

ESSAYS

THE CONSERVATIVE TURN AGAINST COMPENSATORY MITIGATION

BY
DAVE OWEN*

This Essay considers the recent conservative turn against compensatory mitigation policies. Those policies allow environmentally destructive activities to proceed, but on the condition that regulated actors compensate by protecting or improving environmental conditions somewhere else. Over the last four decades, those policies have become increasingly prevalent within environmental law, and they have enjoyed support from across much of the ideological spectrum, with most of the critiques coming from environmentalists. Recently, however, compensatory mitigation policies have become targets of conservative ire. This Essay asks why that has happened.

I argue that there are several explanations. First, the tendency to equate compensatory mitigation with a capitalist or neoliberal agenda mistakes the true roots of compensatory mitigation policies, which were often helpful to but were not creations of the business establishment. Second, as compensatory mitigation policy has grown up (a process that still is far from complete), it has become more demanding for regulated entities. Third, the deals promised by compensatory mitigation will seem less enticing to regulated entities as they begin to sense weakness in the underlying mandates of environmental law. These factors do not fully explain the recent

* Professor of Law, University of California, Hastings College of the Law. I thank Arturo Reyes and Meredith Stevenson for research assistance, Don Barry, Letty Belin, and several current agency staff members for helpful conversations at early stages of this research, John Leshy and David Takacs for comments on earlier drafts, and the student editors at *Environmental Law* for their editorial assistance.

conservative turn, but they do offer partial explanations for its emergence, as well as cautionary notes for those who believe—as I do—that compensatory mitigation should be an important part of the future of environmental law.

I.	INTRODUCTION.....	266
II.	WHAT IS COMPENSATORY MITIGATION?	269
III.	CONSERVATIVE BONA FIDES?	271
IV.	COMBAT BIOLOGISTS	275
V.	THE BEGINNINGS OF A BACKLASH	282
VI.	THE FUTURE OF COMPENSATORY MITIGATION.....	288

I. INTRODUCTION

In June 2017, at a Western Governors' Association meeting in Whitefish, Montana, Interior Secretary Ryan Zinke boasted about signing an order “to end the practice of compensatory mitigation.”¹ He then added perhaps the strongest—and least accurate—critique the practice has ever received from a top executive branch official: “I call it un-American.”²

By this time, such statements were not entirely surprising. Since 2015, when the Obama Administration took several prominent steps designed to improve compensatory mitigation practices,³ some conservative politicians had made no secret of their disdain for the practice. Representative Louie Gohmert, for example, charged that the Obama Administration’s policies were “another attempt to increase the unilateral expansion of the executive branch and the influence of land managers outside of their fiefdoms,”⁴ while

¹ Perry Backus, *Zinke Talks Issues at Western Governors' Association Meeting*, MISSOULIAN (June 28, 2017), <https://perma.cc/YGF6-3A9Y>; see Ryan Zinke, Sec’y of the Interior, Order No. 3349, American Energy Independence (Mar. 29, 2017), <https://perma.cc/8TMA-9URV>; see also Exec. Order No. 13,783, 82 Fed. Reg. 16,093, 16,094 (Mar. 31, 2017) (rescinding President Obama’s November 3, 2015 action on compensatory mitigation).

² Backus, *supra* note 1. In fact, the idea is distinctively American. See Marie Hrabanski, *The Biodiversity Offsets as Market-Based Instruments in Global Governance: Origins, Success and Controversies*, 15 ECOSYSTEM SERVS. 143, 145 (2015) (noting that compensatory mitigation policy development began primarily in the United States); Calvet Coralie et al., *Tracking the Origins and Development of Biodiversity Offsetting in Academic Research and Its Implications for Conservation: A Review*, 192 BIOLOGICAL CONSERVATION 492, 495 (2015) (finding that academic writing about compensatory mitigation policies began in the United States).

³ See, e.g., Endangered and Threatened Wildlife and Plants; Endangered Species Act Compensatory Mitigation Policy, 81 Fed. Reg. 95,316, 95,316 (Dec. 27, 2016); U.S. Fish and Wildlife Service Mitigation Policy, 81 Fed. Reg. 83,440, 83,440 (Nov. 21, 2016); BUREAU OF LAND MGMT., MITIGATION: HANDBOOK H-1794-1, at iv (2016); U.S. DEP’T OF THE INTERIOR, DEPARTMENT MANUAL, CHAPTER 6: IMPLEMENTING MITIGATION AT THE LANDSCAPE-SCALE 4 (2015); Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 81 Fed. Reg. 68,743, 68,744 (Nov. 6, 2015).

⁴ *Imposition of New Regulations through the President’s Memorandum on Mitigation: Oversight Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on*

Senator Dan Sullivan warned that “compensatory mitigation often appears arbitrary and even punitive to those of us trying to navigate this complex process.”⁵

Nevertheless, even if environmental commentators understood that compensatory mitigation was becoming a target, they puzzled about the reasons why.⁶ For decades, compensatory mitigation policies had enjoyed bipartisan support. They had emerged and advanced under both Democratic and Republican administrations,⁷ and compensatory mitigation enjoyed a reputation as the sort of market-friendly regulatory instrument that even conservatives were supposed to embrace.⁸ Indeed, some academics still refer to incentive-based environmental policies—a category that includes compensatory mitigation—as a form of regulatory minimalism.⁹ And until recently, the harshest critiques of compensatory mitigation policies tended to come from environmentalists and left-leaning academics, some of whom derided the policies as part of a larger neoliberal project of extending capitalism’s empire.¹⁰ For a self-styled deal-making ubercapitalist and his supporting cast of deregulators to turn against compensatory mitigation seemed kind of weird.¹¹

Nat. Res., 114th Cong. 3 (2016) [hereinafter *Hearings on the President’s Memorandum on Mitigation*] (statement of Rep. Louie Gohmert, Chairman, S. Comm. on Oversight and Investigation) (describing President Obama’s mitigation memorandum).

⁵ *Federal Mitigation Requirements and Interagency Coordination Related to the Economic Development on Federal, State, and Private Lands: Joint Field Hearing Before the S. Comm. on Energy and Nat. Res. and the Subcomm. on Fisheries, Water, and Wildlife of the S. Comm. on Env’t & Pub. Works*, 114th Cong. 4 (2015) (statement of Sen. Sullivan, Alaska).

⁶ See, e.g., Greg Zimmerman, *What’s Interior Secretary Zinke’s Beef with “Compensatory Mitigation?”*, WESTWISE (June 30, 2017), <https://perma.cc/GN5R-DFMB> (explaining that Secretary Zinke has not clearly explained why he opposes compensatory mitigation); see also Jim Salzman, *The Overlooked Part of Trump’s Executive Order on Climate Change*, LEGAL PLANET (Apr. 6, 2017), <https://perma.cc/A2JH-5Z5T> (questioning the reasoning behind the Trump Administration’s opposition to mitigation banking).

⁷ See Dave Owen, *Little Streams and Legal Transformations*, 2017 UTAH L. REV. 1, 4, 23–42 (describing the evolution of regulatory protections for small streams).

⁸ See, e.g., Zimmerman, *supra* note 6 (“[I]t’s precisely the type of free-market solution to conservation and environmental protections that Republicans have always supported.”).

⁹ E.g., Robin Kundis Craig & J.B. Ruhl, *Designing Administrative Law for Adaptive Management*, 67 VAND. L. REV. 1, 3–4, 6 (2014); Charles F. Sabel & William H. Simon, *Minimalism and Experimentalism in the Administrative State*, 100 GEO. L.J. 53, 58 (2011).

¹⁰ See, e.g., Bram Büscher et al., *Toward a Synthesized Critique of Neoliberal Biodiversity Conservation*, CAPITALISM NATURE SOCIALISM, June 2012, at 4, 8 (arguing that the expansion of policies that involve payments for ecosystem services—a category that includes compensatory mitigation—“is about finding new arenas for markets to operate in and thus to expand the remit, and ultimately the circulation of capital”).

¹¹ E.g., Salzman, *supra* note 6 (“It seems an odd step for an administration with an avowed affinity for business to destroy in one of its very first acts arguably the most pro-market environmental initiative of the Obama administration.”); see also *Hearings on the President’s Memorandum on Mitigation*, *supra* note 4, at 3–4 (statement of Rep. Debbie Dingell, Ranking Member, Subcomm. on Oversight and Investigations) (noting bipartisan and business support for compensatory mitigation policies and stating, “I am somewhat baffled by the perspective offered here on the other side of the aisle today.”).

Yet this turn of events has been building for a long time. And it has been building not just because conservative politics now seem defined by rejection of anything the Obama Administration did, though that impulse toward rejection probably does play a role. The reasons, instead, run deeper, and they have been coalescing since the 1980s, when compensatory mitigation policy first shuffled onto the national stage.¹² Compensatory mitigation was never really a product of resurgent capitalism.¹³ It instead was largely a creation of the bureaucracy, and while it evolved in ways that were friendly to some private entrepreneurs, it appeals primarily to business entities that are ready to accept and work within the complex regimes of modern environmental law (or that see no other choice) and to professionalized regulatory agencies and environmental groups that are willing to work closely with businesses.¹⁴ It appeals, in other words, to people who believe in regulated capitalism. It arouses some concern from the subset of environmentalists that views business interests as incorrigibly anti-environmental.¹⁵ And to conservatives who disdain any compromise with the administrative state, distrust complex policy instruments, and wear anti-environmentalism as a badge of honor, compensatory mitigation is likely to be particularly repellant.

This Essay explores the conservative turn against compensatory mitigation. Part II explains what compensatory mitigation is and how it developed a reputation as a market-friendly, nonpartisan form of regulation. Part III turns to the historical evolution of compensatory mitigation practices. It explains how the realities of compensatory mitigation undercut some of the more liberal critiques of the practice, and how those realities set the stage for emerging conservative opposition. Part IV turns to the actual emergence of that opposition, beginning with the courts and then turning to present-day administrative and legislative policy fights. Part V closes by considering the future of compensatory mitigation. For people who believe that compensatory mitigation is an imperfect but promising policy option,¹⁶ that future includes causes for concern: with skepticism on the left and outright opposition on the right, compensatory mitigation may now occupy a position analogous to a politician whose coalition is just a little too small. But even if compensatory mitigation policies may be vulnerable because they do not fit neatly into the most popular narratives of environmental politics, the functionality of a policy also has some relevance in the real

¹² See *infra* notes 52–55 and accompanying text.

¹³ See *infra* notes 107–110 and accompanying text.

¹⁴ See *infra* notes 76–117 and accompanying text.

¹⁵ See, e.g., David Ehrenfeld, *Neoliberalization of Conservation*, 22 CONSERVATION BIOLOGY 1091, 1092 (2008).

¹⁶ In addition to ideological critiques, compensatory mitigation also has received extensive functional criticism. E.g., Joseph W. Bull et al., *Biodiversity Offsets in Theory and Practice*, 47 ORYX 369, 369–70 (2013) (synthesizing critiques). That criticism has led some people to dismiss the practice as hopeless, while others—myself included—view it as promising policy in need of improvement. I am not aware of any scholars or policymakers who think compensatory mitigation is just fine and in need of no further reform.

world. Compensatory mitigation emerged because it has the potential to address real needs. So long as meaningful environmental regulation remains—and, for now, it does—those needs also will remain, and so too, hopefully, will a continued effort to advance and improve policies for compensatory mitigation.

II. WHAT IS COMPENSATORY MITIGATION?

To understand the current turn against compensatory mitigation, and the reasons it has been surprising, it helps to first know something about what the practice is. This Part therefore provides a basic primer on compensatory mitigation and explains how it came to have a reputation as a business-friendly, market-oriented kind of policy.

The core concept of compensatory mitigation is simple. Regulated entities receive permission to engage in environmentally degrading activities that otherwise would be prohibited, and in return, they provide extra environmental benefits at some other time or place.¹⁷ So, for example, a developer might receive permission to build a shopping mall in an area with protected wetlands, and in return for receiving its permit, the developer would restore wetlands somewhere else.

This basic concept is now integral to the implementation of many environmental law regimes.¹⁸ In the United States, Clean Water Act¹⁹ section 404 drives much of the compensatory mitigation work,²⁰ but compensatory mitigation also occurs under the National Environmental Policy Act,²¹ the Endangered Species Act,²² the natural resource damages provisions of several statutes,²³ the Federal Power Act,²⁴ and provisions of state laws.²⁵ In

¹⁷ See Palmer Hough & Morgan Robertson, *Mitigation Under Section 404 of the Clean Water Act: Where It Comes From, What It Means*, 17 WETLANDS ECOLOGY & MGMT. 15, 16, 23–24 (2009).

¹⁸ See COMM. ON MITIGATING WETLAND LOSSES ET AL., NAT'L RESEARCH COUNCIL, COMPENSATING FOR WETLAND LOSSES UNDER THE CLEAN WATER ACT 61–63 (2001) (summarizing several laws that provide compensatory mitigation requirements).

¹⁹ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).

²⁰ *Id.* § 1344.

²¹ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370h (2012); see COMM. ON MITIGATING WETLAND LOSSES ET AL., *supra* note 18, at 62 (summarizing its applicability to compensatory mitigation).

²² Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2012); see *id.* §§ 1538–1539 (allowing otherwise prohibited takes of listed species so long as those takes are adequately mitigated, among other requirements).

²³ See Memorandum from Steve Glomb, Dir., Office of Restoration & Damage Assessment, to Director of Bureau of Indian Affairs et al. 2 (Dec. 9, 2016), <https://perma.cc/M2CU-LNRY> (noting that the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675; the Oil Pollution Act of 1990, Pub. L. No. 101-380, 104 Stat. 484 (codified as amended in scattered sections of 33, 43, and 46 U.S.C.); and the Clean Water Act all have natural resource damages provisions that can lead to compensatory mitigation).

²⁴ 16 U.S.C. §§ 791a–825r; see Dave Owen & Colin Apse, *Trading Dams*, 48 U.C. DAVIS L. REV. 1043, 1079 (2015).

other countries, compensatory mitigation policies also are on the rise, and they have received the active support of many international organizations devoted to the growth and development of environmental law.²⁶

In practice, regulators and regulated entities use three primary mechanisms to implement compensatory mitigation policies. The first is known as “permittee-responsible” mitigation.²⁷ As the name suggests, permittee-responsible mitigation is carried out by the same entity that receives permission to cause environmental degradation (or by its contractors).²⁸ The second two types both fall within the umbrella category of third-party mitigation. In a mitigation banking system, the third party is typically a private, entrepreneurial entity that creates, restores, or protects environmental resources and then markets credits for equivalent environmental degradation.²⁹ Entities that purchase those credits then can engage in environmentally degrading activities. In an in-lieu fee program, the third party manages a fund into which permittees can pay, and it then uses the aggregated funds to support environmental restoration or protection.³⁰ Some in-lieu fee programs are managed by public entities, while others are managed by nonprofits.³¹ In both of these third-party systems, liability for the performance of the mitigation shifts from the permittee to the mitigation provider.³²

One last terminological distinction is important here. In regulatory parlance, compensatory mitigation falls within the broader term “mitigation,” which also includes measures to avoid or minimize impacts to protected resources.³³ Under United States Army Corps of Engineers (Corps)

²⁵ See, e.g., Amy Wilson Morris & Jessica Owley, *Mitigating the Impacts of the Renewable Energy Gold Rush*, 15 MINN. J.L. SCI. & TECH. 293, 322–24 (2014) (describing compensatory mitigation under California’s species protection laws).

²⁶ See Coralie Calvet et al., *The Biodiversity Offsetting Dilemma: Between Economic Rationales and Ecological Dynamics*, 7 SUSTAINABILITY 7357, 7358 (2015); Bruce A. McKenney & Joseph M. Kiesecker, *Policy Development for Biodiversity Offsets: A Review of Offset Frameworks*, 45 ENVTL. MGMT. 165, 166–69 (2010) (describing and comparing programs from multiple countries).

²⁷ U.S. ENVTL. PROT. AGENCY, WETLANDS COMPENSATORY MITIGATION (2015), <https://perma.cc/YP9P-48DT> (explaining different mitigation types).

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ See JESSICA WILKINSON ET AL., ENVTL. L. INST., THE STATUS AND CHARACTER OF IN-LIEU FEE MITIGATION IN THE UNITED STATES 17–18 tbl.2 (2006), <https://perma.cc/TA2V-JFHU>. In Virginia and Maine, the Nature Conservancy administers state-sponsored in-lieu fee programs. See *Virginia Aquatic Resources Trust Fund Freshwater Conservation in Virginia*, NATURE CONSERVANCY, <https://perma.cc/7B6N-UADK> (last visited Apr. 7, 2018); see also *Maine In Lieu Fee Compensation Program (ILF) and Maine Natural Resource Conservation Program (MNRCP)*, ME. DEP’T ENVTL. PROTECTION, <https://perma.cc/73FP-CAHP> (last visited Apr. 7, 2018).

³² U.S. ENVTL. PROT. AGENCY, *supra* note 27. In contrast, while a permittee may hire a contractor to carry out permittee-responsible mitigation, the permittee remains legally responsible for completing that mitigation. *Id.*

³³ COMM. ON MITIGATING WETLAND LOSSES ET AL., *supra* note 18, at 65.

and United States Environmental Protection Agency (EPA) policies,³⁴ which have been widely imitated by other agencies and in other countries,³⁵ compensatory mitigation is a third-best approach, and impacts should be avoided and then, to the extent avoidance is impossible, minimized before compensatory mitigation takes place.³⁶ This prioritization system is widely known as the “mitigation hierarchy.”³⁷

III. CONSERVATIVE BONA FIDES?

So how, one might wonder, did compensatory mitigation earn its reputation as a market-friendly, neoliberal policy? There are several reasons.

First, by replacing flat prohibitions with the possibility of deal-making, compensatory mitigation appears to give flexibility to regulated entities. In a system without compensatory mitigation, the law may appear to simply prohibit some forms of environmental degradation. So, for example, prior to 1982, when Congress amended the Endangered Species Act to allow some forms of compensatory mitigation, the Act seemed to prohibit all actions that “took” protected species, even if that prohibition meant the end of a proposed project.³⁸ A compensatory mitigation policy opens up another choice: the project can proceed, but with compensation for its impacts.³⁹ If the absence of this compensatory option really corresponds with full and vigorous enforcement of the law (in practice, that can be a big if), then a compensatory mitigation option creates significant flexibility for the regulated.⁴⁰

Second, as many observers have pointed out, compensatory mitigation requires commodification of environmental values.⁴¹ In order for a compensatory mitigation system to work, regulators need to decide how much mitigation a permittee must provide, or how many credits it needs to buy from a bank (and how many credits the bank’s work entitles it to sell), or how much money a developer must provide to an in-lieu fee program.⁴²

³⁴ EPA and the Corps jointly implement the Clean Water Act section 404 program. See Dave Owen, *Regional Federal Administration*, 63 UCLA L. REV. 58, 81–82 (2016) (describing the division of responsibilities).

³⁵ See BECCA MADSEN ET AL., STATE OF BIODIVERSITY MARKETS: OFFSET AND COMPENSATION PROGRAMS WORLDWIDE, at iv, 8, 32, 59 (2010), <https://perma.cc/WC38-MKK5> (describing multiple programs that use the mitigation hierarchy).

³⁶ *Id.* at 5.

³⁷ *Id.* at 5, 24–25.

³⁸ See Karin P. Sheldon, *Habitat Conservation Planning: Addressing the Achilles Heel of the Endangered Species Act*, 6 N.Y.U. ENVTL. L.J. 279, 294–95 (1998).

³⁹ See *id.* at 295–96; see also Endangered Species Act of 1973, 16 U.S.C. § 1539(a)(2)(A) (2012) (allowing takes if, along with meeting other requirements, the applicant for a take permit has mitigated the impacts of the take).

⁴⁰ See Sheldon, *supra* note 38, at 298 (noting that Congress intended to provide flexibility).

⁴¹ See generally James Salzman & J.B. Ruhl, *Currencies and the Commodification of Environmental Law*, 53 STAN. L. REV. 607 (2000) (describing environmental trading markets).

⁴² See Owen, *supra* note 34, at 102–03 (describing these decisions); see also Morgan Robertson, *The Work of Wetland Credit Markets: Two Cases in Entrepreneurial Wetland*

And because no two habitats are exactly the same, the answer cannot be, “recreate the very same thing that you destroyed.”⁴³ Instead, the architects of compensatory mitigation systems must come up with quantifiable currencies of exchange, which typically are proxy measures of environmental values.⁴⁴ This practice of developing currencies imbues environmental regulation with economic concepts and language, and it can seem as though ecological value is being subsumed within an economic framework.⁴⁵

Third, the emergence of mitigation banking has influenced the reputation of the entire field of compensatory mitigation. Many mitigation bankers really are unapologetic capitalists.⁴⁶ They may take pride in the quality of the habitats they restore, but they are also in it for the money; their goal is to turn environmental restoration into profit. For some environmental advocates, that marriage of restoration and profit is appealing; arguing that environmentalism is good for business can be a wise strategic choice. But the environmental movement grew in large part out of distrust of the perceived excesses of capitalism, and an embrace of capitalistic environmental fixes makes many environmental advocates a little queasy.⁴⁷ Not all of compensatory mitigation reflects that embrace; mitigation banking is just one species of compensatory mitigation policy.⁴⁸ But it is a particularly intriguing form of compensatory mitigation—permittee-responsible mitigation may be more prevalent,⁴⁹ but it is

Banking, 17 WETLANDS ECOLOGY & MGMT. 35, 47 (2009) (describing regulatory review of mitigation banking).

⁴³ See generally James Salzman & J.B. Ruhl, “No Net Loss”: *Instrument Choice in Wetlands Protection*, in MOVING TO MARKETS IN ENVIRONMENTAL REGULATION: LESSONS FROM TWENTY YEARS OF EXPERIENCE 323 (Jody Freeman & Charles D. Kolstad eds., 2007) (noting the challenges associated with applying trading systems to habitat).

⁴⁴ See Salzman & Ruhl, *supra* note 41, at 623–24 (noting this heavy reliance on proxy measures).

⁴⁵ See Morgan M. Robertson, *The Nature That Capital Can See: Science, State, and Market in the Commodification of Ecosystem Services*, 24 ENV'T & PLANNING D: SOCIETY & SPACE 367, 371–72 (2006) (“The knowledge system of science is being put into new articulatory relationships with the standards of capital, and scientific data are doing important new work in expanding the circuits of capital.”).

⁴⁶ This is an aggregate impression formed from multiple research interviews (for previous research papers, including Owen, *supra* note 34, and Owen & Apse, *supra* note 24) and more informal conversations with mitigation bankers.

⁴⁷ See, e.g., Daniel F. Doak et al., Opinion, *What Is the Future of Conservation?*, 29 TRENDS ECOLOGY & EVOLUTION 77, 79 (2014) (“[T]he assumption, and hence reinforcement, of only economic motivations for conservation ignores and may thus diminish the importance of political, scientific, philosophical, and religious motivations for conservation found across different nations and cultures.”); Ehrenfeld, *supra* note 15, at 1092 (“The reduction of all conservation problems to economic terms is counter-productive and dangerous.”).

⁴⁸ See *supra* notes 27–32 and accompanying text (describing permittee-responsible mitigation and in-lieu fee programs).

⁴⁹ U.S. ARMY ENG’R INST. FOR WATER RES. & U.S. ENVTL. PROT. AGENCY, 2015-R-03, THE MITIGATION RULE RETROSPECTIVE: A REVIEW OF THE 2008 REGULATIONS GOVERNING COMPENSATORY MITIGATION FOR LOSSES OF AQUATIC RESOURCES 11 (2015) (noting that for the

comparatively dull—and mitigation banking therefore gets an overabundance of attention.⁵⁰ Consequently, it can seem to spread its capitalistic aura out over the entire compensatory mitigation field.⁵¹

Fourth, the timing of compensatory mitigation's emergence has contributed to its reputation for market-friendliness. While the basic idea of compensatory mitigation has existed for a very long time, the United States' compensatory mitigation policies rose to prominence during the 1980s and 1990s, at a time when deregulation was also ascendant.⁵² Early on, at least, the two movements weren't entirely disconnected. As one former Department of Interior lawyer who worked in the Reagan Administration explained to me, there were some highly ideological and anti-regulatory political appointees who saw compensatory mitigation as a convenient fig leaf—a set of minor and unenforceable commitments whose primary value was to allow projects to proceed.⁵³ That hope was exactly concordant with some environmentalists' fears, and at the time, it often had ample basis in reality.⁵⁴ Compensatory mitigation has never fully shed the resulting stain.⁵⁵

Fifth and finally, the intellectual climate surrounding the emergence of compensatory mitigation policies partially explains their reputation. Particularly in the 1980s and 1990s, some of environmental law's central academic debates pitted advocates of economics-based regulatory methodologies against more traditional environmentalists, who argued for regulatory schemes based in moral values and in non-economic measures of public health.⁵⁶ These debates took place on multiple fronts, including disputes over the use of regulatory cost-benefit analysis and quantitative risk

Corps's compensatory mitigation authorizations between 2010 and 2015, "41% used mitigation bank credits, 11% used in-lieu fee program credits, 37% did on-site permittee responsible mitigation, and 11% conducted off-site permittee-responsible mitigation").

⁵⁰ See Owen, *supra* note 7, at 36 (noting that, in some parts of the country, mitigation banking is still "in its infancy").

⁵¹ See, e.g., Valerie Boisvert, *Conservation Banking Mechanisms and the Economization of Nature: An Institutional Analysis*, 15 *ECOSYSTEM SERVS.* 134, 135 (2015) ("The vocabulary used to describe these mechanisms—banks, bankers, credits, debits, *etc.*—and the associated legal framework are eloquent testimony to the underlying neoliberal vision.").

⁵² See Richard J. Lazarus, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law's First Three Decades in the United States*, 20 *VA. ENVTL. L.J.* 75, 85–87, 92–97 (2001) (describing deregulatory pushes).

⁵³ Telephone Interview with Don Barry, former attorney, Office of the Solicitor, U.S. Dep't of the Interior (Sept. 8, 2017).

⁵⁴ See COMM. ON MITIGATING WETLAND LOSSES ET AL., *supra* note 18, at 120–22 (providing, in 2001, a comprehensive critique of recent and contemporary practices).

⁵⁵ See, e.g., Albert C. Lin, *Myths of Environmental Law*, 2015 *UTAH L. REV.* 45, 79 (identifying compensatory mitigation as a myth). In some realms, it also has continued to earn that reputation. See, e.g., Margaret A. Palmer & Kelly L. Hondula, *Restoration as Mitigation: Analysis of Stream Mitigation for Coal Mining Impacts in Southern Appalachia*, 48 *ENVTL. SCI. & TECH.* 10,552, 10,554 (2014) (finding that stream restoration efforts are not providing anything close to mitigation for the impacts of coal mining).

⁵⁶ See DANIEL A. FARBER, *ECO-PRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD* 35–36 (1999) (summarizing this debate).

assessment,⁵⁷ and one particularly important front was a debate about whether to employ market-oriented regulatory approaches, like cap-and-trade systems, or traditional technology-based permitting.⁵⁸ Compensatory mitigation systems are close cousins to cap-and-trade schemes, and even if the debaters tended to focus on air-quality regulation rather than habitat-protection systems, it was easy to think that compensatory mitigation policy was at least part of the discussion.⁵⁹ Because that discussion sometimes occurred in explicitly ideological terms—disparaging traditional environmental regulatory systems as “Soviet-style” centralization was a common trope—it was easy to identify compensatory mitigation with the more conservative camps in an ideologically tinged debate.⁶⁰

The net result of all these factors was to create a widespread impression that the emergence of compensatory mitigation was driven by a rightward political turn.⁶¹ This view remains common; many articles by environmental scholars evince an uneasy distrust toward compensatory mitigation, which the scholars view as a poster child for neoliberal policy.⁶² A seemingly obvious corollary of this view is that compensatory mitigation policy should be supported by conservative politicians. But there is a difference between a somewhat casual identification—primarily by its critics—of a policy with conservative politics and the actual existence of conservative roots and conservative support. The importance of that difference is now coming to light.

⁵⁷ Compare CASS R. SUNSTEIN, *THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION*, at ix, xi (2002) (discussing the emerging cost-benefit state), with Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. PA. L. REV. 1553, 1562–64 (2002) (“[C]ost-benefit analysis is fundamentally incapable of delivering on its promise of more economically efficient decisions about protecting human life, health, and the environment.”).

⁵⁸ Compare Wendy E. Wagner, *The Triumph of Technology-Based Standards*, 2000 U. ILL. L. REV. 83, 84 (arguing that technology-based standards are the most important approach for pollution control), with Bruce A. Ackerman & Richard B. Stewart, Comment, *Reforming Environmental Law*, 37 STAN. L. REV. 1333, 1341–47 (1985) (discussing the benefits of market-oriented trading regimes).

⁵⁹ See generally, e.g., Salzman & Ruhl, *supra* note 43 (discussing habitat exchanges).

⁶⁰ See, e.g., Ackerman & Stewart, *supra* note 58, at 1334. In these debates, Ackerman and Stewart’s perceived conservatism was only relative. Their writing—in this vein and others—makes clear their support for the basic goals of environmental regulations and their willingness to impose high costs on businesses. See, e.g., *id.* at 1343–44 (arguing that tradable pollution entitlements should be auctioned, a practice that would heighten costs for businesses and raise large sums to support public regulation).

⁶¹ See, e.g., Büscher et al., *supra* note 10, at 8 (describing compensatory mitigation policy as an expansion of capitalism’s empire).

⁶² E.g., Morgan M. Robertson, *The Neoliberalization of Ecosystem Services: Wetland Mitigation Banking and Problems in Environmental Governance*, 35 GEOFORUM 361, 361–63 (2004). While Robertson’s work often identifies mitigation banking with neoliberalism, his research also frequently explains ways in which that labeling is overly simplistic. *Id.* at 371.

IV. COMBAT BIOLOGISTS

In the early 1980s, employees at the United States Fish and Wildlife Service (FWS) referred to their colleagues who worked on Clean Water Act section 404 implementation as “combat biologists.”⁶³ These combat biologists’ job was to review stream and wetland fill permits issued by the Corps.⁶⁴ The Corps, in that era, viewed itself as a construction and economic development agency; enforcing environmental protections was an unfamiliar and weakly embraced role.⁶⁵ But at staff levels in FWS (and EPA), a strong commitment to environmental protection remained.⁶⁶ And so began a policy fight that continues to the present day, with outcomes that have helped define the political valence of compensatory mitigation.

The sides of the debate, as it initially emerged, are easy to summarize. Corps staff wanted less compensatory mitigation and was less committed to the measures it did adopt, while FWS wanted more, and it wanted mitigation measures to be effective.⁶⁷ Behind those simple positions lurked a larger philosophical debate about what compensatory mitigation was supposed to achieve. To some at the Corps, it was a fig leaf to facilitate de facto deregulation.⁶⁸ Support among elected politicians, including some Republicans, was too strong to ignore the mandates of environmental law; a show of compliance was necessary.⁶⁹ And compensatory mitigation offered a way of granting permits while pretending to protect the environment.⁷⁰ To FWS staff, in contrast, compensatory mitigation was supposed to be something real. It was a way of securing genuine environmental compensation for the impacts of permitted projects.⁷¹

In the early years of the debate, the anti-regulators seemed to be prevailing. For many types of stream and wetland fills, regulators required no compensatory mitigation at all.⁷² Where they did require compensatory mitigation, the efforts were often somewhat cursory and were neither monitored effectively nor backed by any kind of scientific theory of

⁶³ Telephone Interview with Don Barry, *supra* note 53.

⁶⁴ *Id.*

⁶⁵ See Owen, *supra* note 7, at 18–19 (quoting an FWS staff biologist who worked with the Corps during this era: “They were old school Corps of Engineers, damn the torpedoes, we’re going to issue permits. We can’t let these lowly fish stand in our way.”).

⁶⁶ See *id.* at 23–24 (“The Corps’s partner agencies—the FWS . . . in addition to the EPA—also were engaged in constant discussions with the Corps staff, and often pushed for more thorough and aggressive wetland protections.”).

⁶⁷ Telephone Interview with Don Barry, *supra* note 53.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ See Edward T. LaRoe, *Wetland Habitat Mitigation: An Historical Overview*, NAT’L WETLANDS NEWSL. (Env’tl. Law Inst., Wash. D.C.), Sept.–Oct. 1986, at 8, 9 (“[I]t is the only method for allowing development, while at the same time ensuring no net loss in resource benefits to the public.”). Mr. LaRoe worked for FWS at the time he published the article. *Id.* at 8.

⁷² See Owen, *supra* note 7, at 20–22 (describing instances of lax and/or minimal Corps efforts in the initial years of Clean Water Act implementation).

environmental restoration.⁷³ Contemporary reports amply documented the dismal results.⁷⁴ Studies of compensatory mitigation in this early era found that the restored or replacement wetlands had little ecological value or quickly failed, were often disconnected from surrounding habits, and were subject to spotty and inadequate oversight.⁷⁵ Yet the environmental destruction for which mitigation was supposed to compensate was entirely real.

These early failings helped give compensatory mitigation its lingering stigma.⁷⁶ But they also inspired FWS, EPA, and eventually the Corps itself to seek reform. One key reform was a move toward applying mitigation requirements to smaller and smaller impacts, so that the scope of compensatory mitigation changed.⁷⁷ From the 1990s through the 2000s, the Corps and EPA steadily reduced the thresholds for requiring permitting and for requiring compensatory mitigation, and they (and some state regulators) also expanded compensatory mitigation requirements to cover impacts to streams.⁷⁸ In combination, these changes meant that many projects that once could proceed without any mitigation at all now required compensation.⁷⁹

EPA and the Corps also increasingly favored “mitigation in advance.”⁸⁰ Advance mitigation must be provided, and must demonstrate some value, before it can be the basis for permitting environmentally destructive activities.⁸¹ It contrasts with mitigation provided after environmentally destructive activities occur. The advantages of the former approach should be fairly obvious: the compensation occurs sooner, and regulators should have more confidence that real mitigation will take place.⁸² Initially, however, the latter approach was much more common.⁸³ Regulated entities

⁷³ See *id.* at 26 n.166 (quoting a Corps biologist: “Back in the day somebody may have said, ‘Well I’m just gonna go create some wetlands’ and we’d say ‘OK, here’s your permit’ without any level of detail of what you’re gonna do and how you’re gonna do it, what your success is. If it didn’t work, then, ‘ok, well no big deal.’”).

⁷⁴ *E.g.*, COMM. ON MITIGATING WETLAND LOSSES ET AL., *supra* note 18, at 190–97 tbl.A-1 (compiling and summarizing studies).

⁷⁵ See *id.*; see also U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-05-898, WETLANDS PROTECTION: CORPS OF ENGINEERS DOES NOT HAVE AN EFFECTIVE OVERSIGHT APPROACH TO ENSURE THAT COMPENSATORY MITIGATION IS OCCURRING 4–6 (2005) (discussing the inconsistencies and inadequacies of then-current oversight regimes).

⁷⁶ See *supra* note 55 and accompanying text.

⁷⁷ See Hough & Robertson, *supra* note 17, at 18 (noting this trend).

⁷⁸ Owen, *supra* note 7, at 28–30, 34–36.

⁷⁹ *Id.* at 38.

⁸⁰ See Compensatory Mitigation for Losses of Aquatic Resources, 73 Fed. Reg. 19,594, 19,609 (Apr. 10, 2008) (to be codified at 33 C.F.R. pts. 325 and 332; 40 C.F.R. pt. 230) (describing a mitigation rule’s preference for “encouraging compensatory mitigation planning to be performed in advance of permitted activities”).

⁸¹ Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 81 Fed. Reg. 68,743, 68,744 (Nov. 6, 2015).

⁸² See Royal C. Gardner, *Money for Nothing? The Rise of Wetland Fee Mitigation*, 19 VA. ENVTL. L.J. 1, 39 (2000) (discussing the drawbacks of fee mitigation).

⁸³ See *id.* at 2 (“Traditionally, the developer . . . has implemented the mitigation project concurrent with or after the development project.”).

would often build first and compensate later, or would pay into an in-lieu fund that would only begin restoring or protecting aquatic habitats once enough money had accumulated to start projects—if it did so at all.⁸⁴ Consequently, a preference for advance mitigation has been an element of most recent efforts at compensatory mitigation reform.

These changes coincided with a shift toward watershed-scale mitigation planning.⁸⁵ In the 1980s and 1990s, regulators preferred for compensatory mitigation to occur as close as possible to the sites of destruction and preferably in the same place.⁸⁶ This approach made intuitive sense; if compensation occurs far away from the original site of destruction, that geographic disparity raises questions about who is really being compensated.⁸⁷ But in practice, the preference for on-site mitigation often worked poorly.⁸⁸ Often the best sites aren't in the same areas where development is occurring.⁸⁹ The geographic configuration of restoration sites matters as well, and restoring a site that provides links between two areas of existing habitat may do far more environmental good than creating an isolated “wetland” at the edge of a shopping mall parking lot.⁹⁰ Consolidated mitigation sites also are easier to inspect, which makes regulatory oversight of mitigation more feasible.⁹¹ For all of these reasons, critics argued for a

⁸⁴ See *id.* at 4, 39 (summarizing critiques of in-lieu fee programs).

⁸⁵ See ENVTL. LAW INST. & NATURE CONSERVANCY, WATERSHED APPROACH HANDBOOK: IMPROVING OUTCOMES AND INCREASING BENEFITS ASSOCIATED WITH WETLAND AND STREAM RESTORATION AND PROTECTION PROJECTS 15–16 (2014), <https://perma.cc/FQ7W-2TRL>.

⁸⁶ See Memorandum of Agreement Between Robert W. Page, Assistant Sec'y, U.S. Army Corps of Eng'rs, & LaJuana S. Wilcher, Assistant Adm'r, U.S. Env'tl. Prot. Agency on the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines (Feb. 6, 1990), <https://perma.cc/5VZH-FJB4>. The memo explained:

Compensatory actions . . . should be undertaken when practicable, in areas adjacent or continuous to the discharge site (on-site compensatory mitigation). If on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable (i.e., in close proximity and, to the extent possible, the same watershed).

Id. at 4.

⁸⁷ See Philip Womble & Martin Doyle, *The Geography of Trading Ecosystem Services: A Case Study of Wetland and Stream Compensatory Mitigation Markets*, 36 HARV. ENVTL. L. REV. 229, 232, 243 (2012) (describing the failings of on-site, in-kind mitigation).

⁸⁸ Owen, *supra* note 7, at 25 n.165 (“[W]hen we started doing wetland mitigation it was on-site, one-to-one mitigation and for the most part failing miserably.” (quoting Telephone Interview with Regulatory Dist. Chief (Nov. 20, 2014))).

⁸⁹ See Theodore C. Weber & William L. Allen, *Beyond On-Site Mitigation: An Integrated, Multi-Scale Approach to Environmental Mitigation and Stewardship for Transportation Projects*, 96 LANDSCAPE & URB. PLAN. 240, 251 fig.5, 252 (2010) (showing how mapping technologies can be used to identify optimal sites for protection or restoration).

⁹⁰ See Nélida R. Villaseñor et al., *The Relative Importance of Aquatic and Terrestrial Variables for Frogs in an Urbanizing Landscape: Key Insights for Sustainable Urban Development*, 157 LANDSCAPE & URB. PLAN. 26, 32–33 (2017) (explaining the importance of terrestrial habitats and connectivity to wetland-dependent amphibians).

⁹¹ Royal C. Gardner, *Banking on Entrepreneurs: Wetlands, Mitigation Banking, and Takings*, 81 IOWA L. REV. 527, 560 (1996).

shift away from the emphasis on on-site, in-kind mitigation and in favor of selecting mitigation sites in accordance with watershed-based planning.⁹² By the late 2000s, that critique had found receptive audiences in federal agencies. In a joint rule issued in 2008—and specifically demanded by Congress⁹³—EPA and the Corps officially endorsed this watershed-based approach.⁹⁴

All these policy reforms coupled with cultural shifts. There are exceptions—the Appalachian coalfields have been a particularly intense flashpoint⁹⁵—but in general, staff at FWS and EPA no longer perceive the Corps as an agency hell-bent on filling streams and wetlands.⁹⁶ Instead, the Corps's regulatory program has matured into a traditional environmental regulatory agency, staffed with trained biologists and increasingly permeated with an ethos of professionalized management.⁹⁷ As one Corps biologist explained to me,

[W]hen I started, the principal . . . responsibility of our program was really . . . to look at the impacts of construction activities on navigation. . . . And now navigation only plays a very small part of what we evaluate. It's primarily now an environmental program. So there's been a big change in the culture over the years in the focus of the Corps.⁹⁸

Because of these changes, compensatory mitigation now is very different from the fig-leaf systems embraced by anti-regulatory staff in the early 1980s. Requirements for it are more extensive, rules are stricter, regulatory oversight is more demanding, the techniques used are backed by stronger theories, and a large number of private and public entities now specialize in providing mitigation.⁹⁹ That does not mean compensatory mitigation has fully proven itself. Some studies have found mixed results, or worse,¹⁰⁰ and the literature reviewing the performance of compensatory

⁹² See Timothy D. Searchinger, *Wetland Issues 1993: Challenges and a New Approach*, 4 MD. J. CONTEMP. LEGAL ISSUES 13, 65–70 (1993) (discussing the benefits of a watershed-based approach); see also Gardner, *supra* note 91, at 557–62 (describing how wetland mitigation can both protect the environment and preserve private rights).

⁹³ National Defense Authorization Act for Fiscal Year 2004, Pub. L. 108-136, § 314, 117 Stat. 1392, 1430–31 (2003).

⁹⁴ See Compensatory Mitigation for Losses of Aquatic Resources, 73 Fed. Reg. 19,594, 19,594 (Apr. 10, 2008) (to be codified at 33 C.F.R. pts. 325 and 332; 40 C.F.R. pt. 230) (“This rule improves the planning, implementation and management of compensatory mitigation projects by emphasizing a watershed approach . . .”).

⁹⁵ See Owen, *supra* note 7, at 31–34.

⁹⁶ *Id.* at 23–24.

⁹⁷ *Id.* at 23–26.

⁹⁸ *Id.* at 24 n.155 (quoting Telephone Interview with Regulatory Dist. Chief (Aug. 25, 2014)).

⁹⁹ For a recent study of the status of compensatory mitigation under section 404, including discussion of the expanded mitigation industry, see generally U.S. ARMY ENG’R INST. FOR WATER RES. & U.S. ENVTL. PROT. AGENCY, *supra* note 49.

¹⁰⁰ See, e.g., Palmer & Hondula, *supra* note 55, at 10,557 (finding very little evidence of success); see also Martin W. Doyle & F. Douglas Shields, *Compensatory Mitigation for Streams*

mitigation is generally too sparse and too methodologically heterogeneous to allow definitive conclusions.¹⁰¹ We do not yet know, in other words, what benefits this transformation has actually produced for the environment, and our best evidence may just be the sense, widely shared among regulators and mitigation providers, that performance has greatly improved.¹⁰² But we do know that for entities that hoped to ignore compensatory mitigation requirements, or to satisfy them with just a cursory effort, the world has become a less welcoming place.

In many ways, the initiatives of 2015 and 2016 just relocated these old trends to a new agency setting.¹⁰³ The vanguard of compensatory mitigation policy had been implementation of Clean Water Act section 404, and other regulatory programs had largely followed EPA and the Corps's lead.¹⁰⁴ Other agencies sometimes lagged, and the 2015 and 2016 mitigation policy documents were partly designed to bring the United States Bureau of Land Management—an agency not traditionally known for progressive environmental policy—into the modern era.¹⁰⁵ Absent from those documents, however, are any dramatically new ideas about mitigation policy. Their emphasis on advance mitigation, clearer and more consistent operating rules, and integration of mitigation with landscape-scale planning instead echoes priorities set by EPA and the Corps in their 2008 mitigation rule.¹⁰⁶

This story also is notable for what it does not include. Most importantly, the proponents of compensatory mitigation reform hardly ever identified their efforts as measures to boost the capitalist system.¹⁰⁷ Even during the

Under the Clean Water Act: Reassessing Science and Redirecting Policy, 48 J. AM. WATER RESOURCES ASS'N 494, 500 (2012) (“The balance of published evidence suggests that current practices of stream restoration—in terms of scale and technique—cannot be assumed to provide demonstrable physical, chemical, or biological functional improvements.”).

¹⁰¹ Joseph A. Morgan & Palmer Hough, *Compensatory Mitigation Performance: The State of the Science*, NAT'L WETLANDS NEWSL. (Envtl. Law Inst., Wash. D.C.), Nov.–Dec. 2015, at 5, 10.

¹⁰² Owen, *supra* note 7, at 42–43.

¹⁰³ See *Hearings on the President's Memorandum on Mitigation*, *supra* note 4, at 13 (prepared statement of Michael Bean, Principal Deputy Assistant Sec'y for Fish & Wildlife & Parks, U.S. Dep't of the Interior) (“The Department's policy, and bureau policies in development, will reflect and build upon this extensive history of mitigation as applied under Section 404 of the Clean Water Act.”).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 13–14; see Debra L. Donahue, *Western Grazing: The Capture of Grass, Ground, and Government*, 35 ENVTL. L. 721, 774 & n.387 (2005) (noting the origins of the Bureau of Land Management's nickname “the Bureau of Livestock and Mining”).

¹⁰⁶ See *Hearings on the President's Memorandum on Mitigation*, *supra* note 4, at 13 (prepared statement of Michael Bean) (“That 2008 rule articulated many of the principles that have been subsequently incorporated into the Department's policies. . .”).

¹⁰⁷ See, e.g., LEONARD SHABMAN ET AL., U.S. ARMY ENG'R INST. FOR WATER RES., NATIONAL WETLAND MITIGATION BANKING STUDY: EXPANDING OPPORTUNITIES FOR SUCCESSFUL MITIGATION: THE PRIVATE CREDIT MARKET ALTERNATIVE, at vii–x (1994) (offering functional rather than ideological justifications for mitigation banking); WHITE HOUSE OFFICE ON ENVTL. POLICY, PROTECTING AMERICA'S WETLANDS: A FAIR, FLEXIBLE, AND EFFECTIVE APPROACH (1993) (endorsing compensatory mitigation and mitigation banking, but without any ideological overlay).

Reagan Administration, debates about compensatory mitigation were driven more by conflicts over regulatory intensity and states' rights rather than by Milton Friedman-style market ideals.¹⁰⁸ And later reformers' key goal was to strike a compromise between political mandates to accommodate economic development and legal mandates to protect the environment, and to make permitting decisions in an expedited fashion.¹⁰⁹ Compensatory mitigation policy, in other words, evolved to fulfill agency goals, not to advance a free-market agenda, even though the policies did sometimes bring regulated industries the benefits of expedited and more flexible permitting.¹¹⁰

The emergence of the mitigation banking industry should not change this narrative. One might think that promoting that industry, and environmental markets more generally, was a central goal of compensatory mitigation policy.¹¹¹ And there are a few whiffs of evidence consistent with that view.¹¹² The preference for advance mitigation, for example, benefits the mitigation banking industry, which generally must provide mitigation before it releases credits.¹¹³ But if promoting that industry—and, more broadly, promoting the commodification of environmental values—really had been the central goal of compensatory mitigation reform, current regulatory structures would look quite different. Government agencies would not use the traditional mitigation hierarchy, which prioritizes avoidance and minimization over compensation, and thus relegates exchanges to a third-priority position after more prohibitory regulatory approaches have proven infeasible.¹¹⁴ Similarly, the emphasis on integrating mitigation policy with landscape- or watershed-scale planning would not exist, and the emphasis would be on allowing the market to determine the geographic placement of mitigation sites.¹¹⁵ Even the policy favoring advance mitigation could be, and in fact was, justified for reasons independent of any desire to boost the mitigation banking industry, and it falls short of the industry's request for

¹⁰⁸ Telephone Interview with Don Barry, *supra* note 53.

¹⁰⁹ See generally Hough & Robertson, *supra* note 17 (emphasizing the importance of functional rather than ideological justifications for the emergence of compensatory mitigation practices).

¹¹⁰ See LaRoe, *supra* note 71, at 9 (noting “the increasing demands of resource management agencies for habitat mitigation”).

¹¹¹ See *supra* notes 46–50 and accompanying text (noting the prominence of this industry, at least in academic discussions).

¹¹² See, e.g., Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 81 Fed. Reg. 68,743, 68,753 (Nov. 6, 2015) (including “encouraging related private investment” in the title of a presidential memorandum). The body of the memorandum makes clear that mitigation banking is just one of the forms of investment that are to be encouraged. *Id.* at 68,743–44.

¹¹³ See WILKINSON ET AL., *supra* note 31, at 4 (noting that the government entities and private foundations that run in-lieu fee programs often lack sufficient capital to provide advance mitigation).

¹¹⁴ For a brief description of this hierarchy, see *supra* notes 34–36 and accompanying text.

¹¹⁵ See Womble & Doyle, *supra* note 87, at 272 (“[S]mall service areas will decrease demand for compensatory mitigation credits.”).

policies that banned competing mitigation approaches.¹¹⁶ The industry, in other words, has benefited because regulators like verifying compensatory mitigation before they allow development, not because regulators have some special affinity for mitigation banks.¹¹⁷

The net result of this evolution is that compensatory mitigation is increasingly an agency-driven, somewhat planned policy approach designed largely to advance the goals of environmental regulators. Those goals include facilitating development; it is not prohibitory policy.¹¹⁸ They also suit the interests, at least to some extent, of the private mitigation banking industry.¹¹⁹ But compensatory mitigation policy is a far cry from the kinds of regulatory abdications that current conservative thought seems to favor. In many of its present-day incarnations, it is sophisticated and somewhat complex regulatory policy that sometimes draws upon, and provides incidental benefits to, market-like systems.¹²⁰ In an era when prevailing conservative thought strongly opposes regulation—and, as recent efforts to promote the coal industry indicate, has questionable commitments to markets¹²¹—that kind of policy seems unlikely to garner conservative support.

And yet it still also seems, at first blush, like a poor candidate for serious conservative opposition. If prohibitive environmental mandates are going to exist, then regulated entities might appreciate the flexibility that compensatory mitigation options can provide, while reserving their ire for the prohibitive mandates. Indeed, until fairly recently, there was little evidence of a conservative effort to undo legislative or administrative policies for compensatory mitigation. Conservatives did attack the laws and regulations that prohibited environmentally destructive activities. Clean Water Act section 404, for example, has been a particularly popular target for a long time.¹²² But in legislative and administrative spheres, the attack

¹¹⁶ See *Compensatory Mitigation for Loss of Aquatic Resources*, 73 Fed. Reg. 19,594, 19,595 (Apr. 10, 2008) (to be codified at 33 C.F.R. pts. 325 and 332; 40 C.F.R. pt. 230) (explaining the disadvantages of in-lieu fee programs); see also *id.* at 19,599–600 (explaining that in-lieu fee programs would not be phased out).

¹¹⁷ See *id.* at 19,595 (explaining how mitigation banks must secure approval before selling credits).

¹¹⁸ See U.S. ARMY ENG’R INST. FOR WATER RES. & U.S. ENVTL. PROT. AGENCY, *supra* note 49, at 16 (noting that program goals include “promot[ing] regulatory efficiency, consistency, and predictability”).

¹¹⁹ See *id.* at 64, 91–92 (discussing mitigation banking’s evolution).

¹²⁰ See Owen, *supra* note 7, at 35 (discussing how North Carolina lawmakers utilized a compensatory mitigation requirement for streams because it was compatible with continued real estate development).

¹²¹ See Michael Grunwald, *Trump’s Love Affair with Coal*, POLITICO (Oct. 15, 2017), <https://perma.cc/B85L-BK7H> (quoting Secretary of Energy Rick Perry, explaining his efforts to favor the coal industry: “What’s the cost to keep America free? I’m not sure I want to leave that up to the free market.”).

¹²² See Owen, *supra* note 34, at 83 (summarizing controversies surrounding the section 404 program).

focused on the underlying prohibitive mandates of those laws, not on using compensatory mitigation as an option for compliance.

Nevertheless, the intellectual roots of that latter attack were beginning to grow. They just were growing primarily in the courts.¹²³

V. THE BEGINNINGS OF A BACKLASH

In 1972, Coy Koontz bought a parcel of undeveloped land near Orlando, Florida.¹²⁴ Two decades later, he decided to develop his land.¹²⁵ But the parcel contained wetlands, which were protected under both Florida and federal law, and the St. Johns River Water Management District, which held permitting authority under Florida's wetlands law, was unwilling to issue a permit unless Koontz provided compensatory mitigation.¹²⁶ Koontz thought the district's compensatory mitigation requests were excessive.¹²⁷ The district thought his offers were inadequate.¹²⁸ After an impasse resulted and his permit application was denied, Koontz sued for damages.¹²⁹ The Florida Supreme Court affirmed the trial court's dismissal of his claims, but the United States Supreme Court, in a 5–4 decision, held that Koontz was entitled to bring his damages claim.¹³⁰ If a government entity demanded compensatory mitigation as a permitting condition, the Court held, that compensatory mitigation had to have a nexus to the impacts of the permitted project, and the degree of mitigation needed to be roughly proportional to the degree of harm that the project would create.¹³¹ A permit denial following unconnected or excessive demands could be the basis for a lawsuit.¹³²

¹²³ Interestingly, these ideas manifested themselves primarily in United States Supreme Court cases. *See* discussion *infra* Part V. While the lower courts have considered many cases involving compensatory mitigation, those cases often address more technical matters like the legal sufficiency of mitigation measures. *E.g.*, *Black Warrior Riverkeeper, Inc. v. U.S. Army Corps of Eng'rs*, 833 F.3d 1274, 1288–89 (11th Cir. 2016) (rejecting an argument that the Corps relied excessively upon compensatory mitigation); *O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d 225, 235 (5th Cir. 2007) (concluding that the Corps had not explained why mitigation would reduce a project's impacts to less-than-significant levels, but not questioning the use of compensatory mitigation as a general practice). Debates about the very idea of compensatory mitigation are basically absent from lower court opinions.

¹²⁴ *Koontz v. St. Johns River Water Mgmt. Dist.*, 133 S. Ct. 2586, 2591–92 (2013).

¹²⁵ *Id.* at 2592.

¹²⁶ *Id.* at 2592–93.

¹²⁷ *Id.* at 2593.

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.* at 2591, 2597–98, 2603. The Court did not resolve that claim in his favor, and instead remanded the matter to the Florida courts. *Id.* at 2598.

¹³¹ *Id.* at 2595, 2603.

¹³² *Id.* at 2598.

Conservative activists celebrated *Koontz v. St. Johns River Water Management District* as a legal victory,¹³³ just as they had celebrated *Nollan v. California Coastal Commission*¹³⁴ and *Dolan v. City of Tigard*,¹³⁵ the two prior Supreme Court cases that had established the nexus and rough proportionality requirements.¹³⁶ Some commentators have wondered why.¹³⁷ Conservatives generally favor broad freedom to contract and are skeptical of governmental efforts to police negotiated deals, yet all three decisions seem to subvert those preferences.¹³⁸ *Nollan* narrows the range of deals that developers and governments can reach by eliminating from consideration any mitigation measure that doesn't directly relate to the harms created by the development at issue—even if that mitigation measure would be more valuable to the community and cheaper for the developer.¹³⁹ *Dolan* places courts in the rare position of evaluating the adequacy of consideration in a negotiated deal; it thus replaces the normal libertarian presumptions of contract law with a sort of unconscionability-on-steroids doctrine directed toward government permitting.¹⁴⁰ And *Koontz* extends these principles even to mitigation offers that private parties refuse to accept.¹⁴¹ The net effect, it would seem, is to narrow the space for negotiated deals. No wonder, then, that Justice Kagan, in dissent, warned that local governments might react by opting “to simply deny permits outright without discussion or negotiation rather than risk the crushing costs of litigation”; and property owners like

¹³³ See, e.g., Brian T. Hodges, *Koontz—A Banner Day for Property Rights*, PAC. LEGAL FOUND. (June 25, 2013), <https://perma.cc/W4TK-JBE6> (“For a property rights advocates [sic], reading today’s decision in *Koontz* . . . is like being a kid trapped in a candy store.”).

¹³⁴ 483 U.S. 825 (1987).

¹³⁵ 512 U.S. 374 (1994).

¹³⁶ See *Nollan*, 483 U.S. at 837 (nexus); see also *Dolan*, 512 U.S. at 391 (rough proportionality).

¹³⁷ See, e.g., Lee Anne Fennell, *Hard Bargains and Real Steals: Land Use Exactions Revisited*, 86 IOWA L. REV. 1, 4–5 (2000) (arguing that *Nollan* and *Dolan* weaken property rights by limiting landowners’ options).

¹³⁸ See J.M. Balkin, *Too Good to Be True: The Positive Economic Theory of Law*, 87 COLUM. L. REV. 1447, 1454 (1987) (reviewing WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* (1987)) (“Since the late nineteenth century, American political conservatism has generally been individualist in economic matters; it has . . . viewed freedom of contract as a fundamentally important value and resisted attempts to regulate it.”).

¹³⁹ See Fennell, *supra* note 137, at 74–75.

¹⁴⁰ See *Dolan*, 512 U.S. at 391 (demanding “rough proportionality” between the exaction and the claimed impact, and also requiring “some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development”); see also Vicki Been, “Exit” as a Constraint on Land Use Exactions: Rethinking the Unconstitutional Conditions Doctrine, 91 COLUM. L. REV. 473, 475 (1991) (raising similar questions about *Nollan*).

¹⁴¹ *Koontz*, 133 S. Ct. 2586, 2595–96 (2013) (holding that liability can exist even if: 1) the applicant never accepts the offending condition, and 2) the permitting entity could have just denied the permit without offering the condition).

Koontz then would ‘have no opportunity to amend their applications or discuss mitigation options.’¹⁴²

Nollan, *Dolan*, and *Koontz* all predated the current surge of legislative and administrative opposition to compensatory mitigation policy, and *Nollan* and *Dolan* also were decided during a time when compensatory mitigation policies were expanding without any evidence of legislative or executive branch opposition. It might be tempting, then, to see the cases as disconnected from the current political twists and turns. Nevertheless, the cases target similar policies, and even if their outcomes were just to cabin these policies rather than to eliminate them, they seem to arise from similar impulses. They are, in other words, the judicial ancestors of present-day legislative and administrative attacks on compensatory mitigation. If we can understand why conservatives would celebrate these cases—and many do—that might help explain the current administrative and legislative attacks on the very idea of compensatory mitigation.

One obvious explanation for the conservative support is a generalized frustration with government regulation. According to this line of reasoning, if regulators are the enemies, and they have embraced compensatory mitigation, then compensatory mitigation also must be an enemy.¹⁴³ Some commentators have suggested that this is a key part of the story. Consider, for example, Lee Anne Fennell’s pre-*Koontz* analysis:

The *Nollan/Dolan* rules are perhaps best understood as a highly visible symbolic protest against government excess. The decisions proved so psychologically gratifying for landowners that few property-rights advocates have been willing to look behind the decisions’ anti-government rhetoric to consider their true impact on property rights and the community. . . . The bargaining context provided an opportunity to voice the pent-up frustrations of the nation’s landholders and to strike a strong moral victory against what was perceived as the virtually unstoppable regulatory power of government.¹⁴⁴

It is not hard to find evidence of a similar reaction in contemporary debates. In the rash of recent political statements against compensatory mitigation, generalized frustration at governance is abundant, and nuanced critiques of the idea of compensatory mitigation are rare.¹⁴⁵ “We don’t really know what you’re doing,” the objectors seem to be saying, “but we know we don’t like it, and we’re going to make you stop.”

¹⁴² *Id.* at 2611 (Kagan, J., dissenting) (quoting *St. Johns River Water Mgmt. Dist. v. Koontz*, 77 So. 3d 1220, 1231 (2011)).

¹⁴³ *Cf.* WILLIAM A. FISCHER, *REGULATORY TAKINGS: LAW, ECONOMICS, AND POLITICS* 61–62 (1995) (describing this kind of reasoning).

¹⁴⁴ Fennell, *supra* note 137, at 13.

¹⁴⁵ *See, e.g., Hearings on the President’s Memorandum on Mitigation, supra* note 4, at 2–3 (statement of Rep. Louie Gohmert, Chairman, S. Comm. on Oversight and Investigation) (emphasizing generalized distrust of the President rather than specific objections to compensatory mitigation policies).

As Fennell points out, however, this way of thinking loses most of its coherence once it purports to be something more than a gut reaction. If the frustration is with regulatory prohibitions, then the focus of opposition should be the prohibitions themselves, not the compensatory mitigation options that might provide some flexibility.¹⁴⁶ Yet there are reasons why the conservative support of the *Nollan/Dolan/Koontz* trilogy, and opposition to present-day compensatory mitigation, has more logic than one might initially think. These reasons all share, at their root, a belief that the force of regulatory prohibitions and the availability of compensatory mitigation are actually closely connected.

One potential connection is conceptual. The term “compensatory mitigation” shifts the focus of discussion from a developer’s claimed entitlement to act to the environmental harms that developer will allegedly cause—and, then, to the sufficiency of his compensation for those harms. The focus changes, in other words, from the developer’s goals to the impacted community’s needs. To environmentalists and community advocates, there is nothing problematic about that shift; they argue that because the value of land to its owners arises from the embeddedness of that land in human and natural communities, asking developers to attend to the health of those communities is only fair.¹⁴⁷ The problem, they argue, instead lies with more libertarian conceptions of property that dangle the false and damaging promise of near-absolute dominion over land.¹⁴⁸ But if one starts with the opposite presumption—if one believes, to quote Richard Epstein, that under a proper legal regime, “changes in habitat can be made at will by owners unless and until they constitute a nuisance to the property of others”—then the very ideas of permitting and compensatory mitigation invert the proper legal order.¹⁴⁹ “The language of mitigation,” Epstein warns, “artfully reverses the previous understanding that habitat belongs to the person who owns the land.”¹⁵⁰

¹⁴⁶ See Fennell, *supra* note 137, at 4–5 (arguing that *Nollan* and *Dolan* place too much attention on bargaining and not enough on the prior distribution of entitlements).

¹⁴⁷ See, e.g., Eric T. Freyfogle, *Taking Property Seriously*, in *PROPERTY RIGHTS AND SUSTAINABILITY: THE EVOLUTION OF PROPERTY RIGHTS TO MEET ECOLOGICAL CHALLENGES* 43, 55 (David Grinlinton & Prue Taylor eds., 2011).

¹⁴⁸ See, e.g., Michael C. Blumm & J.B. Ruhl, *Background Principles, Takings, and Libertarian Property: A Reply to Professor Huffman*, 37 *ECOLOGY L.Q.* 805, 811, 815–16 (2010).

¹⁴⁹ Richard A. Epstein, *Babbitt v Sweet Home Chapters of Oregon: The Law and Economics of Habitat Conservation*, 5 *SUP. CT. ECON. REV.* 1, 3 (1997). Epstein also would allow government to acquire control of land use by paying for the land. *Id.*

¹⁵⁰ *Id.* at 25. Epstein continues:

With the rise of mitigation permits, development (broadly defined to cover any alteration of land or water) itself becomes a wrong, for which the set-aside of additional lands under a public trust becomes the cure. The transfer of property rights from individual to state is thus ratified by the new terminology.

Id.

The possibility of compensatory mitigation also might encourage lawmakers to enact stronger initial prohibitions.¹⁵¹ Suppose, for example, that an area contains two sets of natural habitat areas. Both are highly degraded, and surrounding development has pushed one past the point of no ecological return, but the other could be restored.¹⁵² A developer wants to build in the more degraded area. Environmental advocates want to restore the other. If no compensatory mitigation option exists, regulators might be inclined to just let the development proceed; their community would gain the benefits of development while suffering no real ecological loss. But if a compensatory mitigation option exists, lawmakers now have an incentive to establish a negotiable prohibition on development even in the degraded location and to use the negotiations to extract funds to support their preferred restoration project. The same sort of thinking could play out on a city- or state- or even nationwide scale. Of course, lawmakers may not engage in such strategic thinking when creating environmental policy; I have never actually heard a federal or state environmental regulator say that the point of regulatory prohibitions was to shunt funding into compensatory mitigation projects. But in policy debates, the actual motivations of government employees do not seem to hold much influence, and plausible fears can matter more than reality.

Closely related to this concern is another intuition: that in the absence of compensatory mitigation options, some existing laws wouldn't be enforced at all. Consider, again, the example in the preceding paragraph, and suppose that the habitat area proposed for development is quite small. Suppose, also, that this habitat has been subject to *de jure* protection for years. Despite that legal protection, if a developer proposed to build in a small and degraded area, regulators might not take any action to stop the developer from proceeding. Enforcing environmental laws, as any regulators knows, often begets outrage and requires using governmental resources, and regulators might not want that bother. In such a circumstance, the possibility of requiring compensatory mitigation is rather appealing to regulators; rather than stating and then defending a bold "no," they can state an accommodating "yes, if."¹⁵³ But if the developer suspects that "no" isn't really a politically feasible option—if the threat of enforcement is really a bluff—then accepting "yes, if" doesn't make much strategic sense. The developer might be better off in a world where the regulator's only legally allowable choices are a pure yes and a pure no.

This is hardly an unrealistic scenario. Indeed, this very dilemma is what made compensatory mitigation an appealing policy option for some of its

¹⁵¹ See Fennell, *supra* note 137, at 15–16 (noting this concern in the land use context).

¹⁵² This is a stylized and somewhat unrealistic hypothetical, for in the real world, even a degraded area could probably provide some ecological value by allowing stormwater infiltration. But it might be nearly useless as habitat for native species.

¹⁵³ See Dave Owen, *Critical Habitat and the Challenge of Regulating Small Harms*, 64 FLA. L. REV. 141, 193–94 (2012) (describing this dilemma).

early promoters.¹⁵⁴ If potentially regulated entities just decide to ignore the law, limits on agency resources would not allow agency staff to respond to every instance of unauthorized environmental degradation.¹⁵⁵ And agency staff also knew, as one state regulator once told me, that because of political support for economic development, “there is no stopping things, with very, very, very limited exceptions.”¹⁵⁶ Under such circumstances, compensatory mitigation isn’t something that detracts from the force of environmental law, as some of its critics have alleged.¹⁵⁷ Instead, it helps make environmental protection possible, particularly in times when legislative support for environmental enforcement continues to decline. And environmental law’s opponents may be increasingly aware of that fact.

The growing integration of compensatory mitigation requirements with planning processes can heighten all of these concerns. From a regulator’s perspective, that integration is just a way of maximizing the societal payoff from mitigation deals. But from a developer’s perspective, the integration with planning can increase the sense that his legitimate ambitions are being leveraged to support someone else’s schemes. Add to this the fact that planning of any sort is increasingly a conservative bugaboo,¹⁵⁸ and the combination of compensatory mitigation and planning, despite all its potential virtues, begins to seem like a box of dry tinder. The current Administration, with its love of provocation, will not be shy about setting off a few sparks.

Viewed in this light, the conservative support for *Nollan*, *Dolan*, *Koontz*, and the present attacks on compensatory mitigation policy all begin to make more sense. Surely there is an element of generalized frustration beneath this opposition; if government permitting is nothing more than “a racket”¹⁵⁹ or “out-and-out plan of extortion,”¹⁶⁰ then opposing any element of the

¹⁵⁴ See, e.g., SHABMAN ET AL., *supra* note 107, at 3 (“The most obvious benefit from private credit market systems is the opportunity to secure mitigation for the many small wetland impacts that would otherwise go unmitigated.”).

¹⁵⁵ See Owen, *supra* note 7, at 52–53 (noting that environmental regulation often involves responding to thousands of instances of small harm).

¹⁵⁶ See *id.* at 41 (quoting Telephone Interview with retired N.C. Dep’t of Env’tl. Quality Emp. (Sept. 9, 2015)).

¹⁵⁷ E.g., Jessica Owley, *The Increasing Privatization of Environmental Permitting*, 46 AKRON L. REV. 1091, 1110 (2013) (“Mitigation banks have enabled the conversion of thousands of acres of wetlands and endangered species habitats, facilitating development of those lands.”).

¹⁵⁸ See, e.g., Adam M. Sowards, Opinion, *Inside the Fight to Undo BLM’s Planning Overhaul*, HIGH COUNTRY NEWS (Feb. 22, 2017), <https://perma.cc/CNF5-WMRG> (quoting a Republican politician’s claim that Bureau of Land Management Planning 2.0 rule, a rule designed to upgrade planning, was “the first step to a totalitarian government, having bureaucrat planners making legislation through administrative process”).

¹⁵⁹ Richard A. Epstein, *The Permit Power Meets the Constitution*, 81 IOWA L. REV. 407, 416 (1995). For a thorough response to Epstein’s argument, see Eric Biber & J.B. Ruhl, *The Permit Power Revisited: The Theory and Practice of Regulatory Permits in the Administrative State*, 64 DUKE L.J. 133 (2014).

¹⁶⁰ *Nollan*, 483 U.S. 825, 837 (1987) (quoting *J.E.D. Assocs., Inc. v. Atkinson*, 432 A.2d 12, 14–15 (N.H. 1981)).

permitting system is a valid protest. But beneath that abject frustration may lie a set of cold-eyed calculations. Of course, the extent to which such calculations are actually driving contemporary opposition to compensatory mitigation is hard to discern. That recent opposition has been delivered largely in sound bites and scattered legislative questioning, and a coherently articulated critique has yet to emerge.¹⁶¹ But *Nollan*, *Dolan*, and *Koontz* foreshadow how that critique may yet coalesce, and why, if the staying power of *Nollan* and *Dolan* is any clue, it may not go away.

VI. THE FUTURE OF COMPENSATORY MITIGATION

Over a year into the Trump Administration, Secretary Zinke has not ended the practice of compensatory mitigation. Indeed, the order he signed shortly before offering that boast never purported to do any such thing.¹⁶² While the order and other similar initiatives eliminated some attempts to make compensatory mitigation policies more systematic and effective, they did not eliminate the underlying legal frameworks that make compensatory mitigation possible.¹⁶³ In that sense, the Administration's actions are somewhat similar to the *Nollan/Dolan/Koontz* trilogy, which, despite its warm welcome from conservative activists, has not eliminated governmental demands for exactions and is unlikely to do so anytime soon.

Yet the present assault on compensatory mitigation still matters. Even if it does not eliminate the practice, it will likely reduce its prevalence. And that, in turn, means limiting use of a regulatory technique that, at its best, finds compromises between the worthy goals of economic development and environmental protection. It also means limiting use of a technique to which agency staff have gravitated for decades. For people who disdain agency governance, either because they view agencies as power-hungry zealots or as captured paper tigers, that recurring agency support may not mean much. But for the many people who do value both economic development and environmental quality, and who think government regulators know something about how to do their jobs, the continued support of agency staff

¹⁶¹ See, e.g., *Hearings on the President's Memorandum on Mitigation*, *supra* note 4, at 1–3. In asking questions, Republican members of the committee clearly demonstrated their skepticism of and hostility toward the policy. But their critiques of the policy, to the extent they offered them, focused primarily on the use of broad language, not on actual approaches to compensatory mitigation. See, e.g., *id.* at 24 (questions from Rep. Louie Gohmert) (“When we see vague, ambiguous language . . . and there seems to be an abundance of those type of words, it seems like sometimes, in this Administration, people are looking for words that have never been legally defined, so that the sky can be the limit.”).

¹⁶² See Zinke, Order No. 3349, *supra* note 1. The order makes no mention of ending the practice of compensatory mitigation.

¹⁶³ The Administration is also trying to weaken those mandates, most notably through attempts at narrowing the geographic scope of regulatory jurisdiction under the Clean Water Act. See Exec. Order 13,778, 82 Fed. Reg. 12,497, 12,497–98 (Mar. 3, 2017). In the long run, these attacks are likely to be more consequential than anything the Administration does about compensatory mitigation.

for compensatory mitigation policies ought to carry a lesson. These policies would not have received so much agency support for so many years if regulators did not believe they were doing something good.¹⁶⁴

Any positive view of compensatory mitigation should be tempered, of course, by the many critiques arguing that the practice of compensatory mitigation often falls well short of its potential. Clearly those critiques have some substance; indeed, the same agencies that have been advancing compensatory mitigation policies have also raised concerns about the inadequacies of their own practices.¹⁶⁵ Yet those critiques highlight the second, and more subtle, threat created by the current conservative attack on compensatory mitigation policies. For decades, those policies have been moving through cycles of critique and reform, and compensatory mitigation practice now is quite different from what it was twenty or thirty years ago.¹⁶⁶ The initiatives of the Obama Administration, and the Bush Administration before that, were promising advances amid these reform cycles.¹⁶⁷ But now the process of improvement may be stilled. In the long run, that loss of institutional learning may be more important than a reduction in the actual amount of compensatory mitigation.

This, too, is part of a much larger story. One of the most important, though often obscure, stories of American environmental governance is our evolving ability to find synergies and successful compromises between economic imperatives and environmental protection. On many fronts, both regulators and businesses have gotten better at working with each other, and on many fronts, economic productivity has grown even as environmental conditions improved.¹⁶⁸ These changes are partly tied to the willingness—which, of course, remains uneven—of some businesses to integrate environmental protection into their culture, or even to rely upon environmental mandates to generate business. But they are also closely tied to the ability of government to govern, sometimes in sophisticated and

¹⁶⁴ An alternative critique, grounded in public choice theory, is that compensatory mitigation just makes regulators' jobs easier without providing any real benefit to the environment. See *supra* note 55 and sources cited therein. Surely there is some truth to this critique. But the supporters of compensatory mitigation policy aren't just mid-level bureaucrats seeking to make their day jobs easier; instead, the supporters include many thoughtful political appointees with strong and well-earned reputations as environmental advocates. That reality, plus ongoing agency efforts to make compensatory mitigation more rigorous, shows that a public choice critique no more than partially explains compensatory mitigation's appeal.

¹⁶⁵ See, e.g., Rosanna P. Ciupek, *Protecting Wetlands Under Clean Water Act §404: EPA's Conservative Policy on Mitigation*, NAT'L WETLANDS NEWSL. (Env'tl. Law Inst., Wash. D.C.), Sept.–Oct. 1986, at 12, 13 ("Success is sometimes difficult to define, and is often illusive or, at best, onerous to ascertain in the short time period within which most regulatory permitting decisions are made.").

¹⁶⁶ See U.S. ARMY ENG'R INST. FOR WATER RES. & U.S. ENVTL. PROT. AGENCY, *supra* note 49, at 11–12 (summarizing some of the changes).

¹⁶⁷ See Memorandum on Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 81 Fed. Reg. 68,743, 68,743 (Nov. 6, 2015); Owen, *supra* note 7, at 49.

¹⁶⁸ Owen, *supra* note 7, at 48–55.

innovative ways, and to learn from those innovations. Compensatory mitigation is just one example of this phenomenon. It emerged as an innovative regulatory technique designed to accommodate the needs of regulated entities and the environment's protectors, initially performed fairly poorly in key parts of those tasks, and has been evolving towards better practices that respond to the early concerns¹⁶⁹—with a long way still to go. But none of that can happen if government lacks the capacity to innovate and to reform, and the present attempts to diminish the size of government and hamstringing the remaining staff are direct attacks on that capacity.¹⁷⁰ Conservative rhetoric now often emphasizes the supposed incompatibility of environmental protection and economic growth.¹⁷¹ And the attacks on compensatory mitigation policy are just one piece of a larger effort to turn those claims into reality.

That effort may yet fail, and the current spate of attacks on compensatory mitigation may be forgotten. Businesses, regulators, and environmentalists may all decide that the compromises compensatory mitigation offers are basically good, and that improving the practice makes more sense than opposing it. Perhaps in ten years the policy frontiers will involve developing better systems for tracking and monitoring compensatory mitigation, not finding ways to eliminate the practice.

But that future is by no means assured. For the reasons this Essay has explored, some degree of conservative opposition to compensatory mitigation will likely continue, particularly during periods when regulatory opponents sense weakness in environmental law. The current opposition, in other words, is worth taking seriously, and the practice of compensatory mitigation will need its defenders. Their support should not be unqualified; the optimal future for compensatory mitigation policy would involve more rigorous analyses of past and present measures and continued efforts at reform. But nearly all of environmental policy is a highly imperfect work in progress. That does not make it any less worthy of a strong defense.

¹⁶⁹ See, e.g., Salzman & Ruhl, *supra* note 41, at 652–655 (discussing the evolution of wetland mitigation banking).

¹⁷⁰ See Kevin Bogardus & Hannah Northey, *Buyout Stories: 'We Are Kind of Being Hollowed Out'*, E&E NEWS: GREENWIRE (Nov. 22, 2017), <https://perma.cc/JV4Y-MNBY>.

¹⁷¹ E.g., Exec. Order No. 13,783, 82 Fed. Reg. 16,093, 16,093 (Mar. 31, 2017).