett* opinion, and the tone and scope of the opinion suggest that it rested not only on concerns about the costs of wetlands protection, but also on widely held conservative conceptions about property rights, individual autonomy, and government intrusion in individuals' lives.²⁷

https://sfs.georgetown.edu/prof-madeleine-albright-moves-diplomacy-simulation-online [https://perma.cc/P5Y7-QNFG] (describing former Secretary Albright's "America's National Security Toolbox" course). See generally ROBERT E. SCOTT & PAUL B. STEPHEN, THE LIMITS OF LEVIATHAN: CONTRACT THEORY AND THE ENFORCEMENT OF INTERNATIONAL LAW (2006) (discussing and comparing international law and contract theory as standard setting not enforced by a Hobbesian leviathan); THOMAS HOBBES, LEVIATHAN OR THE MATTER, FORME & POWER OF A COMMONWEALTH, ECCLESIASTICALL AND CIVILL (A.R. Walker ed., Cambridge Univ. Press 1904) (1651) (arguing for social contract and rule by absolute sovereign to enforce and legitimate laws).

27. A 2009 study by the Environmental Law Institute (ELI) illustrates the problem of clearly defining wetlands, writing that "a lack of consistent data...hinder[s] assessment of the nation's vulnerable aquatic resource types." Philip Womble et al., America's Vulnerable Waters: A Portfolio of Vulnerable Aquatic Resources since Rapanos v. United States, ENV'T L. INST., at vii—viii (Aug. 2011), https://www.eli.org/sites/default/files/eli-pubs/d21-06.pdf [https://perma.cc/T2ZA-7RM9]. The study also notes that state quantitative measures of aquatic resources do not break out aquatic resources by type or

Regardless of one's perspective on the importance of these concerns, understanding them is fundamental to developing responses that are feasible in the near term and durable over the long term. Part I begins by examining the benefits and costs of wetlands protection, turns to the likely effects of the *Sackett* decision, then ends by examining whether the type of party that wanted to fill wetlands in the *Sackett* case—an individual landowner—is representative of the parties most responsible for destroying wetlands and most vulnerable to civil and criminal CWA enforcement.

A. WETLANDS PROTECTION UNDER THE CLEAN WATER ACT

1. The Benefits and Costs of Wetlands

No comprehensive scientific study has fully explored the extent of regulatory coverage lost after the Sackett decision, but there are several indications that it is substantial. The headwater streams and associated wetlands at the center of the Sackett controversy represent seventy-nine percent of the United States's overall river network, drain seventy percent of the land, and have an economic value of over \$15.7 trillion.²⁸ The results of modeling by twelve professional water science societies submitted to the Supreme Court before Sackett suggested that moving away from the significant nexus approach presented by Justice Kennedy in Rapanos v. United States,²⁹ as Justice Alito's opinion ultimately did in Sackett, would lead to a thirty to seventy-five percent loss of wetlands coverage depending on the watershed at issue.³⁰ One recent scientific study of the more modest regulatory loss under the first Trump administration's Navigable Waters Protection Rule-which excluded from federal wetlands coverage isolated wetlands and ephemeral streams and

subtype, and that even amongst the Corps of Engineers' thirty-eight regulatory districts, seven lacked readable determinations of no jurisdiction (NJDs), and twelve recorded aquatic resource types in less than fifty percent of the NJDs reviewed by the ELI team. *Id.* at viii.

^{28.} Patrick Parenteau, My Own Private Idaho Wetland: What Will the Court Do with the Sackett Case, 52 ENV'T L. 373, 389 (2022) (citing Headwater Streams Studies, ENV'T PROT. AGENCY (Mar. 8, 2022), https://www.epa.gov/water-research/headwater-streams-studies [https://perma.cc/MV6U-G6Y7]; Susan A.R. Colvin et al., Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services, 44 FISHERIES 73, 74 (2019)).

^{29.} See infra note 65 and accompanying text.

^{30.} Brief of Scientific Societies as Amici Curiae in Support of Respondents at 24–31, Sackett v. EPA, 143 S. Ct. 1322 (2023) (No. 21-454).

required a surface water connection to navigable waters³¹—found that the Trump rule would have led to a twenty-seven percent coverage loss compared to the significant nexus approach.³²

Although scientists are still assessing the effects of the *Sackett* opinion, the benefits that wetlands provide are clear. Covering only six percent of global land area, wetlands provide homes or breeding areas for forty percent of all plant and animal species.³³ Wetlands are valuable for recreation and prevent

^{31.} Simon Greenhill et al., Machine Learning Predicts Which Rivers, Streams, and Wetlands the Clean Water Act Regulates, 383 Sci. 406–12 (2024).

^{32.} *Id*. The absence of post-Sackett data is unsurprising as scientists, scholars, and courts work to determine the scope and coverage of the decision. See, e.g., Statement of Chairman Tom Carper, Hearing on the Implications of Sackett v. EPA, U.S. SENATE COMM, ON ENV'T & PUB. WORKS (Oct. 18, 2023), https:// www.epw.senate.gov/public/index.cfm/2023/10/chairman-carper-s-opening -statement-hearing-on-the-implications-of-sackett-v-epa [https://perma.cc/ PX7N-CDHW]; Ryan Day, Conference Paper, Assessing the August 2023 Amendments to the Waters of the United States Rule in the Wake of Sackett v. EPA, 1 ENV'T & NAT'L RES. L. SYMP. 1 (2023); States' Motion for Summary Judgment, Texas v. EPA, No. 23-cv-00017 (S.D. Tex. June 28, 2023) (moving for summary judgment striking down the Biden WOTUS rule in its entirety); Safety Zones in Reentry Sites; Jacksonville, Florida, 88 Fed. Reg. 61,963, 61,963–64 (Sept. 8, 2023) (discussing changes to the Department of Homeland Security and Coast Guard rules in response to Sackett); Revised Definition of "Waters of the United States"; Conforming, 88 Fed. Reg. 61,964, 61,964-69 (discussing changes to policies of the Department of Defense and Corps of Engineers); James McElfish et al., Analyzing the Consequences of Sackett v. EPA, 53 ENV'T L. REP. 10693 (2023); Jeff Turrentine, What the Supreme Court's Sackett v. EPA Ruling Means for Wetlands and Other Waterways, NAT. RES. DEF. COUNCIL 5, 2023), https://www.nrdc.org/stories/what-you-need-know-about -sackett-v-epa [https://perma.cc/PX7N-CDHW]; Anna Todd, Sackett v. EPA and the Definition of the Waters of the United States, ENV'T & ENERGY L. PROGRAM AT HARV. L. SCH. (June 24, 2022), https://eelp.law.harvard.edu/sackett-v-epa -and-the-definition-of-waters-of-the-united-states [https://perma.cc/39R7 -JE4C]; Kirti Datla, What Does Sackett v. EPA Mean for Clean Water?, EARTHJUSTICE (May 26, 2023), https://earthjustice.org/article/what-does -sackett-v-epa-mean-for-clean-water [https://perma.cc/HHA4-KM42]; Colby Galliher, Sackett v. EPA's Aftermath and the Risk of Inflamed Western Water Conflict, JUST SEC. (Oct. 2, 2023), https://www.justsecurity.org/88982/sackett-v -epas-aftermath-and-the-risk-of-inflamed-western-water-conflict [https:// perma.cc/6GPE-Q7CB].

^{33.} Why Healthy Wetlands are Vital to Protecting Endangered Species, U.S. FISH & WILDLIFE SERV. (Apr. 26, 2023), https://www.fws.gov/story/2023-04/why-healthy-wetlands-are-vital-protecting-endangered-species [https://perma.cc/75MK-YYF7] (additionally noting that "approximately half of all federally listed [threatened and endangered species] in the United States are wetland dependent"); U.S. COUNCIL ON ENVT QUALITY, ENVIRONMENTAL QUALITY: THE NINTH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 316 (1978) ("No ecosystem is more essential to the survival of the nation's fish and wildlife.").

erosion.³⁴ Beyond their value for protecting biodiversity,³⁵ they serve as natural filters for underground aquifers.³⁶ "In-fill," or the filling of wetlands with gravel, sand, dirt, or other detritus, removes wetlands' natural filtration properties from the surrounding drainage area. In-fill therefore degrades aquifers over time, creating groundwater issues near new development.³⁷ This is a significant risk: Clean, drinkable groundwater is an increasingly scarce resource.³⁸ Arizona limited construction of new developments in Phoenix in 2023 due to concerns that insufficient groundwater would be available to supply drinking water to

Beyond provision of habitat for the animal species that call them home, wetlands also provide "corridors" between streams through which wildlife can move, and "edge" and "transitional" habitat which "maximizes the types and variety of food and cover" available to each animal. Robert B. McKinstry, Jr., Constraints Upon Development in Environmentally Sensitive Areas: Regulation of Wetlands, Streams, and Floodplains in Pennsylvania, 2 VILL. ENV'T L.J. 333, 335–36 (1991).

- 34. Kathryn Gale Winter Cowdery et al., *The Valuation of Wetlands*, 1 J. LAND USE & ENV'T L. 1, 4–6 (1985).
- 35. Colvin et al., *supra* note 28; *Why Are Wetlands Important?*, ENV'T PROT. AGENCY (Feb. 18, 2025), https://www.epa.gov/wetlands/why-are-wetlands-important [https://perma.cc/X8HU-EDFK].
- 36. See Fernando Vidal Gimenez & Claudio Ruiz Mas, The Valuation of Recreational Use of Wetlands and the Impact of the Economic Crisis, 17 INT'L J. ENV'T RES. & PUB. HEALTH 3228 (May 6, 2020) ("[Wetlands] have been described both as 'the kidneys of the landscape' because of the functions they perform in the hydrological and chemical cycles and as 'biological supermarkets' because of the extensive food webs and rich biodiversity they support."); Cowdery et al., supra note 34, at 4–6; McKinstry, supra note 33, at 335 ("[W]etlands naturally purify water through a variety of physical and biological processes. For example, as polluted water flows through a wetland, sediment is trapped, heavy metals are immobilized, nutrients are taken up by vegetation, and even nitrogen can be removed.").
- 37. Wetlands Functions and Values: Surface and Ground Water Protection, VT. DEP'T OF ENV'T CONSERVATION, http://dec.vermont.gov/watershed/wetlands/functions/water-quality [https://perma.cc/4G8A-CLR2]; Pascal Badiou, Nature's Wealth: Manitoba's Wetlands Are a Vibrant, Valuable Part of Our Shared Environment, INT'L INST. FOR SUSTAINABLE DEV., https://www.iisd.org/system/files/publications/IISD-LWF-DUC-wetlands-insert.pdf [https://perma.cc/9NJK-VM5S]; Abbey Tyrna, The Importance of Florida Wetlands, UNIV. OF FLA. INST. OF FOOD & AGRIC. SCIS. BLOGS (May 17, 2018), https://blogs.ifas.ufl.edu/sarasotaco/2018/05/17/the-importance-of-florida -wetlands [https://perma.cc/7TXX-BEUN].
- 38. Nearly half of the United States's groundwater sites have suffered from falling water levels since 1980. Mira Rojanasakul et al., *America is Using Up Its Groundwater Like There's No Tomorrow*, N.Y. TIMES (Aug. 28, 2023), https://www.nytimes.com/interactive/2023/08/28/climate/groundwater-drying-climate-change.html [https://perma.cc/H636-LHSR].

projects already approved.³⁹ Similarly, subdivisions in Montana have been found to threaten the aquifers that service wells supplying existing homes.⁴⁰

Wetlands are also an important component of efforts to adapt to and mitigate climate change. Wetlands provide natural flood protections. Coastal wetlands prevented more than \$625 million in property damage during Hurricane Sandy by mitigating flooding, a total damage reduction of ten percent. 41 The U.S. Global Change Research Program estimates that wetlands in the United States store 13.5 billion metric tons of carbon, an amount equal to roughly three times the annual U.S. greenhouse gas emissions. 42 Freshwater inland wetlands, including the types of wetlands most threatened by the Sackett Gap, are particularly valuable. In many cases these inland wetlands store as much as ten times the carbon as those found on the tidal coast, a point we will return to when we discuss federal climate legislation later in this Article.43 Wetlands also form natural barriers to fire spread, but development, drought, rising temperatures, and increasingly intense blazes can form a vicious cycle in which wildfires destroy wetlands, which in turn lead to increasingly intense wildfires.⁴⁴ Climate change risks creating another vicious cycle:

^{39.} Christopher Flavelle & Jack Healy, *Arizona Limits Construction Around Phoenix as Its Water Supply Dwindles*, N.Y. TIMES (June 1, 2023), https://www.nytimes.com/2023/06/01/climate/arizona-phoenix-permits -housing-water.html [https://perma.cc/PN7S-UWEF].

^{40.} Christopher Flavelle & Mira Rojanasakul, As Groundwater Dwindles, Powerful Players Block Change, N.Y. TIMES (Nov. 24, 2023), https://www.nytimes.com/interactive/2023/11/24/climate/groundwater-levels.html [https://perma.cc/M49Q-33K5].

^{41.} Coastal Wetlands Provide Significant Flood Damage Reduction, COASTAL RESILIENCE, https://coastalresilience.org/coastal-wetlands-provide-significant-flood-damage-reduction [https://perma.cc/UM2K-4D3R]; Anne Barnard, These Wetlands Helped Stop Flooding From Sandy. Now a BJ's May Move In, N.Y. TIMES (Oct. 28, 2020), https://www.nytimes.com/2020/10/28/nyregion/wetlands-staten-island-bjs.html [https://perma.cc/J3XE-G7U3].

^{42.} Randall Kolka et al., *Terrestrial Wetlands*, in SECOND STATE OF THE CARBON CYCLE REPORT (SOCCR2): A SUSTAINED ASSESSMENT REPORT 507 app. a at 549 (2018), https://carbon2018.globalchange.gov/chapter/13 [https://perma.cc/B74E-9ENN].

^{43.} See also A.M. Nahlik & M.S. Fennessy, Carbon Storage in U.S. Wetlands, NATURE COMMC'NS, Dec. 13, 2016, at 1, 6 (identifying certain wetland areas that are particularly feasible targets for protecting carbon).

^{44.} See, e.g., Restoring Western Headwater Streams with Low-Tech Process-Based Methods: A Review of the Science and Case Study Results, Challenges, and Opportunities, Am. RIVERS (Nov. 2022), https://www.americanrivers

Peatlands are powerful carbon sinks, and their destruction has the potential to release tons of trapped greenhouse gases, which in turn would contribute to further environmental destruction.⁴⁵

Despite their importance, wetlands are under persistent threat of degradation and development. The United States has lost more than half of its pre-colonial wetland area. ⁴⁶ Wetlands today are threatened by a variety of degrading influences, from oil spills ⁴⁷ to groundwater loss, ⁴⁸ pollution, ⁴⁹ and development—including industrial, commercial, residential, and agricultural

.org/wp-content/uploads/2023/01/FINAL_LTPBR-White-Paper_Nov2022 -SHARE1.pdf [https://perma.cc/BRS3-U35M] (discussing the contribution of wetlands and headwaters restorations to a reduction in wildfire intensity); Catrin Einhorn et al., *The World's Largest Tropical Wetland Has Become an Inferno*, N.Y. TIMES (Oct. 13, 2020), https://www.nytimes.com/interactive/2020/10/13/climate/pantanal-brazil-fires.html [https://perma.cc/J5ZN-7VS5] (highlighting that nearly one quarter of the Pantanal wetland in Brazil burned in 2020).

- 45. Daniel Zarin, *The World's Peatlands Are Climate Bombs Waiting to Detonate*, N.Y. TIMES (Nov. 5, 2022), https://www.nytimes.com/2022/11/05/opinion/climate-warming-peatlands.html [https://perma.cc/XS6C-UP2B].
- 46. Why Healthy Wetlands Are Vital to Protecting Endangered Species, U.S. FISH & WILDLIFE SERV. (Apr. 26, 2023), https://www.fws.gov/story/2023-04/why-healthy-wetlands-are-vital-protecting-endangered-species [https://perma.cc/75MK-YYF7].
- 47. Nathan Rott, Wetland Area that Was Damage by California Oil Spill Could Take Years to Recover, NPR (Oct. 10, 2021), https://www.npr.org/2021/10/10/1044830160/wetland-that-was-damage-by-california-oil-spill-could-take-years-to-recover [https://perma.cc/B292-SNUM].
- 48. Rojanasakul et al., supra note 38; Wetlands, ENV'T PROT. AGENCY (Feb. 5, 2025), https://www.epa.gov/report-environment/wetlands [https://perma.cc/6GSL-LMTV] ("Withdrawal of ground water or surface water can reduce the flow of wetlands.").
- 49. Wetlands, supra note 48 ("Pollutants in ground water and fresh surface waters that flow into wetlands can be toxic to plants and animals, and they can accumulate in wetland sediments.").

activities.⁵⁰ Each year, over 80,000 acres of U.S. wetlands are lost due to development alone.⁵¹

The mismatch between wetlands' value and their destruction may be in part because wetlands are difficult to define both in a technical sense⁵² and as an instrument of value. In the 1980s, courts attempting to identify a monetary value for wetlands often factored in only the physical goods wetlands provided that were directly beneficial to humans (i.e., the value of timber, aquaculture, fisheries, and peat present in a wetland) but ignored the second- or third-order environmental products that enabled these physical benefits.⁵³ Wetlands are also difficult to value in a market-based calculation; they are frequently covered by onerous permitting requirements like those challenged in Sackett, devaluing them on the asset purchase market because future development or sale value is speculative. A utility-replacement approach, however, shows that the "services" wetlands provide would be very expensive to replace.⁵⁴ One recent effort, an artificial wetland built in Okeechobee, Florida to

^{50.} Status and Trends of Wetlands in the Conterminous United States 2004 to 2009, U.S. FISH & WILDLIFE SERV. (2010) [hereinafter Status and Trends], https://www.fws.gov/sites/default/files/documents/Status-and-Trends-of-Wetlands-in-the-Conterminous-United-States-2004-to-2009.pdf [https://perma.cc/JM6S-MPEE]; see also Rott, supra note 47 ("In California, more than 90% of the state's wetlands have already been destroyed. Oceanside [wetlands] usually end up as high rises or resorts."). Even human-wildlife conflict related to development can threaten wetlands: Beaver dams, which create and extend wetlands by diverting flowing water, are often the source of complaints by landowners, who—even in drought-parched areas of the country—object to the flooding of portions of their land, despite key benefits. Catrin Einhorn, It Was War. Then, a Rancher's Truce with Some Pesky Beavers Paid Off, N.Y. TIMES (Sept. 6, 2022), https://www.nytimes.com/2022/09/06/climate/climate-change-beavers.html [https://perma.cc/44ED-MS69].

^{51.} Wetlands, supra note 48 ("Wetland loss can add stress to remaining wetlands. For example, if fewer wetlands are available to filter pollutants from surface waters, those pollutants could become more concentrated in the remaining wetlands. Wetland loss can also decrease habitat, landscape diversity, and connectivity among aquatic resources.").

^{52.} See discussion supra note 12 (discussing the definitional challenges under Sackett).

^{53.} Cowdery et al., *supra* note 34, at 11 ("[Products] which [are] not consumed directly by people, but which [are] used to generate another product that people do consume, such as life eaten by fish or crustaceans which in turn are eaten by humans . . . are often overlooked and excluded from wetlands valuation.").

^{54.} *Id.* at 4; see also Rott, supra note 47 ("A 2014 Study found that wetlands provide over \$26 trillion in services globally every year.").

absorb the phosphorus that causes deadly algal blooms, cost nearly four billion dollars.⁵⁵

Although pricing the benefits of wetlands in precise market terms can be challenging, they provide substantial value in ecosystem services, recreation and tourism value, and other economic benefits. Their protection, therefore, avoids very large replacement costs.

2. The Clean Water Act

In 1972, Congress passed sweeping amendments to the Federal Water Pollution Control Act of 1948, transforming the first major U.S. law to address water pollution into a powerful tool of environmental protection. ⁵⁶ As amended, the law became commonly known as the Clean Water Act (CWA). ⁵⁷ The CWA became the principal instrument for regulating discharges into U.S. waters, primarily by banning any discharge of a pollutant to any "water of the United States" (WOTUS) without a permit. The CWA includes twin goals: Section 101(a) focuses on the need to "restore and maintain the chemical, physical and biological integrity of the Nation's waters" while Section 101(b) addresses the need "to recognize, preserve, and protect the primary responsibilities and rights of States." ⁵⁸ The Act requires parties to obtain a permit (or face civil or criminal penalties) ⁵⁹ before

^{55.} Dan Egan, It's Toxic Slime Time on Florida's Lake Okeechobee, N.Y. TIMES (July 9, 2023), https://www.nytimes.com/interactive/2023/07/09/climate/florida-lake-okeechobee-algae.html [https://perma.cc/ZMQ8-PUSZ] ("The 10,500 acre reservoir and the recently completed 6,500-acre artificial wetlands, designed to absorb phosphorus, are the centerpiece of a growing system of canals, gates, pumps, and engineered wetlands built to clean [Lake Okeechobee's] outflows so they can once again drift south into the Everglades as well as provide drinking water to booming South Florida. The Two projects will cost roughly \$4 billion [and] will fill to capacity if only six inches of Lake Okeechobee is sent its way.").

^{56.} History of the Clean Water Act, ENV'T PROT. AGENCY (June 12, 2024), https://www.epa.gov/laws-regulations/history-clean-water-act [https://perma.cc/8Z48-R37V].

^{57.} Id.

^{58. 33} U.S.C. § 1251(a).

^{59. 33} U.S.C. § 1319(b)–(c), (g).

discharging a pollutant into "navigable waters," ⁶⁰ which are further defined as "waters of the United States." ⁶¹

The term "waters of the United States" has been the source of debate because of its vagueness, with one scholar going as far as arguing that the lack of definition for WOTUS in the CWA causes it to be moot under the void-for-vagueness doctrine. 62 The definitional question is complicated because wetlands are not necessarily permanent bodies of water. Historical definitions used by the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps of Engineers) recognized wetlands only temporarily inundated or saturated (in other words, wetlands like vernal pools, which dry up periodically) as protected by the CWA, so long as the inundation or saturation was sufficient to support vegetation adapted for life in saturated soils. 63 Much of the shifting and often confusing Supreme Court jurisprudence and agency rulemaking over the last five decades can be viewed as efforts to emphasize the more environmentally protective Section 101(a) goal or the less protective Section 101(b) goal (since the majority of states have signaled that they will be no more protective than the federal wetlands requirements, and thus more protective of developers' interests⁶⁴) using the uncertainty in the WOTUS definition as the principal battleground.

The WOTUS uncertainty was addressed by the Supreme Court in 2006. In *Rapanos v. United States*, Justice Kennedy's concurrence to the Court's plurality opinion focused on the Section 101(a) goal and allowed for a broad definition of WOTUS that included non-navigable bodies of water that have the capacity to "significantly affect the chemical, physical, and biological

^{60. 33} U.S.C. § 1311(a). Interestingly, the term "navigable waters" was drawn from the Rivers and Harbors Act, which was originally interpreted as limiting the Corps of Engineers regulatory power to preventing only pollution by materials which impeded navigation. William W. Buzbee, *The Antiregulatory Arsenal, Antidemocratic Can(n)ons, and the Water Wars*, 73 CASE W. RSRV. L. REV. 293, 295–96 (2022) (citing Rivers and Harbors Act of 1899, ch. 425 § 13, 30 Stat. 1121, 1152); William L. Andreen, *The Evolution of Water Pollution Control in the United States-State, Local, and Federal Efforts, 1789–1972: Part II,* 22 STAN. ENV'T L.J. 215, 220–21 (2003)).

^{61. 33} U.S.C. § 1362(7).

^{62.} Paul J. Larkin, The Clean Water Act and the Void-for-Vagueness Doctrine, 20 Geo. J.L. & Pub. Pol'y 639 (2022).

^{63.} See 33 C.F.R. \S 328.3(b) (1989) (amended 2023); 40 C.F.R. \S 230.41 (2024).

^{64.} Myers et al., supra note 11, at 6-9.

integrity of other covered waters more readily understood as 'navigable."⁶⁵ Justice Kennedy suggested that WOTUS status should be determined based on whether the waters in question had a "significant nexus" to a traditionally navigable water.⁶⁶ Justice Scalia's plurality opinion, in contrast, focused on the Section 101(b) goal and suggested that the word "waters" in WOTUS should apply only to "relatively permanent, standing or continuously flowing bodies of water," and include wetlands only if they have a "continuous surface connection" to another WOTUS—a standard that excluded many more ephemeral forms of wetland.⁶⁷ Beyond the protective differences between the plurality and concurrence, the *Rapanos* definition required a high level of technical knowledge to apply and largely deferred to the Corps of Engineers' evaluation and permitting process.

The EPA and Corps of Engineers followed Justice Kennedy's concurrence in their 2015 WOTUS rule.⁶⁸ In this rulemaking, the EPA and Corps of Engineers stressed the blend of policy, legal, and scientific judgements required to determine Justice Kennedy's "nexus," but explicitly included a variety of wetlands for WOTUS protections.⁶⁹ Among these specific inclusions were any waters "currently used, . . . used in the past, or may be susceptible to use in interstate or foreign commerce;" all interstate waters; all "impoundments" of water (dammed water); tributaries of any WOTUS; waters "adjacent to" any of the above; and specific wetlands that are rarely adjacent or linked to other

^{65.} Rapanos v. United States, 547 U.S. 715, 779-80 (2006) (Kennedy, J., concurring).

^{66.} Id. at 759-87.

^{67.} Id. at 739-42.

^{68.} Larkin, *supra* note 62, at 644–45 ("[T]he agencies relied on the 'significant nexus' test that Justice Kennedy proposed in his separate opinion in *Rapanos*." (citing Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37,054 (proposed June 29, 2015) (codified at 33 C.F.R. § 328.3 (2016)))).

^{69.} See Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. at 37,060 ("Significant nexus is not a purely scientific determination."); id. at 37,073 (including certain specific waters in the permitting requirement); see also United States v. Riverside Bayview Homes, 474 U.S. 121, 136 (1985) (agreeing that a high degree of deference to scientists was appropriate for determining the correct line between water and land, over attempts by appellants to limit WOTUS to those "adjacent" to "navigable in fact" waters or "clear wetlands").

bodies: prairie potholes, pocosins (wetland bogs), and western vernal pools in California.⁷⁰

The first Trump administration relaxed the scope of WOTUS, following an approach modeled on Justice Scalia's *Rapanos* opinion. The relaxed rule was withdrawn as part of President Biden's immediate review of Trump-era actions upon assuming office. The Biden administration proposed a replacement rule, which was challenged in Congress under the Congressional Review Act. While this back-and-forth was occurring, the *Sackett* litigation, an opportunity for a far-greater narrowing of the CWA's scope, was winding its way through the lower courts.

B. SACKETT AND ITS IMPLICATIONS

In 2004, Michael and Chantell Sackett purchased a vacant lot near Priest Lake, Idaho, where they hoped to construct their family home.⁷⁵ Priest Lake hosts several native fish species, including the threatened bull trout.⁷⁶ The Sacketts claimed that

 $^{70.\;}$ Clean Water Rule: Definition of "Waters of the United States," $80\; {\rm Fed.}$ Reg. at $37{,}125.\;$

^{71.} Exec. Order No. 13778, 82 Fed. Reg. 12,497 (Feb. 28, 2017) (instructing the EPA to "consider interpreting the term 'navigable waters,'... in a manner consistent with the opinion of Justice Antonin Scalia in Rapanos v. United States, 547 U.S. 715 (2006)").

 $^{72.\}$ See Exec. Order No. 13990, 86 Fed. Reg. 7037 (Jan. 20, 2021) (revoking Executive Order 13778).

^{73.} Michael Phillis & Mary Clare Jalonick, Congress Approves Measure to Toss Biden Protections, ASSOCIATED PRESS (Mar. 29, 2023), https://apnews.com/article/epa-biden-water-sackett-wotus-congress-senate-ec5a4b66376fdc9252f7 7575e29043ce [https://perma.cc/NQ4K-WF5Y].

^{74.} The application of the WOTUS rules to wetlands was critiqued, especially when it came to its impacts on development and homeownership. One critical article described how the permitting requirements and discretion of the Corps of Engineers led to an "application of the § 404 practicable alternatives requirements" that is determined by criteria "contained in a complex and scattered set of incomplete and conflicting regulations, memoranda, regulatory guidance letters (RGLs), and cases elevated to Corps headquarters for decision." Daniel R. Mandelker, *Practicable Alternatives for Wetlands Development Under the Clean Water Act*, 48 ENV'T L. REP. 10894, 10895 (2018). This article is especially critical of the absence of guidance on how to deal with different types of projects and the alternatives they require. *See id*.

^{75.} Petitioners' Brief on the Merits at 4, Sackett v. EPA, 143 S. Ct. 1322 (2023) (No. 21-454).

^{76.} Brief of Natural Resources Defense Council et al. as Amici Curiae in Support of Respondents at 3, Sackett v. EPA, 566 U.S. 120 (2012) (No. 10-1062)

they were unaware of wetlands on their property or that those wetlands were subject to CWA protections.⁷⁷ Three days after the Sacketts began clearing their lot, however, EPA officials notified the Sacketts that their actions could constitute a violation of the CWA for filling wetlands.⁷⁸ The Sacketts, having already sought local permit approval, procured the services of a professional wetlands scientist, who not only informed the Sacketts that the land was a wetland, but that the wetland was not isolated and further building would require consultation with the Corps of Engineers and federal approval in the form of a CWA permit from the Corps.⁷⁹

A district court, hearing the Sacketts' case on remand, 80 found that substantial evidence supported the EPA's determination that the Sacketts' property contained wetlands "adjacent" to traditionally navigable water, and therefore was subject to CWA protection. 81 The district court additionally found that the Sacketts' property was connected to Priest Lake by a "shallow subsurface" and was "only 300 feet" from the lake, with flow from the property into the lake only prevented by manmade barriers. 82 Despite—or perhaps because of—these factual findings, there seemed to be little hope that the then-current breadth of the CWA's WOTUS definition would survive review when the Supreme Court took the case. 83

^{(&}quot;Priest Lake . . . is considered critical habitat for bull trout, a threatened species.").

^{77.} See Petitioners' Reply Brief at 1, Sackett, 566 U.S. 120 (No. 10-1062) (arguing that the Sacketts "did not know and had no reason to know that the small lot on which they had started to build their dream home might be a wetland subject to regulation by a federal agency").

^{78.} Brief of Natural Resources Defense Council et al. as Amici Curiae in Support of Respondents, supra note 76, at 10.

^{79.} Id.

^{80.} The Sacketts' prior case reached the Supreme Court on the issue of whether the EPA's 2007 order to restore the property constituted a final agency action subject to judicial review. *See* Sackett v. EPA, 566 U.S. 120, 125–26 (2012). The Court held that it was a final agency action and remanded the case. *Id.* at 131.

^{81.} Sackett v. EPA, No. 08-CV-00185, 2019 WL 13026870, at *10-13 (D. Idaho Mar. 31, 2019), aff'd, 8 F.4th 1075 (9th Cir. 2021), rev'd and remanded, 143 S. Ct. 1322 (2023).

^{82.} Id.

^{83.} See, e.g., Parenteau, supra note 28, at 379.

Writing for the majority, 84 Justice Alito framed Sackett as a clarification on the "outer reaches of the Clean Water Act," emphasizing that an overextension of the Clean Water Act's bounds could lead to what he described as absurd results.85 Justice Alito began by stating that the regulation of water pollution was "left almost entirely to the States and their subdivisions," then reviewed the development of federal water pollution control statutes and described the "crushing consequences" that result from even "inadvertent violations" of the modern CWA.86 The opening section of the majority opinion concluded that "[d]ue to the CWA's capacious definition of 'pollutant,' its low mens rea, and its severe penalties, regulated parties have focused on the Act's geographic scope. . . . The [expanded] meaning of [the] definition [of navigable waters] is the persistent problem that we must address."87 From the opinion's first stanzas, Justice Alito intimated that the wide scope of the CWA's protections was a weakness in the law that led to over-penalization, and therefore must be corrected.88

^{84.} Justice Alito delivered the opinion of the Court. Chief Justice Roberts and Justices Thomas, Gorsuch, and Barrett joined. Justice Thomas filed a concurring opinion, joined by Justice Gorsuch. Justice Kagan filed a concurring opinion, joined by Justices Sotomayor and Jackson. Justice Kavanaugh filed a final concurrence, joined by Justices Sotomayor, Kagan, and Jackson.

^{85.} Sackett v. EPA, 143 S. Ct. 1322, 1329 (2023) ("There is, however, an unfortunate footnote to this success story: the outer boundaries of the Act's geographical reach have been uncertain from the start.... Does the term encompass any backyard that is soggy enough for some minimum period of time? Does it reach 'mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, [or] playa lakes? How about ditches, swimming pools, and puddles?" (internal citations omitted)).

^{86.} Id. at 1330 (internal quotation marks and citations omitted).

^{87.} Id. at 1331.

^{88.} Beyond this opening paragraph's role in framing the legal decision to come, it provides a normative signal. Justice Alito's framing implies that environmental regulations with heavy penalties disproportionately penalize innocent landowners, and does not mention issues of deterrence, enforcement, or implementation that could provide rationale for harsh CWA penalties. Nor do the opening lines include any reference to the importance of environmental protection or pollution control. While Supreme Court opinions do not tend to change the minds of the American population, they have a significant signaling effect on what Americans perceive the general public opinion to be. See, e.g., Margaret E. Tankard & Elizabeth Levy Paluck, The Effect of a Supreme Court Decision Regarding Gay Marriage on Social Norms and Personal Attitudes, 28 PSYCH. SCI. 1334 (2017). But see Chelsey S. Clark et al., Effects of a US Supreme Court Ruling to Restrict Abortion Rights, 8 NATURE HUM. BEHAV. 63, 68 (2023) (concluding that "perceived social norms shifted away from the Court" after its

Justice Alito described the EPA's designation of wetlands on the Sacketts' property as follows:

According to the EPA, the "wetlands" on the Sacketts' lot are "adjacent to" (in the sense that they are in the same neighborhood as) what is described as an "unnamed tributary" on the other side of a 30-foot road. That tributary feeds into a non-navigable creek, which, in turn, feeds into Priest Lake, an intrastate body of water that the EPA designated as traditionally navigable. To establish a significant nexus, the EPA lumped the Sacketts' lot together with the Kalispell Bay Fen, a large nearby wetland complex that the Agency regarded as "similarly situated." According to the EPA, these properties, taken together, "significantly affect" the ecology of Priest Lake. Therefore, the EPA concluded, the Sacketts had illegally dumped soil and gravel onto "the waters of the United States." 89

Justice Alito's framing took a narrow view of the ways that hydrological linkage of seemingly minor outflows or waterways can magnify the impacts of pollution of a seemingly minor wetland area. ⁹⁰ It also omitted the potential importance of temporarily isolated, seasonal wetlands in ecosystem health. ⁹¹

Justice Alito then rejected the significant nexus test, stating that "because the CWA can sweep broadly enough to criminalize mundane activities like moving dirt, this unchecked definition of 'the waters of the United States' means that a staggering array of landowners are at risk of criminal prosecution or onerous civil penalties." He concluded that "[w]etlands that are separate from traditional navigable waters cannot be considered part of

ruling in Dobbs v. Jackson Women's Health Org., 142 S. Ct. 2228 (2022)). Since individuals will go to great lengths to adopt the perceived opinions and behaviors of their groupmates to maintain a sense of belonging, this may lead to normative effects beyond the legal impacts of Supreme Court decisions. See also Jonathon Penney, Understanding Chilling Effects, 106 MINN. L. REV. 1451, 1497–98 (2022) (discussing group norm effects on the internalization of social norms (first citing MUZAFER SHERIF, THE PSYCHOLOGY OF SOCIAL NORMS 89 (1936); and then citing THOMAS HEINZEN & WIND GOODFRIEND, SOCIAL PSYCHOLOGY 203 (2019))); cf. Elodie O. Currier, Virtuous Cycles: The Interaction of Public and Private Environmental Governance, 40 PACE ENV'T L. REV. 526, 534 (2023) (reviewing the effects of psychology literature on the adopting of group norms).

- 89. Sackett v. EPA, 143 S. Ct. 1322, 1332 (2023) (internal citations omitted).
- 90. For an alternative view, see, for example, Scott G. Leibowitz et al., *National Hydrologic Connectivity Classification Links Wetlands with Stream Water Quality*, NATURE WATER, Apr. 2023, at 370, 377 (exploring the "role of wetland connectivity on downstream water quality").
 - 91. See infra notes 137-38 and related discussion.
 - 92. Sackett v. EPA, 143 S. Ct. 1322, 1335 (2023).

those waters, even if they are located nearby."⁹³ Instead, Justice Alito followed the plurality's approach in *Rapanos*, concluding that the term "waters" in the CWA encompassed "only those relatively permanent, standing, or continuously flowing bodies of water 'forming geographical features' that are described in ordinary parlance as 'streams, oceans, rivers, and lakes."⁹⁴ The opinion reiterated the findings in *Rapanos*:

"[W]aters" may fairly be read to include only those wetlands that are "as a practical matter indistinguishable from waters of the United States," such that it is "difficult to determine where the 'water' ends and the 'wetland' begins." That occurs when wetlands have "a continuous surface connection to bodies that are 'waters of the United States' in their own right, so that there is no clear demarcation between 'waters' and wetlands."95

The opinion acknowledged that some temporary interruptions in surface connections (low tides or dry spells) would not destroy this connection for legal purposes. 96 Per Justice Alito, this reading "follows from the CWA's deliberate use of the plural 'waters," aligns the definition of WOTUS "with the term it is defining," and accords with both Congress's use of "waters" elsewhere in the CWA and with the Court's interpretation of statutory history. 97

The majority opinion stated that "almost all waters and wetlands' [were] potentially susceptible to regulation under [the significant nexus] test." It also recognized that the complex system of authorizations required to build in areas with a potential significant nexus created general deterrence on wetlands degradation: Justice Alito wrote, referencing the choice between seeking a Corps of Engineers permit and challenging the Corps' jurisdiction in federal court, that "many landowners faced with this unappetizing menu of options would simply choose to build nothing." These statements, while critical, demonstrate the protective value of the CWA with the significant nexus test. The determination of jurisdiction by the Corps of Engineers alone deterred development of wetlands without an affirmative permit, and the CWA was able to reach valuable wetlands regardless of

^{93.} Id. at 1340.

^{94.} *Id.* at 1336 (quoting Rapanos v. United States, 547 U.S. 715, 739 (2006) (quoting Webster's New International Dictionary 2882 (2d ed. 1954))).

^{95.} Id. at 1340 (quoting Rapanos, 547 U.S. at 742, 755).

^{96.} Id. at 1341.

^{97.} Id. at 1336-38.

^{98.} Id. at 1335.

^{99.} Id. at 1336.

their shape, size, or naming conventions. In the absence of CWA permit requirements, vast areas of wetlands with large ecosystem and environmental value are left federally unprotected—a lack of coverage termed the Sackett Gap.

The *Sackett* decision has significant effects on wetlands and water quality. Scientific models suggest that sixty percent of federal wetlands lost their protections after *Sackett*. ¹⁰⁰ Fifty-five percent of downstream water discharge originates in ephemeral streams no longer covered by the CWA, meaning critical pathways through which pollution can influence water quality are now largely unprotected. ¹⁰¹ *Sackett*'s proponents argue that the CWA's confusing application—not the scope of the permit requirements—had prevented wetlands development. ¹⁰² In the wake of *Sackett*, however, permit requirements are unquestionably relaxed from areas that would have previously been beyond the scope of development.

Moreover, complications arise from the tensions between the approach used by the Supreme Court in *Sackett*—which did not recognize the importance of subsurface hydrological connections and their effects on water quality—and the approach adopted by the Supreme Court in *County of Maui v. Hawaii Wildlife Fund.* ¹⁰³ The *County of Maui* case wrestled with the fact that some non-traditional discharges affect water quality protection, the goal of CWA Section 101(a). Indeed, the case cited the same scientific water societies ignored by the Court in *Sackett.* ¹⁰⁴ The *Sackett* Court did not address these concerns regarding destruction of wetlands that are hydrologically connected to navigable waters but do not meet the *Sackett* WOTUS test because

^{100.} See Galliher, supra note 32 ("These types of waterways constitute about 60 percent of the nation's streams. In the southwest, they are more than 80 percent of all streams." (internal citation omitted)).

^{101.} Craig B. Brinkerhoff et al., Ephemeral Stream Water Contributions to Untied States Drainage Networks, 384 Sci. 1476, 1476 (2024).

 $^{102. \ \} Trevor\ Sochocki, Supreme\ Court's\ Wetlands\ Decision\ Could\ Spell\ More\ Construction, Major\ Impact\ on\ Florida, WFLA\ NEWS\ CHANNEL\ 8\ (June\ 1,\ 2023), https://www.wfla.com/news/florida/supreme-courts-wetlands-decision-could-spell-more-construction-major-impact-on-florida\ [https://perma.cc/UP9V]$

⁻⁵QZ7]. A spokesman for the Associated General Contractors of America stated that confusion leads to "vital infrastructure [not] being built." *Id*.

^{103.} See generally County of Maui v. Haw. Wildlife Fund, 140 S. Ct. 1462 (2020). The authors note, however, that County of Maui dealt with Section 402 of the CWA, not Section 404 as Sackett did.

^{104.} County of Maui, 140 S. Ct. at 1470.

of intermittency, a connection limited to subsurface flows, or some other characteristic.

C. THE PRINCIPAL THREATS TO WETLANDS DESTRUCTION POST- SACKETT

Sackett eroded protections for large swaths of America's wetlands. In the absence of federal regulations, protecting wetlands in the Sackett Gap requires determining the principal threats to wetlands—especially since carefully tailored responses may be the only viable responses in the absence of broad federal regulatory authority.

In many regulatory systems, including the CWA wetlands program, all polluters are regulated based on their pollution or other environmental harms, so identifying the main actors is often not essential. Whether they are an individual landowner, a small business, or a multinational conglomerate, a party seeking to destroy a wetland must obtain a permit. A federal or state sovereign is responsible for determining permissible use of wetlands and wetland-adjacent land. Although the type of party seeking a permit may affect enforcement strategy or projections about wetlands destruction given various levels of enforcement, ¹⁰⁵ all are subject to regulation regardless of their industry type or their incentives for wetlands destruction. The permitting system thus focuses less on who the permittee is and more on when the permit is required, what it requires, and when it can be enforced.

This approach has benefits: The law applies without regard to the identity of the polluter, an approach consistent with rule of law and equal justice concerns. But it also has two important downsides. First, as the *Sackett* majority opinion demonstrates, the Supreme Court can frame the prototypical victim as an individual even if industry destroys most wetlands. This enables the Court to raise the specter of unexpected or unfair criminal enforcement to color the analysis even if criminal enforcement is rare and undertaken only in response to knowing violations. ¹⁰⁶ This framing can affect public support for environmental

^{105.} There are some exceptions. The Swampbuster provisions of the Farm Security Act withhold federal farm benefits from farmers who cultivate an agricultural commodity on wetlands converted by drainage, leveling, etc., or who convert a wetland for agricultural commodity production. See 16 U.S.C. §§ 1221–1222, 3821, 3822.

^{106.} See 40 C.F.R. § 122 (2024) (imposing criminal violations for knowing discharge, including into wetlands); 33 U.S.C. § 1344 (limited exceptions).

protection in a deeply polarized society in which group identity affects many beliefs and policy support.

Second, so long as government agencies exercise authority over the regulated community on the basis of the emissions or harm caused, they need not understand the composition or motivations of the regulated community in any detail. Post-Sackett, however, protecting the wetlands in the Sackett Gap requires understanding who is destroying wetlands and why. Now, much of the focus must turn to discouraging or preventing actions by parties who are beyond the reach of government restrictions. Without federal and state wetlands protections, effective governance—whether public or private—requires granular analysis of who is destroying wetlands, why they are destroying them, and how their motivations can be influenced or shaped.

These inquiries are especially important in designing PEG interventions because the ability to motivate wetlands protection and the tools used to do so will differ based on the actors involved. A large agricultural commodity firm may be most likely to change behavior in the face of supply chain contracting requirements adopted by the retail food manufacturers and grocers it sells to, whereas a homebuilding firm may be more affected by requirements from retail buyers, lenders, or ESG investment firms.¹⁰⁷

Although identification of the industries responsible for wetland destruction is vital to effective post-*Sackett* regulation, only limited analysis is available on this issue. Existing research often characterizes wetlands threats by the type of action, not the industry actor, discussing factors such as "pollution," "natural resource modification," or "in-fill." This approach allows for

^{107.} State and local governments will also need to understand the actors involved to effectively target their legal interventions and avoid dormant commerce clause or preemption challenges. See Rothschild, supra note 6, at 56–60 (discussing erosion of these doctrines). As Rothschild discusses, there is some evidence that the Roberts Court may take a more relaxed approach to dormant commerce clause challenges of state laws on agriculture and the environment. See id.; see also, e.g., Nat'l Pork Producers Council v. Ross, 143 S. Ct. 1142, 1155–57 (2023) (holding a California law banning inhumane pig farming practices did not violate the dormant commerce clause just because it had significant extraterritorial impact).

^{108.} See Ting Xu et al., Wetlands of International Importance: Status, Threats, and Future Protection, INT'L J. ENV'T RSCH. & PUB. HEALTH, no. 10, 2019, at 1 (classifying the issue based on impact factors, including pollution); Amita Kanaujia & Adesh Kumar, Wetlands: Significance, Threats and Their Conversion, GREEN, Mar. 2014, at 4, 9–11 (discussing types of action including

wider definitions of threats to wetlands, including issues like hydrologic interruption that lead to downstream wetlands disruption, as well as the generalized impacts of climate change and drought. It also allows for analysis of the threats facing wetlands without blaming or alienating certain sectors. Other reports discuss broad industries but avoid nuance. There is consensus that industry, urbanization, agriculture, and "pollution" are major threats. Discussions of "agriculture," however,

agricultural conversion, direct deforestation in wetlands, hydrologic alteration, inundation by dammed reservoirs, alterations of watersheds, ground water depletion, urbanization, "anthropogenic activities," and "agricultural activities"). One meta-analysis confusingly mixes these types of factors with individual instances of the kind of granular industry that would be helpful in our analysis, but comparing the frequency of "incidents" from "cattle raising" to "farming" to "urbanization" to "fires" to "sub-freezing" without specific definitions is not entirely useful as a tool to target legal interventions. See Gaston Antonio Ballut-Dajud et al., Factors Affecting Wetlands Loss: A Review, LAND, Mar. 2022, at 434; see also Threats to Wetlands, NAT'L PARK SERV., https://www.nps.gov/ subjects/wetlands/threats-to-wetlands.htm [https://perma.cc/BTP6-X4YS]: Wetlands—Status and Trends, ENV'T PROT. AGENCY (Jan. 24, 2013), https:// archive.epa.gov/water/archive/web/html/vital_status.html [https://perma.cc/ 7XD8-FBNT]; Status and Trends, supra note 50; Threats to Wetlands, ENV'T AGENCY (2001), https://www.epa.gov/sites/default/files/2021-01/ documents/threats_to_wetlands.pdf [https://perma.cc/3QZL-9VFD].

109. See Kanaujia & Kumar, supra note 108, at 9; Xu et al., supra note 108; Status and Trends, supra note 50.

110. Zhaobin Li et al., The Impact of Urban Development on Wetland Conservation, 15 SUSTAINABILITY, No. 21, 2022, at 1, 8 (finding fifty-eight percent of wetland loss in the United States due to "urbanization"); Ballut-Dajud et al., supra note 108 (discussing agriculture, urbanization, aquaculture, and industry); Tiffany Wright et al., Direct and Indirect Impacts of Urbanization on Wet-CTR. FOR WATERSHED PROT. 16 (Dec. Quality. https://www.nrc.gov/docs/ML0915/ML091520194.pdf [https://perma.cc/7WBJ -A9NU] (discussing urbanization); Xu et al., supra note 108 (discussing agriculture); see also Mae A. Davenport et al., Building Local Community Commitment to Wetlands Restoration: A Case Study of the Cache River Wetlands in Southern Illinois, USA, 45 ENV'T MGMT. 711 (2010) ("[In Illinois,] 90% of original wetlands have been converted to agricultural or urban uses "). In historical surveys, agriculture was considered the primary engine of wetland conversion, but urbanization seems to take the lead beginning in the mid-1990s. See Charles M. Cooper & Matthew T. Moore, Wetlands & Agriculture (finding that 87% of wetland conversion was due to agriculture until the mid-1950s, but this figure dipped to 20% during the period of 1982-1992, bowing to the burgeoning responsibility [57%] of urban development), in ACHIEVING SUSTAINABLE FRESH-WATER SYSTEMS: A WEB OF CONNECTIONS 221, 222 (Marjorie Holland et al. eds., 2003); Cindy C. Holland et al., Wetland Degradation and Loss in the Rapidly Urbanizing Area of Portland, Oregon, 15 WETLANDS 336, 338 (1995) (finding that, of studied wetlands that were degraded by human activities, 63% were destroyed by urbanization and 31% were converted to agriculture). But see Lisa

rarely distinguish between timber cultivation, aquaculture, live-stock farming, and annual and perennial non-timber crop production. These industries vary wildly in incentives, operations, legal regimes, and in the instrumentalities of their wetland impacts. 112

Sackett's bifurcation of American wetlands into the WOTUS-protected haves and the unregulated have-nots places roughly fifty percent of formerly regulated wetlands at immediate risk. But the permit-focused regulatory system also leaves advocates for wetlands protection at a disadvantage: The informational tools developed in a system where federal authority provides the main regulation are a poor fit for one where state, local, and private governance efforts must regulate the spheres over which they have some influence. Effective post-Sackett wetlands regulation will require more granular information about what industries and actors pose the greatest threat to wetlands development. While statisticians, public policy experts, and environmental scientists address post-Sackett information shifts, the public and private tools discussed below focus on the tools that can be used and honed to regulate a variety of industries, with specific focus on agriculture¹¹³ and urbanization in the context of housing stock and infrastructure development.

McCauley et al., Isolated Wetland Loss and Degradation over Two Decades in an Increasingly Urbanized Landscape, 33 WETLANDS 117, 121–24 (2013) (finding that, from 1984–2004, studied wetlands in Florida were degraded in timber and ranchland areas but increased in urban areas).

- 111. See discussion supra note 110. One exception to this general rule can be found in Hugh Robertson et al., Sci. & Tech. Rev. Panel, Briefing Note No. 13: Wetlands and Agriculture: Impacts of Farming Practices and Pathways to Sustainability, RAMSAR: THE CONVENTION ON WETLANDS 5 (Feb. 16, 2022), https://www.ramsar.org/sites/default/files/documents/library/bn13_agriculture_e.pdf [https://perma.cc/6N3H-L84B] (differentiating between several agricultural threats to wetlands).
- 112. Further complicating the analysis, studies rarely distinguish between types of wetlands and occasionally do not include the types of ephemeral wetlands left uncovered by *Sackett*. Kanaujia & Kumar, *supra* note 108, at 6.
- 113. Agriculture is, even without *Sackett's* intervention, a highly regulated industry with strong interests in wetlands protection, especially given barriers to subsidies arising from Swampbuster. *See supra* note 105. Pressures on the agricultural industry to continue growth while facing climate driven droughts, flooding, pests, and more may, in the wake of *Sackett*, erode some of the efficacy of the Swampbuster provisions, especially if the Supreme Court continues to erode wetlands-protective law through other decisions. *See* Rob Bland et al., *Trends Driving Automation on the Farm*, MCKINSEY (May 31, 2023), https://www.mckinsey.com/industries/agriculture/our-insights/trends-driving

II. THE LIMITS OF PUBLIC ENVIRONMENTAL GOVERNANCE

In theory, public governance initiatives could close the Sackett Gap. Congress could amend the CWA to adopt the significant nexus test or otherwise broaden the reach of WOTUS, bringing most wetlands back under pre-Sackett protection. The Court could reverse course and relax the new limits on WOTUS. Perhaps the EPA and the Corps of Engineers could find clever ways to exercise the outer limits of their remaining jurisdiction over wetlands, although the initial response to Sackett was to simply identify the new, more limited WOTUS boundaries. 114 The kind of command and control environmental regulation that undergirds CWA protections has become increasingly unpopular in Congress, 115 and seems highly unlikely to pass for the foreseeable future. State and local regulation may be able to assist in closing the gap but, given the interstate nature of water and the limited ability of state governments to regulate extraterritorially, comprehensive options are limited, especially in the majority of states that have declined to fill the regulatory gap.

If new federal or state laws protecting wetlands are unlikely to materialize in the near term, it is essential to assess the feasibility of new environmental initiatives. ¹¹⁶ Not only will some wetlands be destroyed, but regulatory takings may play an increasingly prominent role in discouraging new regulations or legislation. Now that many wetlands are no longer regulated, developers may have investment-backed expectations that could

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⁻automation-on-the-farm [https://perma.cc/3KDJ-XPAJ] (describing business pressures on farmers and agriculture); Climate Change, ECON. RSCH. SERV. (2023), https://www.ers.usda.gov/topics/natural-resources-environment/climate-change [https://web.archive.org/web/20240407073332/https://www.ers.usda.gov/topics/natural-resources-environment/climate-change] (summarizing key findings of reports on climate change's impacts on farms and farmers).

^{114.} See 33 C.F.R. § 328.3(a) (2024) (codifying the post-Sackett definition of "Waters of the United States").

^{115.} Congress has not passed a command-and-control pollution control statute since the Clean Air Act in 1990, with a small caveat for the Frank R. Lautenberg reforms in 2015. See Michael P. Vandenbergh, The Emergence of Private Environmental Governance, 44 ENV'T L. REP. 10125, 10132 fig.1 (2014); see also Richard J. Lazarus, Congressional Descent: The Demise of Deliberative Democracy in Environmental Law, 94 GEO. L.J. 619, 619 (2006). But see Frank R. Lautenberg Chemical Safety for the 21st Century Act, Pub. L. No. 114-82, 130 Stat. 448 (2016).

^{116.} See, e.g., Paul C. Stern et al., Feasible Climate Mitigation, NATURE CLIMATE CHANGE, Jan. 2023, at 1, 6–8 (noting the importance of accounting for initiative feasibility in global and national climate advocacy).

provoke takings claims in federal and state courts and arguments in political debates about takings-related fairness concerns, 117 which could make future wetlands protections prohibitively expensive. 118 Even with the CWA's permitting requirements, the cost of wetlands acquisition imposed by regulatory or traditional takings was thought to be prohibitive. 119 As previously-protected wetlands become subject to development, the heightened expectations of purchasers will also strengthen regulatory takings claims against wetlands protections: Permitting requirements or development restrictions that deny all economically viable use of a property¹²⁰ or interfere with the owners investment-backed expectations¹²¹ could rise to the level of a regulatory taking. Although some funds for wetlands conservation may be available at the federal, state, or local level, an increase in takings doctrine concerns is likely to strain resources and lead to difficult choices.

^{117.} See, e.g., Palazzolo v. Rhode Island, 533 U.S. 606, 617 (2001) ("The clearest sort of taking occurs when the government encroaches upon or occupies private land for its own proposed use."); Cedar Point Nursery v. Hassid, 141 S. Ct. 2063 (2021) (extending clear taking to cases where regulations give government the *right* to invade private property); see also Koontz v. St. Johns River Water Mgmt. Dist., 570 U.S. 595 (2013) (holding monetary excisions as a condition to wetlands-adjacent development constituted an unconstitutional taking and was distinguishable from the paying of a tax).

^{118.} Cowdery et al., *supra* note 34, at 4–6; *see also* Buzbee, *supra* note 60, at 297 ("[B]ecause water-edge land is of immense value for development and industrial polluters and the agricultural sector claimed concerns with regulatory uncertainties and possible liability, success in weakening the CWA's Waters reach offered a huge economic opportunity.").

^{119.} Renee Stone, Wetlands Protection & Development: The Advantages of Retaining Federal Control, 10 STAN. ENV'T L.J. 137, 148 (1991) (proposing acquisition of threatened wetlands where "[o]nerous burdens of regulation on a nonfederal owner are eliminated . . . [and] [p]rotection and management consistent with the federal interest can be permanently assured" but pointing out that "acquiring all wetlands would be over-inclusive and the cost would be prohibitive").

^{120.} Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1015 (1992) ("The second situation in which we have found categorical treatment appropriate is where regulation denies all economically beneficial or productive use of land.").

^{121.} Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124–25 (1978) (establishing that whether a regulation is a taking is determined by (1) the economic impact of the regulation to its owner; (2) the extent to which the regulation interferes with the owner's investment-backed expectations; and (3) the character of the governmental action); Pa. Coal Co. v. Mahon, 260 U.S. 393, 415 (1922) ("[W]hile property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking.").

A. FEDERAL OPTIONS FOR WETLANDS PROTECTION

The *Sackett* decision, combined with the Court's holdings on the major questions and *Chevron* doctrines, places key barriers to executive action on wetlands protection in the absence of new legislation. The Justices emphasized this in their *Sackett* majority opinion, writing that:

[T]his Court "require[s] Congress to enact exceedingly clear language if it wishes to significantly alter the balance between federal and state power and the power of the Government over private property." . . . Regulation of land and water use lies at the core of traditional state authority. 122

Although federal agency options remain, they are unlikely to provide the extent and speed of coverage required to protect the wetlands that are unprotected after the *Sackett* decision, and the EPA and the Corps of Engineers have acknowledged their narrow remaining authority post-*Sackett*. Even pre-*Sackett*, many critics alleged that existing federal legislation, including the CWA and its associated guidance, left gaps in wetlands protections. 124

Robust federal legislation could, in theory, fill these gaps, but the political realities of the current federal system make any major protective action on wetlands highly unlikely. The CWA WOTUS provisions have not been amended since they were adopted in 1972, fifty years ago. In environmental law, command and control legislation had its heyday between 1970 and 1990, with fifteen major pollution control statutes passed during that period. Since 1990, only one major federal pollution control statute has been adopted, and the shutdown in the conveyer

^{122.} Sackett v. EPA, 143 S. Ct. 1322, 1341 (2023) (quoting U.S. Forest Serv. v. Cowpasture River Pres. Ass'n, 140 S. Ct. 1837, 1849–50 (2020)).

^{123.} See supra note 114 and accompanying text.

^{124.} Robin Kundis Craig, There Is More to the Clean Water Act than Waters of the United States: A Holistic Jurisdictional Approach to the Section 402 and Section 404 Permit Programs, 73 CASE W. RSRV. L. REV. 349, 395–97 (2022) (noting the slate of activities which have the potential to pollute wetlands but are not covered by CWA permitting requirements); Stone, supra note 119, at 150 ("Agricultural conversions are responsible for a disproportionate percentage of wetlands losses and they are specifically exempted from the jurisdiction of the Clean Water Act.").

^{125.} VANDENBERGH & GILLIGAN, POLITICS, supra note 22, at 70–72.

^{126.} See id. at 70 (describing the 1996 Food Quality Protection Act as the "only one major pollution control statute [that] was enacted between 1991 and 2016"). Although critiques of command and control began as early as the 1970s, environmental regulation picked up steam during this period. See Mary O.

belt of federal pollution control legislation corresponds closely to the uptick in polarization in Congress in the early- to mid-1990s, a trend that has only increased in recent years.

Although new legislative sticks are almost impossible to adopt, new legislative carrots may be possible. During the Biden administration, federal environmental legislation shifted from a polluter pays or pollution control model to a beneficiary pays model, as demonstrated by the repeated failure of carbon pricing followed by adoption of major climate subsidy bills such as the Inflation Reduction Act and Infrastructure Investment and Jobs Act. 127 Optimism about new legislation must confront the results of the 2024 election, as well as the fact that roughly eighteen percent of the U.S. population live in states controlling fifty votes in the Senate—the population in these largely rural, low-density states is unlikely to push their senators to support strong wetlands legislation. 128 Although state and local environmental action has attracted bipartisan support in some states, 129 environmental issues remain highly partisan on the federal stage, and Republican national platforms have supported efforts to reduce wetlands permitting requirements, 130 often through critiques that permitting requirements are unduly burdensome on

Furner, From "State Interference" to the "Return of the Market": The Rhetoric of Economic Regulation from the Old Gilded Age to the New (discussing rising criticism of command and control regulation in the 1970s), in GOVERNMENT AND MARKETS: TOWARD A NEW THEORY OF REGULATION 92, 131, 133–34 (Edward J. Balliese & David A. Moss eds., 2010); Marc Allen Eisner, Markets in the Shadow of the State: An Appraisal of Deregulation and Implications for Future Research, in GOVERNMENT AND MARKETS: TOWARD A NEW THEORY OF REGULATION, supra, at 512, 512–13 (positing that regulatory capture critiques formed foundation for deregulation). Paul Stephen Dempsey argued in 2012 that regulatory failure was a cause of this push for deregulation, although the stark improvements in pollution control and environmental protection that occurred after the growth of environmental regulation challenges this assertion. Paul Stephen Dempsey, The Rise and Fall of the Interstate Commerce Commission: The Tortuous Path from Regulation to Deregulation of America's Infrastructure, 95 MARQ, L. REV, 1151, 1152 (2012).

^{127.} Currier, *supra* note 88, at 528–30; Vandenbergh, *Polarized*, *supra* note 9, at 26.

^{128.} Vandenbergh, Polarized, supra note 9, at 19.

^{129.} See supra notes 5-11 and related discussion.

^{130.} Sackett was part of this drive. See Buzbee, supra note 60; Coral Davenport, Republican Drive to Tilt Courts Against Climate Action Reaches a Crucial Moment, N.Y. TIMES (June 19, 2022), https://www.nytimes.com/2022/06/19/climate/supreme-court-climate-epa.html [https://perma.cc/6YWF-B3HR] (connecting Sackett to a broader legal strategy).

businesses.¹³¹ Even if legislation could be adopted, avoiding a veto would require a supportive president, and while the Biden-Harris administration made environmental issues a priority,¹³² the change in control of the White House has increased the chance of a veto of strong wetlands legislation.¹³³

131. Phillis & Jalonick, *supra* note 73 ("Republicans have targeted the Biden administration's protections for thousands of small streams, wetlands and other waterways, labeling it an environmental overreach that harms businesses, developers and farmers."). Prior to the 2020 election, the proportion of Republicans who said stricter environmental regulations were "worth the cost" was rising, but remained a minority of the party. *See* Haley Davie & J. Baxter Oliphant, *More Republicans Say Stricter Environmental Regulations Are 'Worth the Cost*,' PEW RSCH. CTR. (Feb. 7, 2019), https://www.pewresearch.org/short-reads/2019/02/07/more-republicans-say-stricter-environmental-regulations-are-worth-the-cost [https://perma.cc/TDR7-HYVJ] ("[S]ince 2017, the share of Republicans who take a positive view of stricter environmental laws has increased, from 36% then to 45% today.").

132. The Biden-Harris administration identified climate change as one of its "immediate priorities" and was adamant about pushing back to fill what we identify as the Sackett gap. See The Biden-Harris Administration Immediate Priorities, WHITE HOUSE, https://web.archive.org/web/20230827153732/https:// www.whitehouse.gov/priorities ("President Biden will take swift action to tackle the climate crisis."); Statement from President Joe Biden on Supreme Court Decision in Sackett v. EPA, WHITE HOUSE (May 25, 2023), https://web.archive .org/web/20230525204957/https://www.whitehouse.gov/briefing-room/ statements-releases/2023/05/25/statement-from-president-joe-biden-on -supreme-court-decision-in-sackett-v-epa ("The Supreme Court's disappointing decision in Sackett v. EPA will take our country backwards. It puts our Nation's wetlands-and the rivers, streams, lakes, and ponds connected to them-at risk of pollution and destruction, jeopardizing the sources of clean water that millions of American families, farmers, and businesses rely on."). Early reporting on the Harris campaign suggested that she would continue to focus on climate change as a key issue. Lisa Friedman, Here's Where Kamala Harris Stands on Climate, N.Y. TIMES (July 22, 2024), https://www.nytimes.com/2024/07/22/ climate/kamala-harris-climate-environment.html [https://perma.cc/FW5G -B3DG] ("[S]he . . . took positions far to the left of Mr. Biden on climate change."); cf. Lisa Friedman, Harris's New Strategy: Equate Fighting Climate Change with 'Freedom,' N.Y. TIMES (Aug. 23, 2024), https://www.nytimes.com/ 2024/08/23/climate/kamala-harris-climate-strategy.html [https://perma.cc/ B3WU-HU5L] ("[At the Democratic National Convention] Ms. Harris declared that along with reproductive choice 'many other fundamental freedoms are at stake' in the November election. Those include 'the freedom to breathe clean air, and drink clean water and live free from the pollution that fuels the climate crisis'...."). These positions failed to carry Harris to a victory.

133. Indeed, while the Trump campaign attempted to distance itself from Project 2025's plans of "gutting federal climate research, slashing funding for environmental agencies and removing climate science from military planning," these goals are consistent with the campaign's statement of policies. Emily Yehle & Joel Kirkland, RNC Launches with a Vast Divide on Climate, POLITICO

New options for federal wetlands protection remain, however, if we recognize the role that public support for environmental protection has played in the shift from a polluter pays to a beneficiary pays era. In response to the political resistance to new regulatory or polluter pays requirements, ¹³⁴ public support for environmental protection did not evaporate, but rather was redirected into more politically palatable approaches. An example is the Inflation Reduction Act (IRA), which provided limited

(July 15, 2024), https://www.politico.com/newsletters/power-switch/2024/07/15/ rnc-launches-with-a-vast-divide-on-climate-00168293 [https://perma.cc/PUL5 -7AAW]; cf. 2024 Republican Party Platform, The Am. Presidency Project (July 8, 2024), https://www.presidency.ucsb.edu/documents/2024-republican -party-platform [https://perma.cc/99S5-5W97] (proclaiming that Trump would "Unleash American Energy" and "Rein in Wasteful Federal Spending"); Lisa Friedman, At the Republican National Convention, Climate Change Isn't a Problem, N.Y. TIMES (July 17, 2024), https://www.nytimes.com/2024/07/15/climate/ republicans-climate-change-fossil-fuels.html [https://perma.cc/5VK6-PWE8] ("If Mr. Biden has taken an all-of-government approach to fighting climate change, Mr. Trump and his allies would adopt the opposite: scrubbing 'climate' from all federal functions and promoting fossil fuels."). There are, however, growing conservative voices pushing for including environmental protection and wildland conservation in a Republican Platform. See, e.g., Ximena Bustillo, Climate Hasn't Been Core to the GOP. These Conservatives Are Trying to Change That, NPR (July 19, 2024), https://www.npr.org/2024/07/19/nx-s1-5041975/ young-republicans-advocate-climate-action [https://perma.cc/5YVC-BUTY] ("[T]his year, for the first time in recent memory, conservatives had a climate showing at the Republican National Convention. The leadership of the American Conservation Coalition (ACC) flew to Milwaukee for a week of conversations around climate, conservation, and energy."). While President-elect Trump promised clean air and water, his cabinet choices reflect mixed views on environmental issues, and they seem unlikely to prioritize the climate. See, e.g., Lisa Friedman, What Trump's Cabinet Picks and Advisers Say About Climate Change, N.Y. TIMES (Dec. 4, 2024), https://www.nytimes.com/2024/12/04/ climate/trump-cabinet-stefanik-zeldin-wright.html [https://perma.cc/9QRR -AWM8] ("President-elect Donald J. Trump's cabinet choices and key advisers run the gamut from people who acknowledge the threat of climate change to those who deny the scientific consensus that emissions from the burning of fossil fuels are dangerously heating the planet. But virtually all support Mr. Trump's plan to extract more oil and gas and erase environmental rules, which would exacerbate global warming.").

134. See Shai Stern, From "Sit and Wait" to "Proactive Regulation": A Model for Environmental Regulation of Private Property, 53 ENVT L. 33, 41–42 (2023) (stating that market-based incentives "could solve environmental challenges without harming private property" but that their effectiveness depends on "the scope of these incentives, market competitiveness, and the urgency of addressing the environmental challenge"); Stone, supra note 119, at 142 ("Using economic incentives to influence activities that affect wetlands is another promising option [alongside regulation and acquisition]. Included in this category are the payment or withholding of direct and indirect subsidies and an assortment of tax incentives.").

funding for wetlands restoration through contracts, grants, and programs administered by the National Oceanic and Atmospheric Administration (NOAA) to protect natural resources in coastal communities. 135 The IRA represented the largest federal investment in combatting global warming to date, but the initial \$2.6 billion funding over five years focused only on coastal and "marine resource dependent" communities. 136 This left projects devoted to inland wetlands restoration—ironically including the isolated wetlands left unprotected after Sackett, many of which store more carbon than coastal wetlands¹³⁷—largely out of the loop. Although the fate of the IRA is uncertain, and even its successful implementation would not fill the Sackett Gap, it provides a helpful model for the kinds of subsidy-based legislation and agency projects that the federal government could pursue if it reflected public preferences for environmental protection. In addition, as we discuss below, these beneficiary pays approaches can often occur in tandem with initiatives by local nonprofits and private sector entities. For instance, an appropriations bill modeled on the IRA could include subsidies targeted to the protection or purchase of Sackett Gap wetlands, incentivizing public and private protection of these resources. 138

Similarly, placing limits or exceptions on existing subsidies is another tool that the federal government can use to encourage wetlands protection. In the 1990s, agricultural conversions were responsible for a disproportionate share of wetlands degradation but were exempted from CWA jurisdiction. Federal subsidies also encouraged behaviors by agricultural producers that adversely affected wetlands. To fill this gap, the Food Security Act denied agricultural subsidies to farmers who converted

^{135.} Stephanie Lai, Billions in Climate Deal Funding Could Help Protect U.S. Coastal Cities, N.Y. TIMES (Sept. 20, 2022), https://www.nytimes.com/2022/09/20/us/politics/climate-law-coastal-projects.html [https://perma.cc/R7P4-ZTD91.

^{136.} Inflation Reduction Act of 2022, Pub. L. No. 117-169, § 40001, 136 Stat. 1818, 2028 (2022).

^{137.} See Nahlik & Fennessy, supra note 43, at 1 ("Freshwater inland wetlands, in part due to their substantial areal extent, hold nearly ten-fold more carbon than tidal saltwater sites").

^{138.} See Currier, supra note 88, at 550 (discussing the IRA's subsidies as a model for public governance efforts which aim to kick off subsequent private action towards the same goal).

 $^{139.\} See$ DEP'T OF THE INTERIOR, 1 THE IMPACT OF FEDERAL PROGRAMS ON WETLANDS $14{-}33$ (1988) (presenting information on federal programs that affect wetlands).

wetlands to agricultural use, while paying farmers who set aside wetlands for ten years or more. 140 This program was ineffective for crops that were not heavily subsidized, and it included a variety of exceptions, but it had the potential to induce farmers to internalize the cost of their wetlands degradation, aligning their financial interests with the public's interest in wetlands protection. 141 In sum, a combination of new federal subsidies and limits on existing subsidies could reduce wetlands destruction after *Sackett* but action by Congress and the executive branch is highly unlikely to fill the Sackett Gap.

B. STATE AND LOCAL OPTIONS FOR WETLANDS PROTECTION

State and local governments provide additional options for wetlands protection. The CWA is designed to complement state wetlands protections: It provides for and authorizes states to impose more stringent requirements than required by the CWA, and some states have imposed stricter requirements. ¹⁴² Fearing degradation post-*Sackett*, Colorado officials issued an interim policy requiring anyone damaging a wetland left unprotected after *Sackett* to notify the state environmental agency. ¹⁴³ In June of 2023, the Wisconsin Department of Natural Resources (DNR) affirmed that *Sackett* did "not alter Wisconsin's wetland regulations under state law." ¹⁴⁴ Wisconsin defines wetlands as "an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and has soils indicative of wet conditions," ¹⁴⁵ a definition that parallels the pre-*Sackett* federal wetlands definition. ¹⁴⁶

^{140.} Stone, *supra* note 119, at 150.

^{141.} *Id*.

^{142.} See, e.g., McKinstry, supra note 33, at 338–39 ("[T]he Clean Water Act specifically authorizes states to impose more stringent requirements. Therefore, state requirements for permits are often more stringent than the federal requirements"); FLA. STAT. §§ 403.91–.916 (repealed 1993).

^{143.} John Flesher & Michael Phillis, States at the Forefront of Fights Over Wetlands Protections After Justices Slash Federal Rules, ASSOCIATED PRESS (Aug. 30, 2023), https://apnews.com/article/wetlands-supreme-court-state-rules-development-4917c6df50c0cd15da2915fc12f9445e [https://perma.cc/Z3KH-F8WD].

^{144.} Press Release, Wis. Dep't of Nat. Res., State Wetland Regulations Remain Intact After SCOTUS *Sackett* Decision (June 2, 2023), https://dnr.wisconsin.gov/newsroom/release/77381 [https://perma.cc/S9LR-BJVN].

^{145.} Wis. Admin. Code NR § 103.02(5) (2025); WIS. STAT. § 23.32(1) (2025).

^{146. 40} C.F.R. § 232.2 (2019) ("The term wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and

Wisconsin addresses the concerns raised by the Supreme Court in *Sackett*—that innocent landowners may be unaware of wetlands on their property and disproportionately penalized through the Wetland Identification Program. 147 The program's webpage warns landowners that they should contact DNR staff to determine if wetland identification or confirmation is required for their project, and that "[i]f your property is in a low area, has standing water for part of the year, and has common wetland plants . . . you likely have wetlands" even if the area is dry most of the time. 148 The Wisconsin DNR also provides a mapping feature that assists potential property purchasers in locating known wetlands on properties they may be targeting. 149 These features allow Wisconsin to streamline the permit process without risking surprise property devaluations for good faith purchasers unaware of the existence of a protected wetland. Several other states have existing protections for wetlands beyond the scope of the Clean Water Act that may protect wetlands caught in the Sackett Gap. 150

In areas where wetlands are important to property values or tourist income, local grassroots efforts can encourage public governance on wetlands protection even without economic support. In traditionally conservative Comal County, Texas, ¹⁵¹ a

duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.").

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^{147.} Wetland Identification Program, WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/identification.html [https://perma.cc/D9JR-NXTM] ("The Wetland Identification Program assists landowners to determine if wetlands are present on their property.").

^{148.} *Id*.

^{149.} Surface Water Data Viewer, WIS. DEP'T OF NAT. RES., https://dnrmaps.wi.gov/H5/?Viewer=SWDV [https://perma.cc/ENC7-ACJ3].

^{150.} See Myers et al., supra note 11, at 2.

^{151.} Donald Trump won seventy percent of the county's votes in 2020 and seventy-two percent in 2016. See Comal County Texas, General Election Cumulative Results, COMAL CNTY. (Nov. 16, 2020), https://www.co.comal.tx.us/Vote/2020/11-03-2020/Results/Official%2020201103%20General%20Election%20Cumulative%20Results.pdf [https://perma.cc/X9F3-3HZC] (noting that Trump won 70.58% of votes in the county in 2020); Robert Price, Record-Breaking Turnout Sees Comal County Surpass Entire 2016 Vote Total, NEWS4 SAN ANTONIO (Oct. 26th, 2020), https://news4sanantonio.com/news/local/record-breaking-turnout-sees-comal-county-surpass-entire-2016-vote-total [https://perma.cc/ECX6-KZ8Y] ("In 2016, Donald Trump won nearly 73% of the vote in Comal County.").

2025]

series of dam failures threatened to drain lakes. 152 The threat energized lakefront communities into not only organizing but also voluntarily assuming enhanced tax burdens to repair dams whose repairs were functionally abandoned by local governments. 153 Similarly, many efforts focused on protecting Massachusetts wetlands from invasive vegetation were undertaken by local volunteer groups. 154 Scholars have also argued that the "home rule" authority delegated to local governments by certain state constitutions empowers localities to function as the primary locus of control for environmental efforts, especially if local governments take affirmative steps to ensure their policymaking bodies allow for broad public participation.¹⁵⁵ Local government initiatives can allow for small group organizing, citizen participation, and access to a greater extent than federal or state policymaking, 156 but local governments—like other levels of government—are susceptible to regulatory capture by special interests¹⁵⁷ and may be limited by risks of preemption by state or federal law, as well as lack of funds.

^{152.} Joe Barrett, On One Texas River, Four Dam Failures Show Harsh Reality of Aging Infrastructure, WALL St. J. (Aug. 2, 2023), https://www.wsj.com/articles/on-one-texas-river-four-dam-failures-show-harsh-reality-of-aging-infrastructure-bfc0f279 [https://perma.cc/X645-Z8F4].

^{153.} Id.

^{154.} Payne, supra note 8, at 532.

^{155.} *Id.* at 532–33 (citing MASS. CONST. amend. art. LXXXIX); *id.* at 547–50. In her article, Payne especially emphasizes the use of local planning commissions to conserve wetlands, which she argues allow for greater participation in the democratic process of wetlands management. *See generally id.* at 548–59. Payne notes, however, that state and federal law provide backstops for local systems, especially given what she characterizes as a "disturbing picture": that the greatest "weakness of citizen management of natural resources is the lack of training in law, engineering, and wetlands science." *Id.* at 545–46.

^{156.} See id. at 547–51.

^{157.} See generally SARAH F. ANZIA, LOCAL INTERESTS: POLITICS, POLICY, AND INTEREST GROUPS IN US CITY GOVERNMENTS (2022) (exploring the power of special interest capture of local politics to shape national conversations). There are certain parallels in regulatory capture critiques of local governments and private certification regimes because in both cases there is the possibility for broad goals ("sustainability" or "building safety") to have standards buried in the certification process which are lower than the public goal would imply. See, e.g., Peter J. May, Regulatory Regimes and Accountability, 1 REGUL. & GOVERNANCE 8, 17–18 (2007) (noting an example of parallel regulatory capture in both local government and private certification of building safety standards in New Zealand). But see Pranab Bardhan & Dilip Mookherjee, Capture and Governance at Local and National Levels, 90 Am. Econ. Rev. 135, 139 (2000) (describing an economic model of special interest capture that shows it is unclear

In addition, roughly one half of states prohibit the adoption of requirements stronger than the federal requirements, and even states and localities that fully embrace wetlands protection face strong legal constraints. State action on wetlands presents a defector or race-to-the-bottom problem—businesses in states that are willing to trade wetland development for economic benefits may outcompete their neighbors for doing so. States are also largely limited to regulating conduct that occurs within their borders, especially when it comes to regulating natural resources. Destruction of any wetland can have hydrological or ecosystem impacts on those around them, and destruction of one state's wetlands may degrade downstream water quality beyond that state's borders. 160

Many of the least protective states have large swaths of wetlands that are vulnerable after *Sackett*. Montana, South Dakota, Texas, Alaska, Louisiana, Mississippi, Alabama, Georgia, and South Carolina each have more than three million acres of wetlands or more than four percent of their land composed of wetlands, but some of the least protective wetlands laws in the country. ¹⁶¹ North Carolina's state legislature barred the state from adopting more stringent standards than those found in post-*Sackett* federal law. ¹⁶² The legislation doing so was initially vetoed by North Carolina's Democratic Governor, ¹⁶³ but the veto was overridden by the legislature. ¹⁶⁴ The North Carolina

whether there is a meaningful trend in capture between local and national governments).

- 158. See supra notes 10-12.
- 159. See generally Richard L. Revesz, The Race to the Bottom and Federal Environmental Regulation: A Response to Critics, 82 MINN. L. REV. 535 (1997); Kirsten H. Engel, State Environmental Standard-Setting: Is There a "Race" and Is It "to the Bottom"?, 48 HASTINGS L.J. 271 (1997).
 - 160. See, e.g., Wetlands, supra note 48.
- 161. Wetlands and Streams Most in Danger After the U.S. Supreme Court's Sackett v. EPA Ruling, EARTHJUSTICE (May 14, 2024), https://earthjustice.org/feature/sackett-epa-wetlands-supreme-court-map [https://perma.cc/5VST
- 162. E.A. Crunden, Sackett Fallout Leaves Wetlands' Fate to States, E&E NEWS (June 28, 2023), https://www.eenews.net/articles/sackett-fallout-leaves-wetlands-fate-to-states [https://perma.cc/SWS9-5Q65].
 - 163 *Id*
- 164. Lisa Sorg, House, Senate Override Governor's Veto of Farm Act, Jeopardizing 2.5 Million Acres of NC Wetlands, NC NEWSLINE (June 27, 2023), https://ncnewsline.com/2023/06/27/half-of-all-nc-wetlands-2-5-million-acres-in-jeopardy-because-of-state-legislation-court-ruling [https://perma.cc/9XWX-JPBG].

Department of Environmental Quality estimates that this bill puts 2.5 million acres of wetlands—seven percent of North Carolina's land mass—at risk of in-fill and pollution. 165

A promising option for states remains, however. A state like California with strong market power can set de facto national standards when the regulated industry has a national reach. 166 California has adopted climate reporting and animal care standards for companies that do business in California, and because many of the affected companies sell goods and services nationally, the California standards can have national effects. 167 Wetlands are often not destroyed directly as part of the sale of goods in national markets, though, so California standards that apply directly to wetlands are unlikely to be effective. California has also used public-private hybrid initiatives to develop de facto national standards. California has applied this approach to car and truck tailpipe standards by inducing leading manufacturers of cars and trucks not only to comply with its standards for vehicles sold in the state, but also to apply those standards nationwide. 168 We explore the possibilities for this public-private de facto national standards approach as part of our discussion of PEG options below.

III. PRIVATE ENVIRONMENTAL GOVERNANCE

Private governance initiatives can help fill the Sackett Gap by harnessing the motivations of the public and private sector organizations to protect newly vulnerable wetlands. PEG occurs when private actors perform functions traditionally assigned to government, including managing common pool resources, reducing negative externalities, and distributing environmental amenities. ¹⁶⁹ Sarah Light and Eric Orts argue that private governance instruments can be classified into seven basic categories

^{165.} Id.

^{166.} The "California Effect," first coined by David Vogel in discussions on the impacts of California's strict auto emissions standards on cars sold nationwide, has since been arguably extended outside the environmental context. See DAVID VOGEL, TRADING UP: CONSUMER AND ENVIRONMENTAL REGULATION IN A GLOBAL ECONOMY 248–70 (1995); see generally Jens Frankenreiter, Cost-Based California Effects, 39 YALE J. ON REGUL. 1155 (2022) (analyzing the "California Effect" in the context of data privacy law).

^{167.} The state's animal welfare standards survived a challenge in Nat'l~Pork~Producers~Council~v.~Ross,~143~S.~Ct.~1142~(2023).

^{168.} See VOGEL, supra note 166, at 248-70.

^{169.} Vandenbergh et al., Gap-Filling, supra note 22, at 3.

that parallel the instruments used in government regulation: information, prescription, procurement, market leveraging, tradeable permit regimes, insurance, and property. To For many sectors and regions, private actors—whether non-governmental organizations, philanthropists, corporations, or other private organizations—use these tools when seeking to achieve environmental and other social goals. PEG can bypass government gridlock and serve as a gap-filler when government regulatory regimes fail to fully mitigate environmental harms, To but academic research and advocacy organizations have yet to focus on adding private governance initiatives to the wetland protection effort post-Sackett. In this Part we define PEG, identify the drivers of PEG that are most likely to motivate companies and individuals to protect wetlands, and discuss a toolbox of promising PEG initiatives.

It is worth pausing here for a moment to discuss our use of the term "pre-Sackett" standards. As noted above, there are key differences in implementation—and required information—between top-down command and control legislative mechanisms for wetlands protections and diffuse solutions arising from a variety of actors. 172 One of these differences emerges from the ways in which standards are set and negotiated. In the pre-Sackett era, there was no single standard for what kinds of activities were or were not permitted when it came to filling wetlands—instead, the permitting process allowed the Corps of Engineers to negotiate with parties seeking to fill wetlands, establish boundaries appropriate for the wetland in question, and, to a lesser extent, enforce those boundaries. In the wake of Sackett, wetlands in the Sackett Gap are no longer subject to this negotiable barrier to development, and private actors (even major

^{170.} See Sarah E. Light & Eric W. Orts, Parallels in Public and Private Environmental Governance, 5 MICH. J. ENV'T & ADMIN. L. 1, 13 tbl.1 (2015); cf. Roy Boyd et al., Energy Taxation as a Policy Instrument to Reduce CO2 Emissions: A Net Benefit Analysis, 29 J. ENV'T ECON. & MGMT. 1 (1995) (evaluating the efficacy of energy taxation as a policy instrument); JAMES SALZMAN & BARTON H. THOMPSON, JR., ENVIRONMENTAL LAW AND POLICY 51–59 (5th ed. 2019) (surveying a variety of policy approaches to environmental protection); James Salzman, Teaching Policy Instrument Choice in Environmental Law: The Five P's, 23 DUKE ENV'T L. & POL'Y F. 363 (2013) (asserting that the five basic policy instruments are prescriptive regulation, property rights, penalties, payments, and persuasion); VANDENBERGH ET AL., GOVERNANCE, supra note 9, at 10–12.

^{171.} Vandenbergh et al., *Gap-Filling*, *supra* note 22, at 3; *see also* Vandenbergh & Gilligan, *Gridlock*, *supra* note 18, at 218.

^{172.} See supra Part II.

players like Target or Walmart) are unlikely to develop their own in-house Corps of Engineers.

Close examination of industry opposition to Sackett, however, reveals that industry treated pre-Sackett permitting reguirements more like a standard than a negotiation process. The opaque and bureaucratized Corps of Engineers permitting requirements counterintuitively created a walled garden around wetlands that offered greater protection by encouraging potential developers to design their projects in ways that avoided or minimized harm to wetlands, helping to avoid the delays and risk to investment-backed expectations imposed by a potential rejection.¹⁷³ Despite the fact that over ninety-nine percent of Corps of Engineers wetlands permits are ultimately granted, 174 firms conformed their behavior to higher standards to avoid the costly process of redesigning projects in response to Corps of Engineers comments, incurring time delay, and risking public response issues. Doing so from the design phase also assisted in aligning investor-backed expectations to what would be possible to gain a permit for. In short, investment-backed expectations dictated that most industry treat the permitting process more like a command-and-control regulation and less like a negotiated implementation process.

Advocates engaging with PEG, therefore, have two options in considering how to fill the Sackett Gap: recreate the bureaucracy of the pre-Sackett permitting process or recreate the effective level of protection offered by the permitting process's de facto protection requirements. PEG would, in most cases, be a poor fit for recreating the bureaucracy, but it suggests a variety of tools to recreate effective protection levels: Firms could incorporate the damage minimization strategies from Section 404(b)(1)'s implementing regulations into their supply chain requirements but extend the coverage to wetlands in the Sackett

^{173.} See generally Claire Krebs, The Army Corps of Engineers' Permits and Decisions, in The Advocate's Guide to Effective Participation in Environmental Permit Proceedings: For New and Expanded Liquefied Natural Gas (LNG) Export Facilities 153, 153–224 (2022), https://environmentalintegrity.org/wp-content/uploads/2022/09/LNG-guide-9_13_22-v3.pdf [https://perma.cc/Z88E-Q5RS] (criticizing the Corps of Engineers' process and encouraging involvement in Corps permit challenges).

^{174.} *Id.* at 160 (citing *Regulatory Program Frequently Asked Questions*, ARMY CORPS OF ENG'RS, https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Frequently-Asked-Questions [https://perma.cc/MWJ8-FZ96]).

Gap, for example.¹⁷⁵ Recreating the effective level of protection without the negotiable and opaque bureaucracy of the Corps of Engineers permitting process could also assist in alleviating some of the critiques raised by Justice Alito in his opinion—that the process could prove unduly and surprisingly burdensome on smaller actors like the Sackett family.

Recreating the bureaucracy of the pre-Sackett system in state or local law may protect Sackett Gap wetlands in the short term, but in the long term these state-level bureaucracies are likely to face the same challenges from the same constituencies that opposed the Corps of Engineer process. Recreating the effective level of protection offered pre-Sackett, however, appeals to private actors by enhancing certainty regarding behavioral requirements, reduces opacity in wetlands protection, and ultimately provides longer-lasting, less-negotiable levels of protection to wetlands in and out of the Sackett Gap. As such, when we discuss "pre-Sackett" standards used as tools in private environmental governance, they are a shorthand for the effective level of protection imposed via a permitting process, not an extension of the specific Corps of Engineers permitting process itself.

A. THE PRIVATE DRIVERS OF WETLANDS PROTECTION

Do corporations have sufficient incentives to take important pro-environmental actions not required by government regulations or are companies' pro-environmental commitments mere greenwashing?¹⁷⁶ Greenwashing is a genuine problem, and

^{175.} See 40 C.F.R. §§ 230.70–.77 (2024). Clean Water Act Section 404(b)(1) and its implementing regulations regulate the discharge of dredged or fill material (in-fill) into the waters of the United States and require those who engage in these kinds of discharges to seek permits. See id. § 230.2.

^{176.} See, e.g., Shelley Welton, Neutralizing the Atmosphere, 132 YALE L.J. 171, 174–77 (2022) (critiquing corporate climate commitments); Daniel C. Esty & Nathan de Arriba-Sellier, Zeroing in on Net-Zero: From Soft Law to Hard Law in Corporate Climate Pledges, 94 U. COLO. L. REV. 635 (2023) (noting concerns about whether net zero commitments will be fulfilled). Greenwashing is a pejorative used to critique false or misleading claims of pro-environmental action. See Amanda Shanor & Sarah E. Light, Greenwashing and the First Amendment, 122 COLUM. L. REV. 2033 (2022); Amy D. Roy et al., Litigation Risks Posed by 'Greenwashing' Claims for ESG Funds, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 25, 2022), https://corpgov.law.harvard.edu/2022/04/25/litigation-risks-posed-by-greenwashing-claims-for-esg-funds [https://perma.cc/F96G-GB9P] (stating that greenwashing consists of misleading claims made by corporations "about the climate-friendliness of their operations or the products they manufacture"); Emma Maris, The World is Finally Cracking Down on 'Greenwashing',

companies have been sanctioned for a wide range of false or unsubstantiated environmental claims. For instance, corporations face limited regulatory enforcement risks for failing to meet public net-zero climate commitments, and research has demonstrated that many have inadequate plans in place to implement their climate and other commitments. ¹⁷⁷ At the same time, they often have a surprisingly strong set of legal, social, and economic incentives to avoid false statements and reduce the environmental damage they cause. The key is to harness those incentives to protect wetlands.

1. Examples of PEG

The viability of PEG gap-filling regarding non-wetlands issues is demonstrated by the success of tools across multiple domains. The Marine Stewardship Council (MSC) certification and standards system applies to nineteen percent of all the fish caught around the world, and the Forest Stewardship Council system applies to twelve percent of all forests. The vast majority of the banks involved in project finance-funded development follow a private standard. Private supply chain standards have restricted the use of toxics by factories in both the Global North and Global South, and a recent empirical analysis of the largest firms in each of seven sectors found that eighty percent impose environmental requirements on their suppliers. Private land

ATLANTIC (Mar. 1, 2023), https://www.theatlantic.com/science/archive/2023/03/greenwashing-refuses-to-die/673241 [https://perma.cc/JMB8-G3E7]; Sebastião Vieira de Freitas Netto et al., Concepts and Forms of Greenwashing: A Systematic Review, 32 ENV'T SCIS. EUR. (2020); Ioannis Ioannou et al., How Greenwashing Affects the Bottom Line, HARV. BUS. REV. (July 21, 2022), https://hbr.org/2022/07/how-greenwashing-affects-the-bottom-line [https://perma.cc/5LAA-GRU9].

177. Oren Perez & Michael P. Vandenbergh, *Making Climate Pledges Stick:* A Private Ordering Mechanism for Climate Commitments, 50 ECOLOGY L.Q. 683, 685–86 (2023).

178. Our Strategy, Marine Stewardship Council, https://www.msc.org/about-the-msc/our-strategy [https://perma.cc/VWP8-6KRM] ("In 2023, 19% of global marine catch is either certified or engaged in the MSC program."); Marshall Newman, FSC: What Is It and Why Is It Important?, Martin Guitar (Apr. 20, 2022), https://www.martinguitar.com/blog-categories/sustainability/blog-042022-fsc.html [https://perma.cc/VV57-H3FQ] ("Today, more than 500 million acres of forest are [Forest Stewardship Council] certified, representing 12 percent of the world's forests.").

179. Michael P. Vandenbergh & Patricia A. Moore, *Environmental Governance by Contract: The Growing Role of Supply Chain Contracting*, 12 MICH. J. ENV'T & ADMIN. L. 1 (2022) [hereinafter Vandenbergh & Moore, *By Contract*];

trusts have conserved an area in the United States the size of Utah. 180 Even with the promise of a deregulatory push by the second Trump administration, oil executives urged the United States not to withdraw from the Paris Climate Agreement. 181

Climate change is one of the most active areas for PEG initiatives, and dozens have emerged over the last decade, many of which deploy several PEG tools in combination. 182 For instance, the dominant carbon accounting and disclosure standards around the world are the WRI/WBCSD Greenhouse Gas Protocol¹⁸³ and CDP, ¹⁸⁴ both private organizations and private standards. In addition, roughly four thousand companies and financial institutions have registered climate commitments with the Science Based Targets Initiative (SBTi), a private system that commits companies to a carbon emissions reduction glidepath and monitors their commitments¹⁸⁵—a rough analogue to the regulatory system the EPA might develop if it were authorized to do so. Major companies ranging from Maersk, the largest shipping firm in the world, to Walmart, the largest retailer, have implemented carbon reduction programs not required by governments but encouraged and supervised by major environmental advocacy groups. Research by the United Nations suggests that these types of private sector climate activities have the potential to

see also Michael P. Vandenbergh, The New Wal-Mart Effect: The Role of Private Contracting in Global Governance, 54 UCLA L. REV. 913, 916–17 (2007) [hereinafter Vandenbergh, Global Governance] (concluding that roughly half of the firms in these sectors in 2004 imposed environmental requirements on their suppliers).

- 180. See VANDENBERGH ET AL., GOVERNANCE, supra note 9, at 4.
- 181. See Rebecca F. Elliott, Exxon Chief to Trump: Don't Withdraw from Paris Climate Deal, N.Y. TIMES (Nov. 12, 2024), https://www.nytimes.com/2024/11/12/business/energy-environment/exxon-mobil-baku-climate-cop29.html [https://perma.cc/4P8W-PTG2]. These efforts were ultimately unsuccessful. See Exec. Order No. 14162, 90 Fed. Reg. 8455 (Jan. 30, 2025) (instructing the U.S. ambassador to the United Nations to formally withdraw from the Paris Agreement).
- 182. VANDENBERGH & GILLIGAN, POLITICS, *supra* note 22, at 119–76 (discussing emergence of private responses to climate change).
- 183. About WRI & WBCSD, GREENHOUSE GAS PROTOCOL, https://ghgprotocol.org/about-wri-wbcsd [https://perma.cc/MD46-YJDM].
- 184. About Us, CDP, https://www.cdp.net/en/info/about-us [https://perma.cc/PMM8-K8ZJ].
- 185. See Companies Taking Action, SCI. BASED TARGETS, https://sciencebasedtargets.org/companies-taking-action [https://perma.cc/VZ4Q-MDNK].

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reduce carbon emissions by several billion tons per year. 186 These PEG initiatives typically cannot fully solve the problems they are designed to address, but in many cases they are buying time, making major contributions, and in some cases increasing the likelihood of government action. 187

2. PEG Motivations for Wetlands Protection

To succeed, PEG initiatives will need to account for companies' motivations for destroying wetlands and will need to be designed to produce sufficient countervailing pressure. The principal drivers for PEG initiatives are economic gains from efficiency, anticipation of future regulatory change, employee recruitment and retention, retail consumer responses, community stakeholder responses, corporate supply chain pressure, and investor, lender, and insurer pressure. Peg Commitments, even if there is political change. Peg Commitments, even if there is political change. Peg All of these drivers are influenced by reputation or brand pressure, and although they are often conflated with retail consumer behavior, they involve many additional factors and—through a wide range of commercial agreements—they reach firms with little or no direct consumer exposure.

Cost Savings from Efficiency. A major incentive driving corporate participation in many PEG initiatives is cost savings, but cost savings may be a limited incentive for wetlands preservation. PEG initiatives such as product carbon labeling, toxics use reduction, and corporate climate net zero commitments often generate large cost savings by reducing energy and raw materials use, creating incentives for adopting and expanding PEG

^{186.} Angel Hsu et al., Bridging the Gap: The Role of Non-State and Subnational Actors (discussing a comparative analysis of studies), in U.N. Env't Programme [UNEP], Emissions Gap Report 2018, at 29, 38–40, UNEP Job No. DEW/2210/NA (Nov. 2018), https://www.unep.org/resources/emissions-gap-report-2018 [https://perma.cc/HG8M-ZBV2]; see also id. at 41 (discussing non-state actors, including companies, and their roles as orchestrators, catalytic linkages, and experimenters in the climate space).

^{187.} Governments can also engage in private environmental governance when they act as market participants. *See* Clopton & Shoked, *supra* note 6, at 2594.

^{188.} See VANDENBERGH & GILLIGAN, POLITICS, supra note 22, at 385–87.

^{189.} Elliott, *supra* note 181 (noting that Exxon Mobil is encouraging climate regulation in part because they have invested in lithium harvesting and "using natural gas to make hydrogen").

activities in these areas.¹⁹⁰ Cost savings may be less likely to arise from efforts supporting wetlands preservation, however, since reducing energy or resource use is unlikely to be an important aspect of wetlands preservation. PEG efforts to protect wetlands will need to draw on other drivers.

Anticipation of Regulation. Companies also may participate in PEG initiatives to anticipate and reduce the cost of future regulatory programs, but similarly may not be the strongest tool for wetlands preservation. Even if a regulatory regime does not currently prohibit a destructive action, the threat of future statutes restricting business practices may encourage enterprises to proactively implement environmental standards, but businesses that will profit from destroying a wetland not protected after Sackett may reasonably assume that they will face little regulatory pressure for many years. 191

Assurance of Supply. Companies may also be motivated because they face risks to the sustainability of their future ability to profit from selling natural resource-based products. This future market risk was an early motivation for the MSC certification system: Walmart and Unilever could not profit if they could not obtain fish because a fishery was permanently depleted, so they had an interest in maintaining yields at sustainable levels. Por Unilever, the business risks arising from declines in the cod population that threatened their ability to supply retail fish products induced the company to work with the World Wildlife Fund (WWF) to develop private standards for fishing stock protection. Similarly, Walmart's grocery arm, Sam's Club, is one of the largest in the United States, and it can wipe out entire fisheries if it sources fish exclusively from them.

^{190.} See generally Khan M.R. Taufique et al., Revisiting the Promise of Carbon Labelling, NATURE CLIMATE CHANGE, Feb. 2022, at 132; Michael P. Vandenbergh, Keynote: Motivating Private Climate Governance: The Role of the Efficiency Gap, 71 ARK. L. REV. 349 (2018).

^{191.} See, e.g., VANDENBERGH ET AL., GOVERNANCE, supra note 9, at 3–12 (discussing the reasons why businesses may engage in PEG).

^{192.} See The Press Ass'n, Sustainable Seafood: The First 20 Years, MARINE STEWARDSHIP COUNCIL (Apr. 25, 2017), http://20-years.msc.org [https://perma.cc/P7M7-QTDT]; see also Statement of Intent from WWF and Unilever (Feb. 22, 1996), in Sustainable Seafood: The First 20 Years, supra.

^{193.} See Statement of Intent from WWF and Unilever, supra note 192; Our History, MARINE STEWARDSHIP COUNCIL, https://www.msc.org/about-the-msc/our-history [https://perma.cc/BQZ7-7LEU].

The U.S. commercial seafood harvest is a \$5.6 billion industry, ¹⁹⁴ and grocers and food manufacturers have incentives to hold their suppliers and partners to wetlands protection if they risk their future ability to supply key products. It is unclear whether firm managers are aware of this risk, though, or whether they believe they can simply shift to other resources. Given the benefits wetlands provide in the fight against climate change, ¹⁹⁵ enterprises who face physical risks from flooding, wildfires, or other climate-enhanced disasters also have an interest in the long-term protection of wetlands. But the risk created by any one action is shared so broadly as to be largely meaningless, and adequate information about the risk would be necessary.

Public Preferences for Environmental Protection. PEG initiatives for wetlands can draw on another important driver of corporate behavior, though: the support for wetlands protection expressed by roughly seventy-five percent of the American population. This support may be reflected in consumer behavior, but even if it is not, it can affect employee recruitment and retention, retail investing and banking, community stakeholder responses to corporate operations, manager norms, and many other aspects of the business environment. Individuals often

^{194.} Fisheries of the United States, 2018, NOAA FISHERIES (Feb. 21, 2020), https://www.fisheries.noaa.gov/feature-story/fisheries-united-states-2018 [https://perma.cc/G4WG-BPP9].

^{195.} See supra Part I.A.

^{196.} See supra note 17 and accompanying text.

^{197.} Take, for example, the boycotts and "buycotts" in the wake of several companies' decisions to draw down diversity, equity, and inclusion (DEI) efforts at the beginning of the second Trump administration. See, e.g., Steve Karnowski, After Target Backs Away from Diversity Programs, Civil Rights Activists Call for a Boycott, PBS (Jan. 31, 2025), https://www.pbs.org/newshour/nation/after-target-backs-away-from-diversity-programs-civil-rights-activists -call-for-a-boycott [https://perma.cc/NG8L-WELF] (reporting on the call to boycott Target over its decision to phase out DEI initiatives); Tom Krosnowski, Rev. Al Sharpton Hosts 'Buy-cott' Rally at NJ Costco for Preserving DEI, NEWS 12 N.J. (Feb. 1, 2025), https://newjersey.news12.com/rev-al-sharpton-hosts -buy-cott-rally-at-nj-costco-for-preserving-dei [https://perma.cc/K432-2LYY] (reporting on a group of local leaders who encouraged others to buy from Costco after it announced its decision to keep DEI initiatives, even after Trump signed an executive order that ended DEI in federal programs and encouraged the private sector to follow suit).

^{198.} See Vandenbergh, Global Governance, supra note 179, at 921 ("[I]n many situations [the] preferences [for sustainable practices] cannot be exercised effectively by civic behavior such as voting or public commentary directed at government. Instead, individuals act on those preferences through their private

find themselves unable to express their environmental preferences through civic behavior, leaving them with few options other than expressing their preferences through private market behavior. Passage As Americans have grown increasingly concerned about long-term climate and environmental risks, consumer demand for environmentally compliant goods has grown, but consumer reputation or willingness to pay more for green goods may be a surprisingly small part of the motivation for companies to reduce wetlands destruction. Passage have been increasingly demanding improved environmental performance—in the race for talent, companies use sustainability efforts as a recruitment and retention asset. This applies not only to a company like Patagonia, which has made nature a key part of its corporate narrative and brand, but also potentially to companies in investing, banking, and other sectors that need to recruit well to

market behavior (as consumers or investors) or through their behavior as employees and managers of firms.").

199. See id.

200. See Anthony Leiserowitz et al., Climate Change in the American Mind: Beliefs & Attitudes, Yale Program on Climate Change Commo'n 15 (2023), https://climatecommunication.yale.edu/wp-content/uploads/2024/01/climate-change-american-mind-beliefs-attitudes-fall-2023.pdf [https://perma.cc/DQE8-HKDD] (finding that an increasing majority of Americans are worried about global warming); Alec Tyson et al., What the Data Says About Americans' Views of Climate Change, PEW RSCH. CTR. (Aug. 9, 2023), https://www.pewresearch.org/short-reads/2023/08/09/what-the-data-says-about-americans-views-of-climate-change [https://perma.cc/S7QK-P5KZ] (finding that a majority of U.S. adults in 2023 described climate change as a major threat to the country's well-being, an increase compared to the early 2010s).

201. See, e.g., Larry Fink, Larry Fink's 2020 Letter to CEOs: A Fundamental Reshaping of Finance, BLACKROCK (2020), https://www.blackrock.com/us/individual/larry-fink-ceo-letter [https://perma.cc/R5YY-BMNP] (stating that in the absence of robust disclosures provided to ascertain whether companies are properly managing risks caused by climate change, investors will increasingly conclude that companies are not adequately managing risk).

202. See Vandenbergh & Gilligan, Politics, supra note 22, at 185 ("[C]orporations may participate in private climate initiatives in an effort to improve the recruitment, motivation, and retention of employees."); Hank Boerner, Millennials Really Do Want to Work for Environmentally-Sustainable Companies, According to a New Survey of Large Company Employees, Governance & Accountability-Inst., Inc. (Feb. 25, 2019), https://ga-institute.com/Sustainability-Update/millennials-really-do-want-to-work-for-environmentally-sustainable-companies-according-to-a-new-survey-of-large-company-employees [https://perma.cc/3W8M-AYUS] (indicating that many millennials have said that "corporate sustainability is a priority" and most would take a pay cut to work in an environmentally-responsible company).

survive.²⁰³ In turn, these retail customer and employee pressures can affect major investment firms and banks. In the last several years, universal owner theory has emerged to argue that the investment firms that hold large, diversified equity portfolios may have incentives to ensure that the companies in their portfolios do not profit by environmentally destructive actions that harm other parties.²⁰⁴ For diversified portfolios with long-term investment horizons such as pension funds, economic self-interest may dictate demanding environmental performance from the companies they own.²⁰⁵

In the wake of Spence v. American Airlines, in which a judge in the Northern District of Texas found that a pension fund breached its fiduciary duty (but not its duty of prudence) by allowing "corporate interests, as well as BlackRock's ESG interests, to influence management" of a retirement plan, 206 there has been some alarm raised on whether investors can use fund management tools as a PEG lever. While beyond the scope of this Article, these concerns may be overstated. Spence v. American Airlines focused on proxy voting practices of the fund manager in relation to ESG investing, which includes priorities such as diversity, equity, and inclusion efforts and corporate governance²⁰⁷ that—while not lacking in merit of their own accord—do not necessarily carry the same discrete long-term financial and physical risk profiles as climate- and other environment-related practices. The court in Spence makes clear that "[i]nvesting that aims to reduce material risks or increase return for the exclusive

^{203.} See Our Environmental Impact Programs, PATAGONIA, https://www.patagonia.com/our-responsibility-programs.html [https://perma.cc/N8DT-AR53] (explaining that Patagonia is committed to reducing its environmental footprint); Eric Lowitt, Patagonia's "Buy Less" Campaign May Lead to More Revenue, HARV. BUS. REV. (Oct. 3, 2011), https://hbr.org/2011/10/patagonias-buy-less-campai [https://perma.cc/JJ5Q-PDRR] (explaining that if companies see profit growth as the result of sustainable practices, sustainability will become more closely aligned with business as a result).

^{204.} See Madison Condon, Externalities and the Common Owner, 95 WASH. L. REV. 1, 66–68 (2020) (explaining that "universal owners," meaning investors that are significantly diversified such that they have a long-term interest in the health of the economy as a whole, may have "an economic incentive to mitigate the harms climate change impose[s] on their portfolios").

^{205.} See Fink, supra note 201 ("Climate change has become a defining factor in companies' long-term prospects.").

^{206.} Spence v. Am. Airlines, Inc., No. 23-cv-00552, 2025 WL 225127, at *2 (N.D. Tex. Jan. 10, 2025).

^{207.} *Id.* at *11 (explaining that criteria informing ESG investing included social advocacy factors and governance factors).

purpose of obtaining a financial benefit is *not* ESG investing," even if it results in similar strategies.²⁰⁸ The decision suggests that BlackRock's error was its failure to justify its ESG investing in financial terms, not the ESG investing itself.²⁰⁹ Harm to wetlands—like harm to climate—carries long-term financial and physical risks,²¹⁰ and the strong support for wetlands protection by the public suggests that financial risks may arise if employees, retail customers, and local communities react negatively to news that an organization has contributed to wetlands destruction. Accordingly, *Spence*'s critique does not preclude continued incentives for banks and other for-profit organizations to put their weight behind tailored environmental efforts, especially where they measurably improve bottom lines.

Pressure via Commercial Transactions. Even if they are not directly subject to retail customer pressure, companies also may be induced to protect wetlands because of pressure from corporate buyers, as well as the policies and practices of their investors, lenders, landlords, and insurers. Contract, lease, and agreement language provides both an expressive tool for stating environmental preferences and the primary persuasive tool through which private actors can exert specific preferences on others. Commercial transactions include merger and acquisition agreements; commercial loans; real estate sales and leases; project finance, asset purchase agreements; insurance agreements; and more. They occur with enterprises of all sizes, from the smallest single proprietorship to the largest publicly traded company. Environmental lawyers, managers, and consultants work on thousands of these agreements per year, involving billions of dollars of assets and generating millions of pages of work

^{208.} *Id.* at *12. *But see id.* (noting that a mix of environmental and fiduciary interests would be unacceptable in a fossil-fuel specific example).

^{209.} *Id.* at *15 ("BlackRock was never asked to provide any financial or empirical analysis justifying its ESG investing . . . as in the best financial interest of shareholders."). It is worth noting, however, that using an ESG label may carry increased risk in 2025. *See* Isla Binnie, *BlackRock's Fink Says He's Stopped Using "Weaponized" Term ESG*, REUTERS (June 26, 2023), https://www.reuters.com/business/environment/blackrocks-fink-says-hes-stopped-using -weaponised-term-esg-2023-06-26 [https://perma.cc/S4L4-43RB] ("BlackRock boss Larry Fink, at the forefront of the business world's adoption of [ESG] standards, has stopped using the term, saying it has become too politicized.").

^{210.} See supra Part I.

product.²¹¹ The records from these agreements, including the text of the final agreements themselves, are a valuable tool for diligence by environmental advocates, who can use reports generated in the transactions in advocacy and litigation.²¹²

Most transactions include representations, warranties, and covenants that include disclosure of environmental information and liabilities—lawyers and consultants carry out environmental due diligence during the transaction process to ensure that these representations and warranties are true, generating a substantial paper trail in the process.²¹³ This diligence can include review of environmental reports; access to facilities, documents, and employees; and use of environmental scientists to carry out investigations.²¹⁴ These investigations and diligence processes are driven by governments, with transparency motivated by a desire to carry out the transaction and avoid potential grounds for breach of warranties as a basis for dissolving a deal or money damages.²¹⁵ As a result, the access available to transaction teams is often greater than what any NGO or government would have in a typical environmental investigation, where companies have public relations or compliance motives to prevent full disclosure of any environmental harms. These diligence reports are largely discoverable, however, and their existence is reflected in the presence of representations and warranties in transactions made public due to Securities and Exchange Commission (SEC) rules.²¹⁶ As a result, even in the absence of environmental rules

^{211.} See VANDENBERGH ET AL., GOVERNANCE, supra note 9, at 267 ("Environmental lawyers and managers work on many thousands of commercial transactions every year involving billions of dollars in assets.").

^{212.} See id. ("These agreements also enable environmental advocates to use the existence of environmental reports and other documents generated during commercial transactions in advocacy campaigns and litigation.").

^{213.} See id. at 267–68 ("For instance, in a transaction in which one party is acquiring a factor, a representation states that the 'Seller has made available to Buyer copies of all Environmental Reports that are in the possession or within the reasonable control of Seller.' . . . [R]epresentations are often accompanied by warranties that provide the counterparty with the opportunity to sue if it later learns that the representations were untrue.").

^{214.} See id. at 268 ("Agreements in commercial transactions also often require a party to provide access to its facilities, documents, and employees for environmental investigations.").

²¹⁵. See id. at 266 (explaining that companies will hire lawyers to conduct due diligence and review the inspection and compliance records).

^{216.} See id. at 267 ("Although private contracts are not typically available to the public, the [SEC] requires publicly traded companies to file certain types of

contained within any given transaction, the structure and record-generating functions of a commercial transaction create incentives for improved environmental behavior.

Corporations with interests in environmental protection can use commercial transactions as a regulatory or prescriptive tool. Target Corporation's standard supplier agreement provides an example of the type of language often used in supply chain contracts by major firms: "We will not tolerate suppliers with undersized, bypassed, or inoperable wastewater treatment systems. Suppliers must install and maintain appropriately sized wastewater treatment systems to ensure that pollutants are at or below legally required levels."217 Note that this provision does not simply require minimal compliance with government regulations. The language is prescriptive and places Target in the role of private regulator of its suppliers. Suppliers are given an incentive—access to Target's \$100 billion per year market²¹⁸—to proactively investigate, treat, and maintain the suppliers' wastewater treatment systems. Target is also given the legal authority to play an enforcement role, with withdrawal or modification of a supplier agreement serving as a powerful potential punishment for non-compliance. The common use of these types of provisions suggests that corporations are increasingly recognizing that achieving environmental benefits often aligns with profitability, shareholder preferences, and reputation.

An additional feature of commercial transactions—and other forms of PEG—is that private actors are less constrained than public ones by political boundaries. For instance, supply chain contracting can extend private environmental standards to suppliers operating in states and countries with limited legal authority or resources.²¹⁹ Commercial transactions thus have

material agreements and makes them available in its EDGAR database. This free database is a valuable source of data for environmental lawyers, managers, and advocates.").

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^{217.} Standards of Vendor Engagement, TARGET, https://corporate.target.com/sustainability-governance/responsible-supply-chains/suppliers/standards-of-vendor-engagement [https://perma.cc/6YP6-T7DN].

^{218.} See Sarah Nassauer & Charity L. Scott, Target Profit Rises as Annual Revenue Crosses \$100 Billion, WALL St. J. (Mar. 1, 2022), https://www.wsj.com/articles/target-profit-rises-as-annual-revenue-crosses-100-billion-11646134269 [https://perma.cc/W8EV-NGAS] (reporting that Target's revenue reached above \$100 billion in 2021).

^{219.} See generally Vandenbergh & Moore, By Contract, supra note 179, at 18 ("[S]upply chain contracting can extend pressure for climate commitments from large firms to the much larger pool of small firms.").

the potential to provide additional protections to wetlands in states that decline to adopt adequate government requirements. 220

Avoidance of Group Identity Barriers. Another important feature of PEG initiatives arises from deeper group identities and norms. The right to develop wetlands has become a cause célèbre for some conservatives, and the states that have blocked greater wetlands protections are often dominated by this group, but private initiatives to protect the environment have shown an ability to bypass some identity group-based barriers and may be able to do so for wetlands.²²¹ Empirical research demonstrates that private sector action can avoid solution aversion—the resistance to facts about a problem based on aversion to the anticipated solution—among conservatives on environmental issues.²²² In short, when conservatives become aware of the private sector responses to environmental problems, they become less resistant to addressing the problems. Although high profile initiatives based on "woke" critiques have created barriers to ESG investing and private sector climate change initiatives, and many conservative states and localities have been hesitant to support environmental causes in public, some have embraced sustainability efforts.²²³

^{220.} Private governance can also provide for solutions that are tailored to regulated industries by allowing for negotiation to adapt environmental standards to specific industries or problems. See Dave Owen, The Negotiable Implementation of Environmental Law, 75 STAN. L. REV. 137, 140 (2023) (discussing negotiation as a "defining feature of environmental law").

^{221.} See Vandenbergh & Gilligan, Politics, supra note 22, at 134–38 (explaining that an advantage to private governance initiatives is in their ability to provoke government action where the general population cannot); Vandenbergh, Polarized, supra note 9, at 59–82 (describing the "current state of gridlock regarding major pollution control statutes" and the possibility for private sector-driven environmental change).

^{222.} See Michael Vandenbergh et al., Convincing Conservatives: Private Sector Action Can Bolster Support for Climate Change Mitigation in the United States, ENERGY RSCH. & SOC. SCI., Mar. 2021, at 1, 9 (considering solution aversion and concluding "[o]ne promising new avenue involves shifting the actor who will respond to the problem and the type of action, such as focusing on the potential contribution of private sector action").

^{223.} See Currier, supra note 88, at 538–40 ("[A]n example of this cycle can be seen in the adoption of solar energy in Texas. Several companies, including Anheuser-Busch, have subsidized—or even sponsored entirely—solar farm construction to power their Texas facilities. In response, Austin and other Texas cities have identified development of decarbonized grids (and especially solar farms) as a way to attract future investments in their cities."); id. at 551 n.94

As we indicated at the outset, PEG initiatives cannot be expected to fill the Sackett Gap. Private actors may be insufficiently motivated by public concern about wetlands or may have limited influence on the firms and individuals that profit from wetlands destruction. In addition, states have shown an increasing willingness to threaten or sue investors, lenders, insurers, and retail companies to discourage them from engaging in PEG, and attempts by major players to act in concert and create consistent standards can raise antitrust concerns. ²²⁴ State anti-ESG efforts have slowed the activity on climate change and other environmental issues, but they have not prevented the development of successful PEG initiatives.

B. PEG INITIATIVES FOR WETLANDS PROTECTION

A wide range of PEG initiatives could contribute to filling the Sackett Gap. We explore several here. We do so by examining the most promising instruments, private regulators, and targets, but we emphasize that many more PEG instruments and actors are available to fill the gap.

Information: A Certification and Standards System for Wetlands

If seventy-five percent of the U.S. population favors increased protection for wetlands, why does the Sackett Gap exist?²²⁵ As to government, democracy deficits at the federal and state levels may explain the remarkable retrenchment represented by *Sackett*. As to the private sector, however, there is an information problem. Individuals are buying homes, working in offices, and shopping in stores on filled wetlands, buying foods grown on filled wetlands, and buying wood products harvested with practices that damaged wetlands. Employees with strong

^{(&}quot;For example, political officials in Texas and Florida have roundly criticized and threatened enforcement action against investment groups that consider ESG.").

^{224.} See generally Michael P. Vandenbergh et al., Model Environmental Supply Chain Contracts (examining how businesses can leverage contractual relationships with supply chain partners to achieve positive environmental benefits), in Contracts for Responsible and Sustainable Supply Chains: Model Clauses, Legal Analysis, and Practical Discussion 163 (David Snyder & Susan Maslow eds., 2023).

^{225.} See supra note 17 and accompanying text.

environmental values are working in those companies, unaware of their corporate practices. ²²⁶ And so on.

Two powerful drivers of private environmental governance are consumer demand for environmentally compliant goods and corporate citizens seeking to ensure the continued health of their raw materials.²²⁷ Wetlands protection implicates both. Because wetlands have frequent public contact through recreation²²⁸ and are home to a variety of charismatic megafauna,²²⁹ goods with wetlands-conserving bona fides are likely to find a market niche. Because wetlands serve as valuable fish hatcheries, they are vital to ensuring the continued viability of the international seafood market.²³⁰ This confluence of drivers makes wetlands protection a strong candidate for certification and labeling standards.

226. Interestingly, these employees and consumers are not just those who would be considered as part of traditional environmental constituencies on the political left. One of the largest nonprofits devoted to wetlands protection is Ducks Unlimited, a group founded by waterfowl sportsmen which proudly partners with Bass Pro Shops and other major hunting chains. See Ducks Unlimited: A Profile of the World-Changing Power of the American Sportsman, BASS PRO SHOPS NEWSROOM (July 28, 2022), https://about.basspro.com/newsroom/stories/ducks-unlimited-a-profile-of-the-world-changing-power-of-the-american-sportsman [https://perma.cc/Z5GC-KEJB] (profiling Ducks Unlimited as "one of the most storied groups in the history of conservation"); Ducks Unlimited's 2023 Annual Report, DUCKS UNLIMITED (Nov. 22, 2023), https://www.ducks.org/conservation/national/ducks-unlimiteds-2023-annual-report [https://perma.cc/NA22-BJX8] ("[For] Fiscal Year 2023 . . . 684,000 members [of Ducks Unlimited] and more than 1 million supporters continue[d] to save the wetlands and waterfowl ").

227. See Vandenbergh & Gilligan, Politics, supra note 22, at 180–86 (discussing how "behavior by green consumers can be an important motivator" however, "[f]or some companies, pressure from corporate customers may be more important than pressure from retail customers").

228. See supra notes 13-36 and related discussion.

229. See Carlotta Mazzoldi et al., From Sea Monsters to Charismatic Megafauna: Changes in Perception and Use of Large Marine Animals, PLOS ONE, Dec. 31, 2019, at 1, 2–3 (describing "marine megafauna"); see also Quinton White, A Zeal to Save the Embattled Gentle Giant Often Seen in Jacksonville Waters, the Manatee, FLA. TIMES-UNION (Feb. 1, 2022), https://www.jacksonville.com/story/news/environment/2022/02/01/manatees-jacksonville-florida-waters-trouble-again/9277537002 [https://perma.cc/4V2U-TS65] ("Our charismatic megafauna, the manatee, which is also the Florida state animal, is in trouble—again.").

230. See infra note 324 and accompanying text; Bren Smith, Eat Like a Fish: My Adventures as a Fisherman Turned Restorative Ocean Farmer 11–17, 48–53, 243–251 (2019) (noting the existential threats to seafood production internationally).

A first step, therefore, is the creation of a system to provide accurate information in simple, clear terms that retail consumers, employees, corporate buyers, investors, lenders, landlords, and insurers can use when deciding whether and how to engage with companies. A successful system will enable firms to make credible commitments to follow the pre-Sackett WOTUS definition and decision makers to act on that information. To avoid incentives for greenwashing, costly signaling will be necessary. In other words, those firms that make these commitments will need to do more than just signal vague support for the pre-Sackett definition. They must pay a price for signaling in the form of their willingness to prefer or only deal with other firms that abide by the pre-Sackett boundary.

This could take the form of a certification system that not only drives consumer behavior but also enables firms to make a public commitment to abide by the pre-Sackett definition and to adopt policies that prefer or require commercial transactions only with firms that also agree to abide by the pre-Sackett definition. Groups such as WWF and the Environmental Defense Fund have extensive experience developing these types of systems, and this would be far easier than the leading example—the MSC.

Proponents of consumer environmental certifications and labels cite the ways that they allow consumers to "vote with their wallets," while their detractors frame them as a form of greenwashing. Labeling and standards, however, have utility beyond consumer marketing: They provide templates and roadmaps for corporations seeking to ensure their products and services are environmentally compliant. Take the example of the MSC, a certification standard developed in the wake of cod fishery collapses in the 1990s. Labeling 1996, after international instruments failed to control cod takes in the North Atlantic, Unilever (then, one of the largest purchasers of fish) began talks with WWF on methods to prevent population collapse. Modeling

^{231.} See Vandenbergh & Gilligan, Politics, supra note 22, at 143, 205—11 (describing how initiatives such as carbon footprint labeling of consumer products may lead to more informed consumption while pressuring retailers to disclose information).

^{232.} See supra note 178 and accompanying text; Will Martin, Marine Stewardship Council: A Case Study in Private Environmental Standard-Setting, 44 ENV'T L. REP. 10097, 10097–100 (2014) (examining key features of the MSC, including its standard-setting process).

^{233.} See Our History, supra note 193 (describing how the MSC came about).

their process off the Administrative Procedure Act and adopting many of its core functions,²³⁴ the MSC developed standards for fishery certification and a clear labeling standard that allowed suppliers and consumers to distinguish between compliant and non-compliant goods.

Creating and overseeing a certification regime, when done transparently, with stakeholder input, and with a degree of independence, ²³⁵ allows for the development of meaningful, scientifically literate standards. Once developed, certification and labeling regimes have impacts far beyond consumer choices. With supply chain contractors able to substitute a relevant certification for in-house development of tailored benchmarks, ²³⁶ it is easier to impose private environmental requirements on suppliers without incurring the costs of full design, implementation, and monitoring of a specific standard. Incorporation of certification standards into private law may infuse wetlands protections into nominally nonenvironmental legal doctrines, including torts, tax, and property standards. ²³⁷

Activists and industry could work towards filling the Sackett Gap by developing a new standard for goods produced through wetlands-protective methods. A new standard is not required for labeling and certifications to have a meaningful impact on isolated wetlands, however. Existing standards and labeling organizations can simply incorporate the pre-Sackett WOTUS definitions into their certification standards where appropriate. Since this will merely freeze the scope of wetlands protections requirements to the standard enshrined in law before the Sackett Gap opened, firms may find it easier to agree to this certification than many others.

^{234.} See Currier, supra note 88, at 565 ("In crafting [the MSC's] certification regime, [the MSC] looked to the Administrative Procedure Act for inspiration, adopting many of its core functions.").

^{235.} The MSC was careful to avoid subsidization by either WWF or Unilever, though both were involved in its founding, to avoid the appearance of industry capture or activist control. *See* Currier *supra* note 88, at 543 ("They worked to separate the Marine Stewardship Council from subsidiarization under either Unilever or WWF, understanding that buy-in from other organizations and consumers would require independence.").

^{236.} See supra notes 219-20 and related discussion.

^{237.} See Meidinger, supra note 18, at 10171–74 ("Environmental certification standards can also be incorporated into legal systems through nominally nonenvironmental laws [e.g., tort, tax, and property laws].").

2. Supply Chain Contracting Initiatives: The Agriculture and Timber Sectors

Once the information problem is overcome, the next step in a PEG wetlands effort is to extend the pressure for following the pre-Sackett definition to those sectors that are most likely to destroy wetlands, including companies in the agriculture, homebuilding, and timber sectors. This can be done through a wide range of commercial agreements, but this section focuses on the potential for supply chain contracting to shift incentives in the agriculture and timber sectors. Although companies in the agriculture and timber sectors are major drivers of wetlands degradation,²³⁸ many also have some limited incentives to protect wetlands, given their dependence on ecosystem and environmental services provided by these ecological assets. NGOs and for-profit standard-setting organizations can create additional incentives to include environmental performance in commercial arrangements and actions through advocacy campaigns, and they can reduce corporate transaction costs in the negotiation of commercial agreements by developing model provisions.²³⁹ Their proliferation allows for NGOs to exert targeted pressure campaigns to encourage corporate adoption of environmental policies without the expense of either the NGO or targeted corporation developing internal standards in a vacuum.240 They also allow companies to demand meaningful performance on environmental actions without forcing them to develop a public regulatory capacity to draft and test standards, reducing adoption costs.²⁴¹

Supply chain requirements are a particularly promising option for wetlands protection. Environmental provisions are

^{238.} See Status and Trends, supra note 50 (indicating that development, agriculture, and timber plantations are the main drivers of wetlands degradation).

^{239.} The creation of these standards often replicates a notice-and-comment process, bringing in stakeholders to develop and update industry best practices for environmental compliance. *See* Currier, *supra* note 88, at 563–66 (describing how the MSC was successful in part because of the procedures adopted from the Administrative Procedure Act).

^{240.} See Vandenbergh & Moore, By Contract, supra note 179, at 2 ("If new corporate environmental policies are widely adopted and implemented, they could help fill gaps in public governance."); Vandenbergh, Global Governance, supra note 179, at 923 ("Standards issued by private standard-setting organizations serve several functions. They enable NGOs and the public to reduce the transaction cost arising from private monitoring and enforcement . . . [and] enable governments in exporting countries to do the same[.]").

^{241.} See Vandenbergh, Global Governance, supra note 179, at 923 ("Private standards and certification programs enable exporting countries to demand

already common in supply chain contracting,²⁴² so there is a norm among many firms to use the procurement process to deliver environmentally friendly goods in the absence of clear standards set by regulators.²⁴³ Suppliers are contractually obligated to comply with the terms of their agreements, and those hoping to become suppliers to major purchasers are incentivized to adjust their operations so that they are capable of complying with environmental conditions imposed by major purchasers.²⁴⁴ Additionally, those imposing supply chain requirements may be more able than government agencies to monitor and enforce their requirements.²⁴⁵ Purchasers are motivated to impose supply chain requirements on suppliers by the wide range of drivers discussed above: concerns that environmental harms buried in their supply chain will lead to public relations harms,²⁴⁶

performance directly from domestic exporting firms or the domestic operations of MNCs, even in the absence of public regulatory capacity to draft and enforce standards of conduct.").

- 242. See Vandenbergh & Moore, By Contract, supra note 179, at 1 (finding that roughly eighty percent of the ten largest firms in seven global sectors include environmental requirements in supply chain contracting); Vandenbergh, Global Governance, supra note 179, at 916-17 (finding that over half of the firms considered in an empirical study impose environmental requirements on their suppliers); see also Leroy Paddock & Natasha Rao, Green Supply Chain Management: A Perspective on Best Practices in GSCM Design, 71 ARK. L. REV. 487, 487 (2018) ("Greening of company supply chains has become almost de rigueur for large, publicly facing companies."); Cassie D. Roberts, Note, The Gap-Filling Role of Private Environmental Governance: A Case Study of Semiconductor Supply Chain Contracting, 51 VAND. L. REV. 591 (2018) (exploring the phenomenon of private standard setting in the semiconductor industry). Supply chain contracting is a promising intervention for wetlands, but it is not a panacea. For a discussion of the legal limits constraining supply chain contracting initiatives, see generally Jonathan Lipson, Promising Justice: Contract (as) Social Responsibility, 2019 WIS. L. REV. 1109.
- 243. See Vandenbergh et al., supra note 224, at 164–65 ("Increasingly, public and private sector actors are turning to the procurement process to help achieve their environmental goals, and the use of environmental provisions in supply chain contracts has increased remarkably in the last decade.").
- 244. $See\ id$. at 167-70 (describing how suppliers may adjust behavior to align with environmental conditions demanded by major purchasers).
- 245. See id. at 168 ("Suppliers are often numerous . . . , and it can be inefficient and politically difficult for governments to regulate them, so supply chain contracting often reaches businesses that are largely beyond the reach of regulatory agencies.").
- 246. See id. at 170 (describing how "[s]ocial media platforms like TikTok have helped generate awareness and demand for behind-the-scenes content on the environmental bona fides of consumer goods, and creator-sellers face sharp criticism for non-sustainable features as seemingly unimportant as types of packaging").

concerns that environmental damage will harm their long-term business plans,²⁴⁷ consumer demand for environmentally friendly products, and economic benefits of reducing the inefficiencies that often occur in connection with environmentally harmful activities.²⁴⁸ The flexibility of supply chain terms also allows for negotiation, preventing the perfect from being the enemy of the good when it comes to private governance efforts.

Finally, the development of model supply chain terms through the work of organizations like The Chancery Lane Project (TCLP)²⁴⁹ has reduced barriers to entry for small and medium businesses seeking to negotiate supply chain requirements. Model language provides a starting point for negotiations and form contracts without the need for bespoke drafting. TCLP has not yet developed common language regarding wetlands, but potential new supply chain contracting language could follow this type of format: "Supplier will treat as a water of the United States subject to water quality protection requirements those wetlands that were considered waters of the United States prior to the U.S. Supreme Court's decision in *Sackett v. EPA*."

Adding this new language to existing supply chain contracts would not be a heavy lift. Supply chain contracts already incorporate a variety of clauses that have clean water effects and that could be expanded to include provisions that explicitly mention wetlands. For example, Target, a retailer with a major retail food business and thus the ability to influence the agricultural sector through its supply chain policies, requires its suppliers to "identif[y], characteriz[e], and inventor[y] all operational and production impacts to . . . water[] and wastewater . . . [and] install and maintain appropriately sized wastewater treatment systems to

^{247.} See id. ("Adoption of sustainable supply chain management systems also may provide start-ups and other small- and medium-size businesses increased access to capital if green investors consider these systems in their investing, lending, and insuring criteria."); see also supra Part III.A.

^{248.} See Vandenbergh et al., supra note 224, at 169 (describing economic benefits associated with environmental efficiency and noting that the "effectiveness and durability of environmental provisions may be enhanced when contracts are designed in ways that benefit multiple parties").

^{249.} See THE CHANCERY LANE PROJECT, https://chancerylaneproject.org [https://perma.cc/TJF9-EWJB]; see also Simon Jessop, Climate Target Group in Turmoil over Carbon Offsetting Plan, REUTERS (Apr. 16, 2024), https://www.reuters.com/sustainability/companies-get-green-light-use-offsets-supply-chain-emissions-2024-04-10 [https://perma.cc/K2SY-ETDG] (documenting how staff at the SBTi called for the ousting of its chief executive and the reversal of a plan to allow companies to use carbon credits to offset greenhouse gas emissions from their value chain).

ensure pollutants are at or below legally required levels."²⁵⁰ Albertsons Companies, a major grocer with a substantial ability to affect the agricultural sector, ²⁵¹ states that "[s]uppliers are expected to . . . [s]trive to reduce or eliminate natural resource destruction, . . . water contamination, soil contamination and waste."²⁵² Other firms have used broad language that could be updated to incorporate pre-Sackett WOTUS interpretations, such as Whole Foods Market:

We encourage our suppliers to implement systems that are designed to minimize the impact on the environment through their supply chain, the production process, and the products themselves. . . . Whole Foods Market expects that suppliers adopt a management system to drive continuous improvement and ensure compliance with applicable laws and this Supplier Code. 253

H-E-B Grocery Company pegs its legal requirements to compliance with law, but it adds additional broad statements of principles on environmental pollution and compliance without specific additional requirements.²⁵⁴ Corporations such as Costco Wholesale Corporation require the prevention of pollution and

^{250.} See Standards of Vendor Engagement, supra note 217.

^{251.} Albertsons controlled approximately seven percent of the grocery market in 2023. See Walmart Reigns as Top Grocery Retailer, RETAIL CUSTOMER EXPERIENCE (Aug. 16, 2023), https://www.retailcustomerexperience.com/news/walmart-reigns-as-top-grocery-retailer [https://perma.cc/A6ZY-FT9P] (reporting that Albertsons held 7.2% of the market share at the end of June 2023).

^{252.} Supplier Sustainability Guidelines and Expectations, ALBERTSONS COS. 26 (Jan. 7, 2022), https://s29.q4cdn.com/239956855/files/suppliers/Supplier-Sustainability-Expectations-1-7-2022-(1).pdf [https://perma.cc/EHP5-AWLR].

^{253.} Whole Foods Market Supplier Code of Conduct, SOURCING TRANSPARENCY PLATFORM, https://sourcingtransparencyplatform.org/sites/default/files/2021-02/WFM%20Supplier%20Code%20of%20Conduct_12.30.19.pdf [https://perma.cc/NR3B-RJ7P].

^{254.} H-E-B, Vendor Code of Conduct (Sept. 2024) (on file with the Minnesota Law Review) ("Our vendors and their subcontractors, agents and affiliates who manufacture, sell, distribute or provide any product and/or service to H-E-B ('Vendors') must fully comply with all applicable national, federal, state and local laws and regulations, including but not limited to those related to labor, immigration, foreign corrupt practices and bribery, health and safety, and the environment. . . . Vendors must ensure that each of their facilities complies with national, state and local environmental laws, treaties and regulations, including those related to air emissions, water discharges, toxic substances and hazardous waste disposal. Vendors must endeavor to minimize environmental pollution through regular review of all input materials and components. Vendors must create and maintain a reasonable environmental management system.").

responsible water management,²⁵⁵ but they do not detail specific metrics for compliance. These pollution-focused requirements do not mention CWA compliance or wetlands protections specifically, but they assume CWA compliance. An advocacy group initiative could focus on inducing firms to strengthen this language to require the seller and the seller's suppliers to comply with the pre-Sackett wetlands definition.²⁵⁶ Incorporating a reference to the pre-Sackett WOTUS boundary thus would protect Sackett Gap wetlands without imposing new requirements on suppliers.

Several companies that could have substantial effects on the homebuilding and timber sectors likewise currently peg their supplier codes to existing law without going further. International Paper Company, which buys a substantial share of all U.S. timber for pulp and paper in the United States, ²⁵⁷ pegs its

^{255.} Supplier Code of Conduct, COSTCO (Nov. 2018), https://www.costco.com/wcsstore/CostcoUSBCCatalogAssetStore/Attachment/16w0604-sustainability-conduct.pdf [https://perma.cc/KQK2-RTDR] ("All chemicals and hazardous materials, including wastewater and solid waste generated from operations, shall be handled and disposed of using environmentally responsible practices."). Costco controlled 9.9% of the grocery market in 2023. See Walmart Reigns as Top Grocery Retailer, supra note 251.

^{256.} Indeed, many firms have demonstrated openness to such an initiative. See, e.g., Target Forward: Our Sustainability Strategy, TARGET, https:// corporate.target.com/sustainability-governance/strategy-target-forward [https://perma.cc/7JPL-MUEH] (outlining Target's collaborative sustainability strategy); Press Release, Albertsons Cos., Albertsons Companies Releases 2023 ESG Report (Aug. 21, 2023), https://www.albertsonscompanies.com/newsroom/ press-releases/news-details/2023/Albertsons-Companies-Releases-2023-ESG -Report/default.aspx [https://perma.cc/ETP3-ME9Y] (discussing ESG progress, including proprietary "Recipe for Change" commitment); Sustainability, CATER-PILLAR, https://www.caterpillar.com/en/company/sustainability.html [https:// perma.cc/7E7C-373R] (describing the company's "long-standing commitment to sustainability"); Sheri Flies, Meeting Our Goals: Updated Sustainability Commitment Shares Our Ongoing Efforts, COSTCO (Jan. 2023), https://www.costco .com/connection-meeting-our-goals-january-2023.html [https://perma.cc/DB9B -BBRCl (explaining that Costco's "goal is to follow sustainable sourcing policies"); Lenovo's Journey to Net-Zero, LENOVO (Jan. 18, 2023), https://news .lenovo.com/campaign/lenovo-journey-to-net-zero [https://perma.cc/A7GJ -KYKW] (re-announcing its goal to reach net-zero greenhouse gas emissions by 2050); Environmental Initiatives, CANON, https://www.usa.canon.com/about-us/ kyosei-our-corporate-philosophy/environment-and-sustainability/additional -initiative-detail [https://perma.cc/C7BE-YCJ9] (explaining Canon's commitment and contribution to the environment).

^{257.} See International Paper: Statistics and Facts, STATISTA (Aug. 1, 2024), https://www.statista.com/topics/6309/international-paper/#topicOverview [https://perma.cc/BLX3-AC8D] (placing International Paper's share of the North American containerboard market at thirty percent).

supplier requirements to legal requirements, 258 but it goes no further, Similarly, Lowe's Companies, a leading home improvement firm, states that "[v]endors shall obtain and comply with all required environmental permits."259 These supplier agreements implicitly included the broader WOTUS wetlands definition but were automatically narrowed with the Sackett decision. Incorporation of a pre-Sackett WOTUS boundary in the contracts would require little change to previous supplier commitments. The existing vendor code of conduct at Lowe's also shows a willingness to incorporate third-party environmental certifications: Lowe's requires wood sourced from "high risk areas" to be Forest Stewardship Council (FSC) certified, and all other wood to engage with third-party certification and share traceability information.²⁶⁰ Should a wetlands standard be developed—as we discussed above—its impact could be magnified by vendor codes of conduct and supply chain agreements.

In sum, supply chain agreements are powerful tools of private governance. Large purchasers and multinational corporations have the power to adopt procurement screening policies and supply chain contracting provisions that shape the behavior of their existing suppliers and hopeful suppliers around the world. Many companies have been including environmental requirements in procurement screening policies, contract provisions, and supplier oversight programs for years. With adequate information and some pressure from advocacy groups, major corporate purchasers of agricultural and building products, especially in the consumer goods, grocery, and home repair sectors, may have strong incentives to act.

^{258.} Supplier Code of Conduct, INT'L PAPER 2 (2013), https://www.internationalpaper.com/sites/default/files/file/2023-02/Supplier%20Code %20of%20Conduct%20English.pdf [https://perma.cc/MW7S-WFMM] ("Suppliers must comply with all environmental laws, including those related to hazardous materials, wastewater, solid waste and air emissions.").

^{259.} Lowe's Vendor Code of Conduct, LOWE'S CORP., https://corporate.lowes.com/our-responsibilities/corporate-responsibility-reports-policies/lowes-vendor-code-conduct [https://perma.cc/L3DG-EH4J].

^{260.} Lowe's Wood Sourcing Policy, Lowe's CORP., https://corporate.lowes.com/our-responsibilities/corporate-responsibility-reports-policies/lowes-wood-sourcing-policy [https://perma.cc/NSG5-RLLU].

3. Lender and Investor Initiatives: The Land Development Sector

Residential and commercial land development projects pose a leading risk to wetlands.²⁶¹ In addition to the loss of the other services from wetlands arising from development, replacing wetlands with fertilizer-heavy lawns can cause environmentally harmful algal blooms in the surface waters connected to non-protected wetlands and can prevent the proliferation of native flora and fauna in developments.²⁶² For instance, the absence of salamanders and native frogs can enable mosquitos and mosquitoborne diseases to proliferate.²⁶³ But developers have limited incentives to reduce or mitigate their wetlands impact. Land is often very valuable, and although the degradation of wetlands and the reduction in filtering of water flowing into aquifers pose environmental and business risks to developers, the environmental risk will occur far in the future and will be shared with others, and once the home is sold, the business risk for the home shifts to the customer.

Developers are not unsusceptible to PEG initiatives, however. At first glance, real estate may seem a poor fit for PEG:

^{261.} Tyrna, *supra* note 37 ("[M]ore than half of the original wetland area in Florida has been drained, dredged and/or filled for development; with the vast majority being for residential and commercial development."); *supra* note 102.

^{262.} See Barnett A. Rattner et al., Review of Harmful Algal Bloom Effects on Birds with Implications for Avian Wildlife in the Chesapeake Bay Region, HARM-FUL ALGAE, Dec. 2022, at 1, 1–2; Our Lawns and Algae/Harmful Algae Blooms, CORNELL COOP. EXTENSION ROCKLAND CTY. (Nov. 13, 2024), https://rocklandcce.org/stormwater-consortium-water-quality-education/our-lawns-and-algae-harmful-algae-blooms [https://perma.cc/QEY5-9LFT]; Nutrient Pollution: Sources and Solutions, ENV'T PROT. AGENCY (Nov. 15, 2024), https://www.epa.gov/nutrientpollution/sources-and-solutions [https://perma.cc/UP8E-7YRB]. Interestingly, wildlife and proximity to national and state parks can be a significant draw for residents of new developments, even though these developments have harmful impacts on wildlife in the area. Volker C. Radeloff et al., Housing Growth in and Near United States Protected Areas Limits Their Conservation Value, 107 PROC. NAT'L ACAD. SCIS. 940 (Jan. 12, 2010).

^{263.} See LEO P. KENNEY & MATTHEW R. BURNE, A FIELD GUIDE TO THE ANIMALS OF VERNAL POOLS 40 (2000) (describing salamander predation of mosquito larvae); id. at 54 (outlining dragonfly predation of mosquitos generally); id. at 58 (characterizing water striders as "important predators of adult mosquitos and other insects"). These benefits are especially important as climate change brings deadly mosquito-borne illnesses without existing treatment to a greater span of the United States. See Zoya Teirstein, The Mosquito-Borne Disease "Triple E" Is Spreading in the U.S. as Temperatures Rise, WIRED (Sept. 7, 2024), https://www.wired.com/story/the-mosquito-borne-disease-triple-e-is-spreading-in-the-us-as-temperatures-rise [https://perma.cc/YK2N-ZDKV].

Families purchasing homes may consider environmental issues,²⁶⁴ but given the countervailing selection criteria for family housing, supply-demand mismatch for single family housing stock,265 and collective action problems,266 these kinds of purchasers are unlikely to push for the development and proliferation of private environmental standards and enforceable norms. Environmental commitments can assist developers in attracting environmentally sensitive buyers. In theory, this could be a significant market niche, given that the global single-family housing green buildings market is expected to grow from its baseline of \$105 billion in 2021 to \$209 billion in 2026, a compound annual growth rate of 14.7%.²⁶⁷ Yet, in practice, consumer willingness to pay for green goods is often limited in the United States. and these motivations are likely to be overwhelmed by the value of the wetlands developers can fill and use after Sackett. Similarly, corporate pressures to "green" offices and building stock may increase commercial lessee sensitivity to environmental standards, but these considerations often play second fiddle to price, location, and utility.²⁶⁸

Institutional Investors. A more promising approach is to start with the recognition that developers require large amounts of capital and large volumes of materials for construction, as well as willing buyers. In addition, increased consolidation in the real estate market—while critiqued for many of its effects²⁶⁹—

^{264.} See, e.g., Christopher Flavelle, As Climate Shocks Multiply, Designers Seek Holy Grail: Disaster-Proof Homes, N.Y. TIMES (July 16, 2023), https://www.nytimes.com/2023/07/16/climate/climate-geodesic-dome-house.html [https://perma.cc/PUN6-6CQV] (describing idiosyncratic housing preferences, including sustainability and climate risk).

^{265.} See generally Gianluca Marcato & Anupam Nanda, Asymmetric Patterns of Demand-Supply Mismatch in Real Estate, 64 J. REAL EST. FIN. & ECON. 440 (2021).

^{266.} VANDENBERGH & GILLIGAN, POLITICS, supra note 22, at 73–75.

^{267.} Single-Family Housing Green Buildings Global Market Report 2022: Market is Expected to Reach \$209.34 Billion in 2026 at a CAGR of 14.7%, BUS. WIRE (Feb. 8, 2022), https://www.businesswire.com/news/home/202202080060 46/en/Single-Family-Housing-Green-Buildings-Global-Market-Report-2022 [https://perma.cc/ZU4U-2QE9].

^{268.} Note, however, that other forms of private environmental governance (supply chain agreements, certification regimes, etc.) may increase demand for compliant commercial real estate.

^{269.} See, e.g., Michael Byrne & Michelle Norris, Housing Market Financialization, Neoliberalism and Everyday Retrenchment of Social Housing, 54 ENV'T & PLAN. A 182, 189 (2022) (critiquing fiscal consolidation for driving down affordable housing funding); Felicia Di Liddo et al., The Impacts of COVID-19 on

facilitates the use of PEG tools by creating single pressure points for enforcement and standard setting.

Initiatives by advocacy groups and willing developers could generate momentum for a wide range of provisions in agreements with investors and lenders, as well as clauses incorporated into development agreements, homeowner association bylaws, and other binding private instruments which could require developers to comply with the pre-Sackett wetlands boundary. This standard setting may come in the form of purchase requirements imposed by institutional investors in real estate. Buyers may seek to condition purchase on a given property not engaging in ongoing pollution of significant-nexus-defined wetlands, and not having engaged in wetlands in-fill. This, however, is likely to have idiosyncratic applications by single, passionate purchasers or it may be a follow-on consequence of other forms of private environmental governance. A supply chain contract or certification standard along the lines of the one discussed above may induce companies to seek out compliant real estate, driving demand for purchase terms or diligence pre-sale. For example, the "gold standard" of environmental certification for buildings— Leadership in Energy and Environmental Design (LEED) certification—awards points for wetlands protection.²⁷⁰ Contrary to a popular national myth, however, institutional investors do not hold a large share of the housing market, and the countervailing considerations discussed above create strong disincentives to enforce wetlands-mitigating purchase conditions.²⁷¹

Real Estate Market Dynamics: A Systemic Literature Review of Emerging Trends, BUILDINGS, Sept. 2023, at 1, 16–17 (2023) (highlighting some of the key impacts of the COVID-19 pandemic on the real estate market). For a more qualitative (but no less thoroughly researched) exploration of the ways consolidation of housing stock by landlords has impacted communities and impoverished individuals, see MATTHEW DESMOND, EVICTED: POVERTY AND PROFIT IN THE AMERICAN CITY (Crown reprt. ed. 2016).

270. Site Design for Habitat or Wetland and Water Body Conservation, U.S. GREEN BLDG. COUNCIL, https://www.usgbc.org/credits/neighborhood-development-plan-neighborhood-development/v4-draft/sllc-0 [https://perma.cc/LC2Q-CXWX].

271. Notably, BlackRock has a full page dedicated to debunking the myth that it owns most of the single-family housing stock in the United States. See Blackrock and Housing: Setting the Record Straight, BLACKROCK, https://www.blackrock.com/us/individual/insights/buying-houses-facts [https://perma.cc/9EM7-B9UH]. Blackstone has a similar page. Our Commitment to Being Responsible Owners, BLACKSTONE (Apr. 15, 2024), https://www.blackstone.com/housing/our-track-record-in-housing [https://perma.cc/SY9X-Q7UT]. The U.S. Department of Housing and Urban Development confirms that institutional

Real Estate Lenders. A more likely source of PEG pressure is lender-imposed conditions on real estate loans for commercial and multifamily residential property. Major lenders have shown strong sensitivity to environmental concerns.²⁷² This is in part because lenders with large retail operations are vulnerable to NGO naming-and-shaming campaigns. For instance, naming and shaming by the Rainforest Action Network contributed to the decision by major lenders to participate in the Equator Principles, an international private standard that requires disclosure of environmental impacts of project finance loans.²⁷³ Although several banks have recently backed out of official adherence to these principles,²⁷⁴ they have pledged generally to continue to follow them. ²⁷⁵ In addition, lending inherently involves risk assessments over medium-to-long time periods, not just quarterto-quarter returns.²⁷⁶ Environmental degradation can generate short-term profits but is likely to impose long-term costs not only on the project in question, but also as negative externalities on other revenue sources.

investor portfolios represent a relatively small portion of housing stock, but does note that in some markets (Atlanta, especially), significant portions of single-family rental homes are institutionally owned. Cameron Ehrlich et al., *Institutional Investors: A Local Perspective*, EVIDENCE MATTERS (2023), https://archives.huduser.gov/portal/periodicals/em/Winter23/highlight2.html [https://perma.cc/LB3Z-3N7Q].

- 272. Fink, supra note 201.
- 273. See Vandenbergh et al., Governance, supra note 9, at 138 (discussing formation of the Equator Principles).
- 274. See Anita Hawser, Major US Banks Back out of the Equator Principles, BANKER (Mar. 13, 2024), https://www.thebanker.com/Major-US-banks-back-out-of-the-Equator-Principles-1710330460 [https://perma.cc/LJX9-RNMG].
- 275. See Simon Jessop et al., Leading U.S. Banks Leave ESG Project Finance Group, REUTERS (Mar. 6, 2024), https://www.reuters.com/business/finance/jpmorgan-citi-wells-boa-are-no-longer-signatories-equator-principles-website -2024-03-05 [https://perma.cc/JY26-ZCPT].
- 276. See Long Term Finance, WORLD BANK GRP., https://www.worldbank.org/en/publication/gfdr/gfdr-2016/background/long-term-finance [https://perma.cc/ET54-LPCR] ("Where it exists, the bulk of long-term finance is provided by banks...."). Ironically, while the Rainforest Action Network pushed banks to join the Equator Principles, they have since moved to protesting the Principles themselves as insufficiently stringent. See Press Release, Ayşe Gürsöz, Commc'ns Manager, Rainforest Action Network, Media Advisory: Indigenous, Environmental, and Climate Justice Groups Rally Outside Equator Principles Meeting, Demand Stronger Commitments (Oct. 17, 2018), https://www.ran.org/press-releases/media-advisory-indigenous-environmental-and -climate-justice-groups-rally-outside-equator-principles-meeting-demand -stronger-commitments [https://perma.cc/2RUR-7JLV].

Lenders who fund purchases of commercial property frequently impose environmental due diligence requirements on the purchases they fund—failing to do so can subject them to liability or increase their risk of loss under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).²⁷⁷ Because of these obligations and the risk of loss they impose on lenders funding commercial property purchases, environmental due diligence is commonly conducted before commercial lending. In addition, environmental disclosures and conditions are frequently included in commercial real estate transactions.²⁷⁸

The incentives for imposing environmental conditions are not exclusive to individual lenders' environmental risk policies; any lender seeking financing from Fannie Mae's national network of Delegated Underwriting and Servicing (DUS) lender partners must have completed a Phase I assessment, among other environmental conditions, on the property it seeks underwriting for.²⁷⁹ In other words, any lender who would like the possibility for its multifamily residential mortgages to be acquired

277. This is not just true of major investors—the U.S. Small Business Administration includes it as part of their best practices for real estate purchasers, both commercial and housing. Lender and Development Company Loan Programs, U.S. SMALL BUS. ADMIN. (Jan. 1, 2018), https://www.sba.gov/sites/ default/files/2017-10/SOP%2050%2010%205(J)_FINAL_.pdf [https://perma.cc/ 6NRY-FHMG]. Lenders are not directly liable under CERCLA unless they participate in the management of a site. See 42 U.S.C. § 101(20)(F) (secured creditor exemption for those who do not "participat[e] in the management of a vessel or facility"). But see, e.g., United States v. Md. Bank & Tr. Co., 632 F. Supp 573, 579 (D. Md. 1986) (finding that lender took on liability by holding title after purchasing the property at a foreclosure sale). CERCLA allows for an "innocent landowner" defense for those who conduct "all appropriate inquiries" into past use of a property. 40 C.F.R. § 312.20 (2024). CERCLA Phase I environmental site assessments are the first—and usually last—step in "all appropriate inquiries," and involve review of property usage to the first developed use, agency record review, a site visit, and interviews with individuals on the use of the property. See 40 C.F.R. § 312.20(b) (2024). Purchasers are also required to engage in continuing obligations, including preventing the spread of hazardous materials safely stored on the property at the time of sale. See 42 U.S.C. § 9601(40)(B)(iv) (requiring "appropriate care" to be taken "with respect to hazardous substances" including "taking reasonable steps to—(I) stop any continuing release; [and] (II) prevent any threatened future release . . . ").

278. See 36 Am. Jur. 3D Proof of Facts § 471, Westlaw (database updated Nov. 2024) ("A seller may be liable for environmental defects on the property which the seller knew about but failed to disclose to the buyer.").

279. FANNIE MAE, MULTIFAMILY SELLING AND SERVICING GUIDE § 502.01 (Mar. 31, 2025), https://mfguide.fanniemae.com/node/4591 [https://perma.cc/Q3R3-92VU].

by Fannie Mae in the future has a strong incentive to complete a Phase I assessment. Similar conditions likely exist for other major loan purchasers, though Fannie Mae's government funding makes it uniquely transparent on terms. Fannie Mae also provides a "Green MBS," which securitizes mortgages on "newly constructed single-family residential homes [that have received] approved green building certifications." Similar products would create incentives for lenders to impose environmental conditions on single-family mortgages in addition to commercial and multifamily loans. Given the existing robust provisions for environmental due diligence and continuing obligations under CER-CLA in multifamily and commercial real estate lending agreements, including an obligation to abide by a pre-Sackett wetlands definition where protective language exists would require little additional negotiation or enforcement cost.

Bond Rating Firms. Like major lenders, bond rating firms have made commitments to transparent sustainability ratings in their products and credit ratings. S&P Global describes physical risks, natural capital, and waste and pollution as "key ESG credit factors," and notes that these factors can "represent a risk or an opportunity" for creditworthiness. They also note climate transition risks, including the risk of legal change and market changes. Moody's takes a more quantitative approach to integrating ESG into credit analysis, and also provides ESG insurance underwriting. Insurance underwriting.

^{280.} Single-Family Green MBS, FANNIE MAE, https://capitalmarkets.fanniemae.com/sustainable-bonds/green-bonds/single-family-green-mbs [https://perma.cc/X6L2-NMFT].

^{281.} See, e.g., ESG Risk, MOODY'S, https://www.moodys.com/web/en/us/capabilities/esg-risk.html [https://perma.cc/MP97-R7G8] ("Leveraging our longstanding record in credit risk analysis, deep ESG domain expertise and innovative technologies, our ESG risk solutions help address evolving business needs and inform better decisions."); cf. Greg Lemos-Stein et al., S&P Global Ratings Update on ESG Credit Indicators, S&P GLOBAL (Aug. 4, 2023), https://www.spglobal.com/_assets/documents/ratings/esg_credit_indicators_mr.pdf [https://perma.cc/NR4Z-YTYA] (describing S&P Global's pause on numerical ratings in favor of qualitative assessments of ESG credit factors).

^{282.} Greg Lemos-Stein et al., General Criteria: Environmental, Social, and Governance Principles in Credit Ratings, S&P GLOBAL (Sept. 9, 2024), https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/12085396 [https://perma.cc/AU98-TM4G].

^{283.} *Id.* ("In some cases, a risk or strength that we currently consider immaterial to creditworthiness can later become material. This could happen . . . if a policy or legal change imposes new or higher costs").

 $^{284. \ \ \}textit{See ESG Risk}, \textit{supra} \ \text{note} \ 281.$

Most of the illustrative examples used by bond agencies' printed materials focus on greenhouse gas risks, 285 but wetlands degradation—or mitigation—raises a variety of issues that can bear on a firm's financial forecasts and profitability. As discussed in Part I.A, wetlands have value both ecologically and as natural filters for groundwater. Pollution increases can be a financial risk—especially for high-thirst industries like agriculture.²⁸⁶ Similarly, offering sustainable funds—including wetlands mitigation products—is a potential profit source, especially given the demand-supply gap in existing carbon credit markets.²⁸⁷ Since wetlands are an especially efficient carbon sink, protection of newly unprotected wetlands in the post-Sackett era may be a source of high-trust carbon credits. 288 The market for wetland mitigation credits is also available, although current wetlands mitigation purchase agreements typically conceptualize "trades" of wetland development for wetland mitigation elsewhere—a problematic proposition.²⁸⁹ It is worth

^{285.} See About WRI & WBCSD, supra note 183.

^{286.} See Christopher Flavelle et al., How America's Diet is Feeding the Groundwater Crisis, N.Y. TIMES (Dec. 24, 2023), https://www.nytimes.com/interactive/2023/12/24/climate/groundwater-crisis-chicken-cheese.html [https://perma.cc/57F8-834Q]; Raymond Zhong & Mira Rojanasakul, Who Gets the Water in California? Whoever Gets There First., N.Y. TIMES (Dec. 14, 2023), https://www.nytimes.com/interactive/2023/12/14/climate/california-water-crisis-drought.html [https://perma.cc/Z3W3-YRQB].

^{287.} See Allegra Dawes et al., Voluntary Carbon Markets: A Review of Global Initiatives and Evolving Models, CTR. FOR STRATEGIC & INT'L STUD. (May 31, 2023), https://www.csis.org/analysis/voluntary-carbon-markets-review-global-initiatives-and-evolving-models [https://perma.cc/6Z4T-TBYK] ("Increasing the supply of carbon removal credits is seen as a critical component in meeting net-zero goals."). But see Susanna Twidale & Sarah McFarlane, Carbon Credit Market Confidence Ebbs as Big Names Retreat, REUTERS (Sept. 1, 2023), https://www.reuters.com/sustainability/carbon-credit-market-confidence-ebbs-big-names-retreat-2023-09-01 [https://perma.cc/7HA5-FTHQ] (describing a decline in voluntary carbon markets in part due to reduced buying from Nestle and Gucci)

^{288.} See Carbon Credits Need More Supply and Integrity to Meet Global Demand, Says IEF, INT'L ENERGY F. (Dec. 1, 2022), https://www.ief.org/news/carbon-credits-need-more-supply-and-integrity-to-meet-global-demand-says-ief [https://perma.cc/N56C-TCPE] (describing the need for higher trust in the carbon credit market).

^{289.} See, e.g., Regent Sienna Plantation Partnership, L.P. & League City, Mitigation Purchase Agreement (Sept. 2020) (on file with the Minnesota Law Review) ("Whereas, Buyer is required to mitigate the impact to wetlands due to the constrictions of a project in Galveston County, Texas... and Buyer wishes to provide this mitigation through the purchase of Credits from the Seller, as

noting, though, that these efforts will only succeed if advocacy groups convince bond rating agencies, investors, and others to adopt ESG investor and lender criteria, and if ESG plans require use of the pre-Sackett wetlands definition. In addition, advocacy groups and collaborative corporate-advocacy initiatives could develop model ESG plans that require pre-Sackett wetlands definitions in disclosures about wetlands activities.

Carbon Disclosure Initiatives. Incentives to protect wetlands also can be strengthened by increasing the focus on wetlands destruction as a source of greenhouse gas (GHG) emissions in reporting by investors, lenders, and corporations. The dominant GHG disclosure standard is the GHG Protocol, a private standard developed by the World Resources Institute and the World Business Council for Sustainable Development.²⁹⁰ The leading global climate disclosure system is managed by CDP, a private organization formerly known as the Climate Disclosure Project.²⁹¹ The GHG Protocol categorizes GHG emissions as Scope 1 (direct emissions from an organization's facilities), Scope 2 (emissions from off-site power and heat sources), or Scope 3 (all other indirect emissions).²⁹² Corporations must disclose Scope 1 and 2 emissions to CDP, but Scope 3 disclosure is voluntary. 293 Wetlands destruction is an important source of GHG emissions, vet disclosure of wetlands-based emissions is rare.

the project lies within the Secondary Service Area of the Mitigation Bank."). Consideration exchanged for 0.3 Physical FCU (functional credit units), 0.3 Biological FCU, and 0.3 Chemical FCU was \$58,500. See id.

^{290.} See generally World Res. Inst. & World Bus. Council for Sustainable Dev., A Corporate Accounting and Reporting Standard: Revised Edition, GREENHOUSE GAS PROTOCOL (Mar. 2004) [hereinafter GHG Protocol Corporate Standard], https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf [https://perma.cc/88SN-CUX8].

^{291.} About Us, supra note 184.

^{292.} See GHG Protocol Corporate Standard, supra note 290, at 25.

^{293.} World Res. Inst. & World Bus. Council for Sustainable Dev., Corporate Value Chain (Scope 3) Accounting and Reporting Standard, GREENHOUSE GAS PROTOCOL 6 (Sept. 2011), https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf [https://perma.cc/J9TN-TCBT] ("Under the Corporate Standard, companies are required to report all scope 1 and scope 2 emissions, while reporting scope 3 emissions is optional."); see also Renee Thompson, Mastering Greenhouse Gas Accounting and CDP Reporting: A Comprehensive Guide, SEC. INDUS. ASS'N (Nov. 4, 2024), https://www.securityindustry.org/2024/11/04/mastering-greenhouse-gas-accounting-and-cdp-reporting-a-comprehensive-guide [https://perma.cc/N2FN-R86S] ("This scope [3] is optional for beginners but increasingly important.").

Similarly, the SBTi,²⁹⁴ a private organization, provides a system that monitors and discloses corporate climate commitments using the GHG Protocol system, but wetlands destruction is not a major focus of the commitments and disclosure monitored by SBTi.²⁹⁵ Leading wetlands advocacy organizations could create pressure on the GHG Protocol secretariat, CDP, and SBTi to increase the focus of the GHG accounting, disclosure, and reduction systems on the importance of protecting pre-*Sackett* wetlands. In addition to PEG initiatives that increase the focus on protecting wetlands through climate mitigation efforts, PEG initiatives could facilitate the use of federal and state securities laws to protect wetlands.²⁹⁶ The gaps in these government disclosure regimes could be filled by PEG initiatives that increase the pressure on firms to disclose the carbon emissions from wetlands destructions.

4. Other Options

Merger & Acquisition Agreements. Deal attorneys and their clients engaged in merger activity can likewise take steps to implement PEG to fill the Sackett Gap. On the disclosure side, diligence requiring documentation of potential degradation of pre-Sackett significant nexus wetlands—and associated covenants documenting that diligence—could encourage takeover targets to be mindful of their impacts on wetlands. Deal attorneys could also encourage consideration of GHG and other implications of wetlands destruction and assist clients in avoiding future compliance risks should a significant nexus definition be reimplemented at the state or federal level. These incentives are enhanced by the disclosure requirements discussed above.

 $^{294.\} Sci.\ Based$ Targets Initiative, https://sciencebasedtargets.org [https://perma.cc/ACX7-83KV].

^{295.} See Companies Taking Action, SCI. BASED TARGETS INITIATIVE, https://sciencebasedtargets.org/companies-taking-action [https://perma.cc/JY9H-FTSX] (cataloguing the approved GHG targets of over 7,000 companies).

^{296.} See, e.g., Fact Sheet: Enhancement and Standardization of Climate-Related Disclosures, U.S. Sec. & Exch. Comm'n (2023), https://www.sec.gov/files/33-11042-fact-sheet.pdf [https://perma.cc/RA2E-3JBA]; Loyti Cheng et al., California Enacts Major Climate-Related Disclosure Laws, HARV. L. Sch. F. ON CORP. GOVERNANCE (Oct. 22, 2023), https://corpgov.law.harvard.edu/2023/10/22/california-enacts-major-climate-related-disclosure-laws [https://perma.cc/B2WJ-KBAY].

Insurance Agreements. Some insurance companies have been in the vanguard of PEG efforts to reduce climate risks.²⁹⁷ and efforts to induce insurers to reduce wetlands destruction post-Sackett could bear fruit. Destruction of wetlands not only increases long-term climate risk—it also increases near-term flood risk. "In watersheds where wetlands have been lost, flood peaks may increase by as much as 80 percent."298 A one-acre wetland can store three acre-feet (or one million gallons) of water.²⁹⁹ When wetlands are paved or developed, if the hydrology of the region is not altered, water that would be absorbed by wetlands can lead to flooding.300 As a result, flood insurance firms have significant incentives to protect wetlands in the areas they insure, especially if they are coterminous with a flood risk area. The National Flood Insurance Program, for example, conditions community participation in their insurance program on the adoption of a floodplain management ordinance.³⁰¹ Private insurers could refuse coverage to properties that engage in significantly degrading activity or could condition coverage on disclosure or avoidance of significant nexus wetland degradation. These private governance conditions would then push developers and homebuyers to avoid constructing or purchasing homes built on Sackett Gap wetlands.

Insurer pressure—including from reinsurers, who can exert pressure even on public-backed insurers of last resort³⁰²—could

^{297.} See generally Navigating Climate Risks: Progress and Challenges in U.S. Insurance Sector Disclosures, CERES (June 18, 2024), https://www.ceres.org/resources/reports/navigating-climate-risks-progress-and-challenges-in-us-insurance-sector-disclosures [https://perma.cc/N6K3-ZESX] (analyzing U.S. insurance companies climate risk strategies).

^{298.} Wetland Functions and Values: Water Storage for Flood Water and Storm Runoff, Vt. DEP'T OF ENV'T CONSERVATION, https://dec.vermont.gov/watershed/wetlands/functions/storage [https://perma.cc/AE7N-L369].

^{299.} Wetlands: Protecting Life and Property from Flooding, ENV'T PROT. AGENCY (May 2006), https://www.epa.gov/sites/default/files/2016-02/documents/flooding.pdf [https://perma.cc/ZM5D-RUW3].

^{300.} See Wetland Functions and Values: Water Storage for Flood Water and Storm Runoff, supra note 298 ("The impervious surface in urban areas greatly increases the rate and volume of runoff, thereby increasing the risk of flood damage.").

^{301.} Dan Farber, After Sackett: A Multi-Prong Strategy, LEGAL PLANET (July 6, 2023), https://legal-planet.org/2023/07/06/after-sackett [https://perma.cc/U27A-XAXQ].

^{302.} Take, for example, Citizens Property Insurance Corporation, the state-funded insurer of last resort for Florida. Citizens seeks reinsurance annually. See Press Release, Citizens Prop. Ins. Corp., Citizens Secures Reinsurance

also create pressure for state legislative changes. For example, climate change has caused rising costs for insurance companies operating in California, leading many insurers to retreat from the state.³⁰³ As a result, California legislators have sought ways to lure insurers back to the state.³⁰⁴ Similarly, pressure from increased flood risks due to wetlands destruction could lead to pressure for legislators to reduce those risks and thus reduce the risk for insurance companies in such states.

Land Trusts. Private governance efforts can also arise from the actions of nonprofit land conservancies, agricultural trusts, and other groups. Private land conservation organizations play a large role in supplementing government land conservation by agencies, such as the Department of Interior and Department of Agriculture, and have protected more land than exists in the

Coverage for 2024 Hurricane Season (July 10, 2024), https://www.citizensfla.com/

documents/20702/30144558/20240710+Citizens+secures+reinsur-

ance+for+2024.pdf/7ed8bcd6-3107-e935-2f39-ee350b4b2827 [https://perma.cc/PFK7-BDWM]; see also Elisabeth Buchwald, Florida's Home Insurer of Last Report Is in Serious Trouble. Will Milton Put It over the Edge?, CNN BUS. (Oct. 11, 2024), https://www.cnn.com/2024/10/11/business/citizens-insurance-hurricane-milton/index.html [https://perma.cc/E8LS-RHLA] (outlining the ability of Citizens to stay afloat even through catastrophic storms).

303. Chris Isidore, California's Insurance Is in Crisis. The Solution Will Cost Homeowners a Ton, CNN Bus. (Jan. 9, 2025), https://edition.cnn.com/2025/ 01/09/business/california-wildfires-homeowners-insurance/index.html [https:// perma.cc/E8LS-RHLA] ("Insurers in California have been refusing to write new policies in areas they consider to be at high risk for wildfires, which is a large percentage of the state."); see also Damian Carrington, Climate Crisis on Track to Destroy Capitalism, Warns Top Insurer, Guardian (Apr. 3, 2025), https:// www.theguardian.com/environment/2025/apr/03/climate-crisis-on-track-to -destroy-capitalism-warns-allianz-insurer [https://perma.cc/4VPF-S2P6] ("[W]e are fast approaching temperature levels—1.5°C, 2°C, 3°C —where insurers will no longer be able to offer coverage for many of these risks. The math breaks down Entire regions are becoming uninsurable." (quoting Günther Thallinger, Climate, Risk, Insurance: The Future of Capitalism, LINKEDIN (Mar. 25, 2025), https://www.linkedin.com/pulse/climate-risk-insurance-future -capitalism-g%C3%BCnther-thallinger-smw5f [https://perma.cc/S9UJ -VVEM])).

304. All Things Considered, *California Hopes to Lure Insurance Companies Back with Extreme Regulation Overhaul*, NPR (June 26, 2024), https://www.npr.org/2024/06/26/nx-s1-5015738/california-hopes-to-lure-insurance-companies-back-with-extreme-regulation-overhaul [https://perma.cc/6WTJ-AA2A]; *see* Isidore, *supra* note 303 ("[T]he California Department of Insurance just announced new regulations... [which] will require that insurers need to write policies in fire-prone areas equal to at least 85% of their market share throughout the state.").

entire state of Utah. ³⁰⁵ Land trusts are nonprofit organizations that work to conserve land by acquiring, stewarding, and/or managing "land or conservation easements." ³⁰⁶ They use property tools such as easements and life estates to protect sensitive areas from development. ³⁰⁷ Many land trusts focus specifically on conservation and preservation of land in its natural state, ³⁰⁸ and efforts to map unprotected wetlands and purchase them can mitigate the short-term impacts of purchase by developers. Some land trusts, such as Florida's Gulf Coast Conservancy, focus on preserving specific parcels of land or wildlife corridors, ³⁰⁹ while others frame their goals in terms of total area conserved. ³¹⁰ Local conservancies have also engaged in grassroots efforts to protect wetlands through lobbying and community action. ³¹¹ Focusing

^{305.} Land trusts have preserved over sixty-one million acres of land in the United States. *Gaining Ground: Together, Saving Land for Us All*, LAND TR. ALL., https://landtrustalliance.org/land-trusts/gaining-ground/conservation-progress [https://perma.cc/LU2G-4B53]. The state of Utah has just over fifty-four million acres of land. Albert L. Fisher, *Physical Geography of Utah*, UTAH HIST. ENCYCLOPEDIA (1994), https://www.uen.org/utah_history_encyclopedia/g/GEOGRAPHY.shtml [https://perma.cc/H8MU-VEU3].

^{306.} What We Do, TAMPA BAY CONSERVANCY, https://www.tampabayconservancy.org/what-we-do [https://perma.cc/66DA-KNGX].

^{307.} Id.

^{308.} Many of these organizations have missions centered on conservation. See, e.g., Our Mission, LAND TR. ALL., https://landtrustalliance.org [https://perma.cc/QVX9-438C] ("Save land. Strengthen communities. Create a healthier planet."); Our Mission, NATURE CONSERVANCY, https://www.nature.org/en-us [https://perma.cc/NA3T-NYCM] (prioritizing "[c]onserving the lands and waters on which all life depends"); GREEN HORIZON LAND TR., http://greenhorizon.org [https://perma.cc/4QQC-DZXP] ("Green Horizon Land Trust was created to preserve and promote central Florida's natural areas and open spaces for the benefit of all."). Other land trusts focus on preserving history, farmland, or public lands. See, e.g., We're Saving Places, NAT'L TR. FOR HIST. PRES., https://savingplaces.org/we-are-saving-places [https://perma.cc/9X3E-4RQG]; About Us, AM. FARMLAND TR., https://farmland.org/about [https://perma.cc/2DRW-GB68]; We Believe Everyone Should Have Access to the Outdoors, TR. FOR PUB. LAND, https://www.tpl.org/our-mission [https://perma.cc/3J3F-9J43].

^{309.} Taking Action, GULF COAST CONSERVANCY, https://www.gulfcoast conservancy.org/taking-action.htm [https://perma.cc/2HKA-C2CV] (naming this sensitive corridor the Nature Coast Greenway and Wildlife Corridor).

^{310.} Our Mission, supra note 308 ("The Land Trust Alliance has set a bold goal for land trusts to conserve another 60 million acres by the end of the decade.").

^{311.} E.g., Dredging Permit Denied for Pasco's SunWest Park Channel Project, TAMPA BAY TIMES (May 10, 2013), https://www.tampabay.com/news/growth/dredging-permit-denied-for-pascos-sunwest-park-channel-project/2120 365 [https://perma.cc/U6RF-HSTG] (naming the Gulf Coast Conservancy as one

land trusts' short-term efforts on wetlands left unprotected by *Sackett* can complement the other PEG initiatives discussed above. Indeed, some efforts have already risen in this space: The New York-based nonprofit, The Wetland Trust, "presently owns more than one hundred properties covering 4,000 wetland acres." ³¹²

Mapping. Private efforts to map Sackett Gap wetlands can facilitate community action to protect them, and reduce burdens on individuals from wetlands protective regulation. By identifying at-risk wetlands, researchers can assist in focusing land trust and public efforts to preserve wetland areas, aid small and medium enterprises in disclosure initiatives at low cost, and provide a low-cost resource for developers and homeowners seeking to avoid disrupting wetlands. Public maps of Sackett Gap wetlands could also be a tool, for those seeking to purchase land that previously required expensive compliance efforts for development and therefore may be available at a comparative discount. Wisconsin's mapping program—which pairs public disclosure of wetland areas with a permit-seeking process—ameliorates some of the harms of wetlands protection identified by the Supreme Court in Sackett.³¹³

Although public disclosure without a state-level permitting process risks acquisition of wetlands, development of private mapping may blunt some arguments against state action, such as the risk that a good-faith purchaser would be subject to CWA fines or would be "stuck" with land they were prohibited from building on. In turn, these private efforts could smooth the path to public regulation, allowing for a Wisconsin-like solution with lower net cost to the taxpayer. Efforts by land trusts and local environmental groups cannot be expected to fill the Sacket Gap entirely, but they may make important contributions, 314 and

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environmental group that successfully opposed a dredging permit through community action, email campaigns, and petitioning).

^{312.} See About Us, THE WETLAND TR., https://www.thewetlandtrust.org [https://perma.cc/QVX9-438C].

^{313.} See supra notes 144–49 (discussing Wisconsin's response to Sackett and its mapping program).

^{314.} This may be an effective tool especially for low-regulation, high-wet-lands areas in Florida at risk of development. "Before entering into, amending, or revoking a development agreement, a local government shall conduct at least two public hearings advertised approximately seven days before . . . in a newspaper of general circulation . . . [and] mailed to all affected property owners before the first public hearing." FLA. STAT. § 163.3225 (2024); see also, e.g.,

collaboration between scientists and grassroots groups can amplify local efforts by assisting in the identification and acquisition of especially hydrologically or ecologically important areas.

IV. BEYOND SACKETT

The examples in Section III.B highlight the ways that PEG can fill the gap in wetlands protection left by *Sackett*. These tools, however, are not limited to *Sackett* or wetlands protection. Although the interventions analyzed above may be tailored to fill specific legislative or regulatory gaps, the toolbox of PEG interventions available to advocates and private actors is extensive.

A. LOOKING TO THE FUTURE

PEG initiatives are not just a post-hoc, Band-Aid solution. They can be used in anticipation of changes in public law to secure the status quo and prevent backsliding. Take, for example, the risk that *Sackett* is only the first shot in a volley of judicial action eroding the CWA. The Supreme Court could, if faced with the right case or controversy, apply its narrow WOTUS definition not only to wetlands regulated under Section 404 of the CWA, but also to the point source discharges regulated under Section 402. The loss of *Chevron* deference in the wake of *Loper Bright* may make such a challenge more likely, if only by encouraging litigators to bring challenges. 315 If the Supreme Court takes this step, discharges to non-permanent waters, even if they allow significant water pollution to reach navigable waters during wet weather events, would be beyond the scope of CWA regulation. This could adversely affect water quality in many states and responses by federal, state, and local agencies would be subject to many of the same restrictions as faced regarding wetlands in Sackett.

Opposition to Bellmar Overwhelms FDEP Meeting, SIERRA CLUB FLA. CHAPTER (Dec. 8, 2023), https://www.sierraclub.org/florida/blog/2023/12/opposition-bellmar-overwhelms-fdep-meeting [https://perma.cc/M7TL-ESTB] (describing an instance of public opposition to wetland development).

315. See Cass R. Sunstein, The Consequences of Loper Bright 9 (July 8, 2024) (unpublished manuscript) (on file with the Minnesota Law Review) ("Under Chevron, litigants should be less inclined to bring suit to challenge agency action than under Loper Bright. The latter decision can and undoubtedly will be taken as an invitation to bring suit to challenge agency interpretation." (citing Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984), overruled by Loper Bright Enters. v. Raimondo, 144 S. Ct. 2244 (2024))).

The Supreme Court's willingness to extend CWA protection to the substantial equivalent of direct discharges to navigable waters in the 2021 *County of Maui* decision suggests that the Court would have to turn further away from a fulsome reading of CWA protections to achieve this result.³¹⁶ But *Sackett* warns that at least four votes may exist for that outcome. Changes to the composition of the Court in the next decade risk entrenching the division between the perceived "liberal" and "conservative" wings of the Court, especially if future appointments are made by Presidents who support regulatory rollbacks.

Nor is the CWA the only regulation put in jeopardy by *Sackett*: After the death of *Chevron* deference, 317 the regulatory state faces heightened judicial scrutiny. The question then becomes, do those who favor clean water feel lucky? Those who favor regulations protecting fish stocks? Ensuring compliance with wage and hours laws? Ensuring fair application of Veterans' benefits to servicemembers and their families? Nor is the death of *Chevron* deference the only threat to regulatory certainty: Deregulation was a key aim of the first Trump administration and will likely be a core feature of the second Trump administration as well. 222 In the face of further deregulation,

^{316.} County of Maui v. Haw. Wildlife Fund, 140 S. Ct. 1462 (2020); see also Sydney Bale, County of Maui v. Hawaii Wildlife Fund and its Impact on Clean Water Act Jurisprudence, 7 OIL & GAS NAT. RES. & ENERGY J. 551 (2022).

^{317.} Loper Bright, 144 S. Ct. at 2273 ("Chevron is overruled.").

^{318.} See Sunstein, supra note 315, at 8 ("Under Chevron, there was plenty of room to strike down agency interpretations, and under Loper Bright, there is plenty of room to uphold them. Whether agency interpretations are upheld or struck down may well depend on something other than whether Chevron or Loper Bright provides the relevant framework.").

 $^{319.\ \} See\ Loper\ Bright,\ 144\ S.\ Ct.$ at 2254 (reviewing agency actions regarding fishery management).

^{320.} See Christensen v. Harris County, 529 U.S. 576, 587–88 (2000) (determining that the U.S. Department of Labor's Wage and Hour Division should not receive *Chevron* deference for an opinion letter).

^{321.} See Wanless v. Shinseki, 23 Vet. App. 143, 150 (2009), aff'd, 618 F.3d 1333 (Fed. Cir. 2010) (applying Skidmore deference to an opinion of the General Counsel of the Department of Veteran Affairs); see also Linda D. Jellum, The United States Court of Appeals for Veterans Claims: Has It Mastered Chevron's Step Zero?, 3 VETERANS L. REV. 67 (2011) (analyzing the inconsistent application of Chevron to Veterans' claims).

^{322.} See Philip A. Wallach & Kelly Kennedy, Examining Some of Trump's Deregulation Efforts: Lessons from the Brookings Regulatory Tracker, BROOK-INGS (Mar. 8, 2022), https://www.brookings.edu/articles/examining-some-of-trumps-deregulation-efforts-lessons-from-the-brookings-regulatory-tracker

private governance initiatives can be adapted to limit the damage from legislative or judicial backsliding. Private governance initiatives that develop and promote supply chain contracting requirements—along with integration of legal standards into certification regimes, loan requirements, purchase conditions, and other tools—can serve to resist further erosion in the relationship between public preferences and government regulatory actions.

Fish stock protections provide an example of how private governance could be used in the future. In 2018, the State of Washington banned farming Atlantic salmon in "net pens" offshore, requiring existing farms to close when their leases ran out in 2022.³²³ Atlantic salmon escapes risked the health of native fish populations, ³²⁴ an important source of tourism and aquaculture revenue in the region.³²⁵ Should Washington take steps to reverse or mitigate the existing ban, ³²⁶ major American

[https://perma.cc/95HE-RZGR] (describing the deregulatory data gathered by Brookings, with the first Trump administration's deregulatory efforts totaling "321 actions, including 16 repeals under the Congressional Review Act, nine guidance documents, and 284 rulemakings"); Beth Gardiner, Fuzzy Math: The Strategy Behind the Trump EPA's Deregulation Push, YALE ENV'T 360 (June 6, 2019), https://e360.yale.edu/features/fuzzy-math-the-strategy-behind-the-trump-epa-deregulation-push [https://perma.cc/2PRS-X5T8] (describing the overall strategy behind the push for deregulation); Sahil Kapur, Silicon Valley Bank Collapse Puts New Spotlight on a 2018 Bank Deregulation Law, NBC NEWS (Mar. 13, 2023), https://www.nbcnews.com/politics/congress/silicon-valley-bank-collapse-puts-new-spotlight-2018-bank-deregulation-rcna74655 [https://perma.cc/KWL3-UVX7] (reflecting on a 2018 bank deregulation bill which possibly "played a role" in the 2023 collapse of Silicon Valley Bank).

- 323. John Ryan, *After 3 Decades, Washington State Bans Atlantic Salmon Farms*, NPR (Mar. 26, 2018), https://www.npr.org/sections/thesalt/2018/03/26/597019406/after-three-decades-washington-state-bans-atlantic-salmon-farms [https://perma.cc/X779-AWMH] (describing the political backdrop of the ban).
- 324. Isabella Breda, WA Bans Commercial Net-Pen Fish Farming in State Waters, Seattle Times (Nov. 18, 2022), https://www.seattletimes.com/seattle-news/environment/wa-lands-commissioner-bans-net-pen-fish-farming-in-state-waters [https://perma.cc/KAM7-967S]; see also Douglas Franz & Catherine Collins, Salmon Wars: The Dark Underbelly of Our Favorite Fish (2022) (summarizing the risks of Atlantic salmon net-pen farming and the public governance effort to mitigate its risks).
- 325. See Natural Resource Industry Output Map, PUGET SOUND INFO, https://www.pugetsoundinfo.wa.gov/Indicator/Detail/9 [https://perma.cc/9QR6-5WC8] (mapping the importance of agriculture and tourism amongst counties in the Puget Sound region).
- 326. In 2022, Washington State Commissioner of Public Lands Hilary Franz sought to expand the net-pen ban to all finfish, not just "exotic" species like Atlantic Salmon. See Commissioner's Order No. 202211, WA. DEPT. OF NAT'L

purchasers could mitigate the impacts of those steps by including requirements in their supply chains that salmon not be farmed in net pens in Washington waters. The availability of cheap, net-pen farmed fish may make that kind of supply chain language seem unlikely, but for companies that depend on broad sources of aquaculture for their supply chain—e.g., seafood companies that sell both salmon and lobster, a species particularly threatened by net-pen farming—and have both marketing interests in environmental protection and outspoken employee stakeholders with an interest in Washington's environmental resources, this language would be intuitive. A company with all three of these characteristics, such as Amazon-owned Whole Foods Market,³²⁷ would have a strong interest in doing so and could be a powerful enforcer of private environmental standards through supplier agreements and codes of conduct.

Corporate actors also have a strong financial interest in preventing backsliding. Short-term backslides to lower environmental standards could allow for windfall if production processes are successfully transitioned to ones that are lower-cost and more environmentally damaging. But the short-term transition costs of a reversion to the lower standard may outweigh savings,

RES. (2022), https://www.dnr.wa.gov/sites/default/files/publications/em_commissioners_order_net_pens.pdf [https://perma.cc/2V9R-D9PY]. A state judge ruled in 2023 that Franz's order had no legal effect, despite Franz's public announcement to the contrary. See Washington State's Fish Farm Ban 'Has No Legal Effect,' FISH SITE (Oct. 23, 2023), https://thefishsite.com/articles/washington-states-fish-farm-ban-has-no-legal-effect [https://perma.cc/YEX7-6BFW] (contrasting the 2023 ruling with Franz's 2022 order and press conference).

Amazon is expanding in Washington, particularly through its Puget Sound Headquarters. See Get an Exclusive Look Inside Sonic and Dynamo, Amazon's Newest Office Buildings in Bellevue, AMAZON (Feb. 9, 2024), https://www .aboutamazon.com/news/amazon-offices/amazon-bellevue-offices-tour [https:// perma.cc/Z9VY-LQWA]. Whole Foods highlights "responsible sourcing" and "environmental stewardship" as key parts of its mission. See Mission in Action, WHOLE FOODS MKT., https://www.wholefoodsmarket.com/mission-in-action [https://perma.cc/NK7B-YAPH]. It has circulated standards for producers supplying North American lobster, including standards for fishing vessels and lobster handling. Whole Food Market Standards for North American Lobster Version 5.0, Whole Foods Mkt. (Mar. 2019), https://assets.wholefoodsmarket.com/ www/missions-values/seafood-sustainability/Whole Foods Market Quality_ Standards_North_American_Lobster_March2019.pdf [https://perma.cc/5DV4 -CBKB]; see also Seafood Standards Like Nowhere Else, WHOLE FOODS MKT., https://www.wholefoodsmarket.com/quality-standards/seafood-standards [https://perma.cc/5KDF-Y6QS] (describing its seafood standards as the "strictest seafood standards on land").

especially if there is risk that the higher standards will be reimposed by a subsequent administration or Congress. As a result, it is likely in the interest of corporate entities to retain their high-water-mark processes to the extent they align with widely held public preferences, avoid transition costs, mitigate future transition risk, and reap the public relations benefits of marketing an above-legal-requirements sustainability process.

B. ASSEMBLING—AND USING—THE TOOLBOX

Advocacy groups can influence private governance in a number of ways, including by: supporting private initiatives, leveraging reputational concerns, advocating for public and private disclosure, creating pressure for due diligence by private actors, and working with private actors to develop contract terms to protect wetlands.³²⁸ But the first step is to avoid getting locked into the mental model that only asks "What can government do?" when confronting an environmental problem like wetlands destruction.

Some tools are more powerful than others. To the extent that it changes consumer behavior (and avoids overuse), naming and shaming can impact private actors seemingly regardless of industry.³²⁹ Other tools require more targeted approaches: Although silvicultural actors are unlikely to bow to retail pressure and may not be compelled by certification regimes, given the commodified nature of their outputs, they are more likely to give in to pressure from wholesale or retail timber buyers, insurers, and the owners of any land on which they operate via license. 330 Similarly, a corporation at the "top" of the supply chain, like Meta or Amazon, may be unyielding to the supply chain contracting requirements of others, but are likely to be cowed by shareholder or customer sentiment, making them uniquely sensitive to public pressure campaigns.331 Filling the Sackett Gap will require advocates to carefully select tools which have the greatest likelihood not only of changing the actions of their targeted actor, but of causing a chain reaction of private governance that magnifies their impact.

^{328.} See Vandenbergh, Global Governance, supra note 179, at 968-69.

^{329.} See supra note 273 and accompanying text.

^{330.} See supra notes 188 (describing a myriad of pressures), 297–301 (pressure by insurers), and 272–80 (pressure by individual and federal lenders).

^{331.} See, e.g., supra note 273 and accompanying text (providing an example of major lenders capitulating after a naming-and-shaming campaign).

It is similarly clear that public and private governance are not mutually exclusive³³²: Banks, while subject to only limited private environmental governance, have increasing exposure to scrutiny from the SEC and other regulators on the downstream environmental impacts of their investments. 333 Similarly, while local governments and federal agencies responsible for parkland may have limited regulatory power in the environmental space, they are sovereign over timber companies on rules relating to acceptable harvests. PEG, then, does not completely cast out Hobbes's leviathan, but rather finds the narrow field in which a given actor is sovereign (setting the terms of their supply chain, determining who they are willing to ensure, controlling their easements or purchasing behavior), and allows them to use their lawmaking power in that field to effectuate change and fill gaps left in more encompassing state authority. In doing so, PEG provides a powerful hedge against loopholes and backsliding. It is up to wetlands advocates to use that power to fill the Sackett Gap.

The analysis we have developed here applies to wetlands, but many other areas of environmental, health, and safety regulation are also subject to the polarized, gridlocked federal system. In addition, action by states is not just limited on wetlands—for instance, roughly half of all states have provisions that require their state environmental laws, not just wetlands requirements, to be no more stringent than the least stringent federal environmental laws. Solving these problems requires breaking the traditional frame and looking to both the public and private governance toolboxes to craft meaningful solutions.

CONCLUSION

The *Sackett* decision eliminated Clean Water Act protections from half of all U.S. wetlands. The response that five decades of environmental law and policy suggest is to ask: What can federal, state, and local governments do? We hope the answer is that they can do quite a bit, but we suggest that a new mental model is necessary. In this era of partisan gridlock, the answer

^{332.} See generally Currier, supra note 88 (discussing the interactions between public and private governance).

^{333.} See Press Release, U.S. Sec. & Exch. Comm'n, SEC Adopts Rules to Enhance and Standardize Climate-Related Disclosures for Investors (Mar. 6, 2024), https://www.sec.gov/newsroom/press-releases/2024-31 [https://perma.cc/9LXC-THZV] (describing updates to the SEC's environmental disclosure requirements).

at the federal level may be little or nothing, and the same may be true in more than half the states and many localities. In this Article, we shifted from asking "What can government do?" to "What can any organization do?"

We also shifted from a public governance to a private governance model and identified multiple viable new options for filling the Sackett Gap. We identified the economic and intangible benefits of wetlands, and the significant gap left in public governance wetlands protections post-Sackett. We then identified the institutions and instruments or tools that can motivate private actors to reduce wetlands destruction, and explored the types of initiatives that can create or harness these motivations.

We do not suggest that private governance can provide adequate protection for all wetlands, but we do suggest that private initiatives are an important and easily overlooked piece of the effort to close the Sackett Gap. Private governance also can work beyond *Sackett* to prevent backsliding in the face of deregulation across multiple topics. Harnessing the tools of private governance will be essential to preventing and preempting backsliding in the face of an uncertain judicial and legislative approach to environmental issues for at least the next decade, and there is no time to waste to get started.