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## ARTICLE

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### PRIVATIZATION, PUBLIC COMMONS, AND THE TAKINGSIFICATION OF ENVIRONMENTAL LAW

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*This project takes on the critical but undertheorized question of how to balance private and public interests in critical natural resource commons, including air, water,*

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public lands, energy, and biodiversity resources, all of which are prone to forms of diminution by private exploitation. It identifies a set of legal biases, which we might call “the privatization paradox,” that effectively create a one-way ratchet toward privatization at the expense of environmental values in public natural resources. This one-way conversion of public resources into private interests can survive policy transitions after elections, because it relies on private law norms—such as property and contract law tools—that are more enduring than public regulatory norms.

During the Trump Administration, many laws protective of public environmental values were weakened and public resource commons were made more available for private claims. This Article explores the means by which these efforts to privatize public resources not only succeeded in the present but were also entrenched into the future through two subtle but vital trends that link environmental and property law. In the first one, the strategic creation of private rights in newly relaxed public commons threatens to privatize public commons by both direct and indirect means. Private interests carved out during periods of deregulation directly erode the underlying resource as a commons, but indirectly, they also serve as a foil against future regulatory efforts to protect environmental values—a tool for “salting the land” against resumed environmental protection—by encumbering those efforts with potential property, administrative, and political liabilities.

Demonstrating this phenomenon, the Article reviews the recent proliferation of private rights in public commons for the extraction of oil and gas resources, minerals, timber, fish, and water resources—all complicating future lawmaking with potential claims that will make it harder for future leaders to reinvigorate relaxed environmental protections. Binding environmental policymaking discretion through the creation of durable private rights in public commons—some constitutionally protected under the Takings Clause—is a powerful strategy for weakening environmental conservation even after more conservation-oriented leadership takes office. The deterring potential for takings, administrative, and political liability in these contexts—collectively, the “takingsification” of environmental law—can weigh heavily on natural resources management, impeding the later resumption of legal protections. The strategy is especially noteworthy in the current era of policy instability, in which natural resource commons have been serially regulated and deregulated, and protected and then opened for business once again, complicating the relationship between public and private interests in these resources.

Even so, the potential for takings claims in these instances is only viable by virtue of the second legal bias—an accelerating paradigm of property law theory that uncritically equates personal interests in conventional forms of private property, such as a family home, with the more circumscribed private interests created in public natural resource commons, such as public lands, air, and water resources. Protecting

*private claims in public commons with equivalent force as a private home misunderstands the complex relationship between public and private interests at stake, and that are especially pronounced in public commons. More importantly, it threatens the public environmental values in natural resource commons that are already so vulnerable to overexploitation. These two troubling legal asymmetries, which make it easy to confer and then protect private rights in public commons, but harder to reclaim or protect competing public interests in the same commons, effectively lock in privatization at the expense of public environmental values.*

*Recalling the Supreme Court's incremental discernment between private and public law forms in its early Contract Clause jurisprudence, the Article proposes a modification to its regulatory takings jurisprudence to better account for the balance of public and private rights in natural resource commons.*

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## INTRODUCTION

This project explores the critical but undertheorized question of how to balance private and public interests in public natural resource commons from which private rights may be subdivided. It is a long exploration, but it makes three basic points. First, it describes a novel strategy for privatizing these commons efficiently, in which environmental regulations are lifted, enabling the creation of new private interests in the deregulated commons that complicate resumed regulation by later policymakers. Second, it argues that this strategy gains support from the ascendancy of a property theory paradigm that overprotects weaker private interests in commons property by inappropriately analogizing them to stronger private interests in more autonomously held forms of property. Finally, as one way to begin resolving these problems, it suggests a reform to regulatory takings law that would require a more balanced assessment of both the public and private property interests at stake in contested natural resource commons.

The strongest forms of conventional private property confer relative autonomy on their owners, enabling them to control many of the proverbial sticks in the bundle of rights associated with property, including rights of exclusion, possession, use, and transfer.<sup>1</sup> In contrast to these strong forms of

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<sup>1</sup> See Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 22-23 (1913) (disaggregating property rights into distinct rights and duties, often analogized to sticks in a bundle); see also *infra* Section III.B (further defining of autonomously-held property for the purposes of this inquiry).

autonomously held private property, the public commons that are the subject of this Article are common pool resources jointly held by all members of a community, though many have been regulated to manage the governance problems associated with open commons.<sup>2</sup> Many of our most important public commons are natural resources, including air, water, public lands, energy reserves, and biodiversity resources, all of which are prone to different forms of diminution by private exploitation. However, two built-in legal biases that favor private rights in these resources could impact their protection, at a time when environmental law has already proven politically vulnerable.

In the last half-century, a phalanx of environmental laws was enacted to protect public natural resources commons from ecological harms associated with private expropriation, extraction, congestion, and pollution.<sup>3</sup> More recently, stakeholders seeking to expand private access to these resources have targeted many of these laws for repeal or reduction. As the Trump Administration came to a close in 2021, about one hundred federal environmental rules and regulations had been reversed, revoked, or were in the process of being rolled back.<sup>4</sup> Many had protected public lands, waterways, aquifers, forests, fisheries, minerals, atmospheric resources, and other natural resource commons that provide critical ecosystem services.<sup>5</sup> The legal changes under the Trump Administration helped midwife a new generation of private interests that now compete with public environmental values associated with these underlying commons.

Yet private interests carved out during periods of environmental deregulation not only erode the underlying commons directly; they can also serve as a foil against resumed protection of impacted public values in the remaining commons—a tool for “salting the land” against future environmental law—by creating legal claims against new or resumed regulation. The proliferation of private rights in opened commons

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<sup>2</sup> See *infra* Section I.A. for further discussion of the definition of commons for the purposes of this inquiry.

<sup>3</sup> See generally A. Dan. Tarlock, *Environmental Law: Then and Now*, 32 WASH. U. J.L. & POL'Y 1 (2010).

<sup>4</sup> Nadja Popovich, Livia Albeck-Ripka & Kendra Pierre-Louis, *The Trump Administration Rolled Back More Than 100 Environmental Rules. Here's the Full List.*, N.Y. TIMES (Jan. 20, 2021), <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks-list.html> [<https://perma.cc/2LGM-L859>] (“[N]early 100 environmental rules [were] officially reversed, revoked or otherwise rolled back under Mr. Trump. More than a dozen other potential rollbacks remained in progress by the end but were not finalized by the end of the administration's term.”).

<sup>5</sup> See, e.g., James Salzman, *Creating Markets for Ecosystem Services*, 80 N.Y.U. L. REV. 870, 872 (2005) (“Created by the interactions of living organisms with their environment, these ‘ecosystem services’ provide both the conditions and processes that sustain human life—purifying air and water, detoxifying and decomposing waste, renewing soil fertility, regulating climate, mitigating droughts and floods, controlling pests, and pollinating plants.”).

complicates future lawmaking by encumbering it with potential takings, administrative law, and political liabilities, making it harder for future legislators to reinvigorate weakened environmental laws. This potential for entrenched privatization is heightened by the failure of property law theory to properly balance the competing public and private interests in natural resource commons. The topic is especially important in the current era of policy instability, in which public natural resource commons have been serially regulated and deregulated, and protected and then opened for business once again, further obscuring the boundaries between public and private interests in these resources.

This Article isolates two troubling asymmetries in the law that effectively create a one-way ratchet toward resource privatization at the expense of public values in publicly-owned natural resources. Analyzing the first asymmetry, the Article traces the acceleration of private interests in various public natural resource commons and the potential takings and reliance problems that may arise when these policies are later reversed—only to be potentially revisited and reversed again (and then again)—as we have witnessed during the policy transitions that have taken place between the Clinton, Bush II, Obama, Trump, and Biden Administrations.<sup>6</sup> The acceleration of private rights during the Trump Administration was especially marked, and the changed priorities of the subsequent Biden Administration raise questions about legal claims to protect those private interests if they are threatened by new policies favoring public environmental values.

This dynamic shows how easy it is to carve private interests from public natural resource commons, and yet afterward, how hard it is to reassert the public interests that remain in the underlying commons without triggering legal claims and political friction. It is a pragmatic problem, and one that we might call the “privatization paradox” of the commons, because the pattern works in only one direction. The conversion of public natural resources into private interests survives policy transitions in what is so often a one-way journey, because private property law norms are stronger—and the rights they create stickier—than public regulatory law norms.

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<sup>6</sup> There are many examples of vacillating environmental rulemaking across administrations. See, e.g., *About Waters of the United States*, U.S. ENV'T PROT. AGENCY (Dec. 19, 2022), <https://www.epa.gov/wotus/about-waters-united-states> [<https://perma.cc/TJ5T-37C7>] (showing regulatory vacillation associated with the Waters of the United States Rule); *The Roadless Rule Timeline*, EARTHJUSTICE (Dec. 23, 2020), <https://earthjustice.org/features/timeline-of-the-roadless-rule> [<https://perma.cc/7ZLB-SVCN>] (telling the history of The Roadless Rule); *History of the MATS Regulation*, U.S. ENV'T PROT. AGENCY (Feb. 1, 2022), <https://www.epa.gov/mats/history-mats-regulation> [<https://perma.cc/PEE7-GDV8>] (detailing the regulatory history of air toxics emissions from power plants). For an example of regulatory whiplash associated with oil and gas leasing on public lands, see *infra* notes 141–142 and accompanying text, describing shifts between administrations on offshore leasing policy.

The privatization paradox is further revealed by the second asymmetry, which is the reinforcement of this pattern by a property theory paradigm that overprotects private interests in natural resource commons at the expense of competing public interests. Potential takings claims are especially viable in a paradigm that uncritically equates private interests in strong forms of conventional private property (such as a family home) with the more circumscribed and correlative private interests in public natural resource commons (such as public lands, air, and water resources). But protecting private claims in public commons with equivalent force as a family home misunderstands the complex relationship between the public and private interests that exist in all property, and that is especially pronounced in public commons. More importantly, it threatens the public environmental values in natural resource commons that are already so vulnerable to private overexploitation.<sup>7</sup> In some commons contexts, such as water law, whether a taking has even occurred remains an unsettled—and occasionally hotly debated—question.<sup>8</sup> Answers to these questions are of deep interest both to those who seek to extract from these commons and those who seek to protect them.

As environmental laws continue to be targeted for weakening, deregulation, and administrative streamlining,<sup>9</sup> this Article considers how such efforts not only succeed in the present but may be entrenched into the future through these subtle but vital trends that link environmental and property law. The strategic creation of private rights in deregulated public commons not only threatens to incrementally privatize public natural resources outright, but also inhibits resumed environmental protections by threat of takings litigation or other administrative actions. Binding environmental policymaking discretion through the creation of constitutionally and administratively protected private rights in natural resource commons—what this Article collectively refers to as the “takingsification” of environmental law—can be a powerful strategy for

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<sup>7</sup> See Robert B. Keiter, *Public Lands and Law Reform: Putting Theory, Policy, and Practice in Perspective*, 2005 UTAH L. REV. 1127, 1154-57 (discussing the difficulties of carving out vested property rights from public resources and how much security should be granted to private over public interests).

<sup>8</sup> See generally Josh Patashnik, *Physical Takings, Regulatory Takings, and Water Rights*, 51 SANTA CLARA L. REV. 365 (2011); see also *infra* notes 367-397 and accompanying text.

<sup>9</sup> Compare Popovich et al., *supra* note 4 (“Over four years, the Trump administration dismantled major climate policies and rolled back many more rules governing clean air, water, wildlife and toxic chemicals.”), with Karen Bennett, Jane Luxton & Amanda Tharpe, *Survey on Oil and Gas: Washington, D.C.*, 5 TEX. A&M J. PROP. L. 151, 151-52 (2019) (critiquing an overly bureaucratic administrative state and highlighting the economic benefits of deregulation); see also Erin Ryan, *The Twin Environmental Law Problems of Preemption and Political Scale*, in ENVIRONMENTAL LAW, DISRUPTED. 149, 149-50 (Keith Hirokawa & Jessica Owley eds., 2021) [hereinafter Ryan, *Problems of Preemption and Political Scale*] (discussing political conflicts over this era of deregulation).

weakening environmental conservation even after future conservation-oriented leadership takes office.

This Article thus explores the implications of the privatization paradox and takingsification in environmental law, in which property rights become a tool for entrenching environmental deregulation and undermining public rights in critical natural resource commons. The same dynamics also raise legal problems under purely administrative law,<sup>10</sup> but this Article focuses on takings jurisprudence because of the doctrinal intersection with underlying problems of property law theory. The Supreme Court's early Contract Clause jurisprudence, forced to reconsider private law norms in light of the distinctive demands on public law actors, further justifies a specific focus on the implications of private law norms on managing public natural resource commons.<sup>11</sup>

Part I defines the public natural resource commons that are the subject of this inquiry, discusses the deployment of property rights as a tool of policy entrenchment, reviews the significance of regulatory takings doctrine in American property law, and explores the Supreme Court's gradual recognition of related problems in its Contract Clause jurisprudence. Part II demonstrates the privatization paradox in action, tracing how the current proliferation of private rights in natural resource commons threatens to buttress new extraction policies against future conservation efforts. It demonstrates the unfolding operation of this strategy in the acceleration of private oil and gas leasing on deregulated public lands, hard rock mining activity in former national monuments, offshore aquaculture and mariculture permitting, and a gold-rush wave of applications for permits to fill wetlands during a period of relaxed regulation.

Part III explores how the overprotection of private rights in public commons reflects unresolved issues in property theory itself. Property interests are inevitably burdened by the legal contingencies within which they operate, and even conventional private property rights have long been constrained by the interests of nonowners under nuisance, zoning, and civil rights law.<sup>12</sup> Nevertheless, a growing paradigm in property theory too casually

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<sup>10</sup> 5 U.S.C. §§ 701–06 (authorizing judicial review of abusive, arbitrary, or capricious agency decisionmaking by agencies). For specific examples, see *infra* note 42 and accompanying text. These administrative law issues deserve equally serious attention but are beyond the scope of this Article.

<sup>11</sup> Cf. James W. Ely, *Still in Exile? The Current Status of the Contract Clause*, 8 BRIGHAM-KANNER PROP. RTS. CONF. J. 93, 95–98 (2019) [hereinafter Ely, *Still in Exile*] (discussing the Court's early history of treating public contracts the same as private contracts for constitutional purposes, and its eventual recognition that public contracts are different because the state's obligation to protect public health, welfare, and safety under its police power cannot be bargained away, even under an otherwise enforceable agreement protected by the Contract Clause).

<sup>12</sup> For discussion of the correlative nature of private and public interests in all property, see *infra* subsection III.B.2, beginning with the text accompanying note 333.



analogizes between strong private rights in forms of property that generally enable owners maximal autonomy (like a family home or heirloom) and those in public commons resources that are shared by all (like the Klamath River or the atmosphere). Conceding the dynamic balance between public and private interests in all property, Part III argues that the public interests in resource commons especially complicate the assertion of exclusive private claims to these resources.

Part IV proposes the outlines of a modified takings analysis that would more clearly address the tension between public and private interests in natural resource commons. Recalling the Supreme Court's incremental distinction between private and public law actions under the Contract Clause, this Part suggests modest modifications to the Court's treatment of private and public rights in natural resource commons under the Takings Clause. After concluding that physical takings in this context would be rare, it builds on the Court's existing takings doctrine to propose a new carveout to the regulatory takings balancing test that better accounts for the public environmental values in natural resource commons, which also deserve property rights protection. It considers the problem at both a practical and theoretical level, considers potential objections, and proposes a mix of jurisprudential and political remedies.

While this Article cannot resolve the entirety of the problem, it begins an overdue conversation about the need for a more sophisticated path of analysis—one that would more clearly align judicial focus on the tension between public and private interests in the natural resource commons at the center of so much environmental controversy. These issues of environmental governance and property theory may initially seem arcane, but their resolution—one way or the other—portends enormous consequences for the future management of critical public natural resources.

## I. PUBLIC COMMONS, PROPERTY RIGHTS, AND POLICY ENTRENCHMENT

To prepare for the exploration of the forces facilitating privatization and takingsification in environmental law, this Part introduces the public natural resource commons that are the subject of the inquiry, as well as the strategic creation of enduring property rights to facilitate their privatization. It sets up the analysis of takingsification by exploring natural resource commons as a site of contest between public and private interests and commons governance as a site of contest between public and private law.

Section I.A introduces the concept of a public natural resource commons. Nearly all natural resources were open-access common pools in the state of nature, but today, governments deploy a variety of strategies to limit access

or control exploitation.<sup>13</sup> Yet even public natural resource commons that have been regulated in these ways can suffer from problems of subtractability, congestion, and disintegration, especially by the accelerating forces of privatization that are the subject of this Article.

Section I.B explores the use of property rights as a tool of policy entrenchment in natural resource commons. The proliferation of private rights in public commons complicates environmental protection not only by eroding the original common pool, but also by encumbering changes in policy with potential takings and administrative law liability that can deter future conservation efforts. In general, governmental decisionmakers are prevented from binding their future counterparts by public law norms that ensure voters in each iteration can set their own policy agendas.<sup>14</sup> In theory, this makes it difficult for regulators today to preserve their legislative agenda into tomorrow, especially if voters elect new representatives with different objectives. However, the proponents of environmental deregulation have learned how to extend their agenda into the future, perhaps even indefinitely, through the strategic deployment of property rights governed by a different set of legal norms.<sup>15</sup>

When the government enters contracts and confers property rights, it acts not only as a sovereign state, governed by public law norms, but also as a market participant, bound by private law norms.<sup>16</sup> The private rights it creates in this capacity are subject to private law norms that enable more durable promises,<sup>17</sup> sometimes with constitutional protection. Private parties that acquire rights to extract from natural resource commons may seek to protect them from interference by later environmental regulation under the Takings and Contract Clauses,<sup>18</sup> as well as separate administrative law remedies. The combined effect of “nonstick” public law norms that prevent regulatory entrenchment and private law conveyances that are “sticky” by design is the privatization paradox, which makes it easy to convert public commons into

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<sup>13</sup> See Elinor Ostrom, Joanna Burger, Christopher B. Field, Richard B. Norgaard & David Policansky, *Revisiting the Commons: Local Lessons, Global Challenges*, 284 SCI. 278, 278 (1999) (“[F]or thousands of years people have self-organized to manage common-pool resources, and users often do devise long-term, sustainable institutions for governing these resources . . .” (citation omitted)).

<sup>14</sup> See Christopher Serkin, *Public Entrenchment through Private Law: Binding Local Governments*, 78 U. CHI. L. REV. 879, 881 (2011) [hereinafter, Serkin, *Public Entrenchment*] (“In a democracy, governments are not allowed to bind future governments. Ordinary legislation cannot be made unrepealable, and future governments are free to revisit the policy choices of their predecessors.” (citations omitted)).

<sup>15</sup> *Id.*

<sup>16</sup> We might distinguish circumstances in which the government is creating property rights in the first place, a quintessentially sovereign act, from circumstances in which the government is engaging in market transactions with preexisting property rights.

<sup>17</sup> See generally Serkin, *Public Entrenchment*, *supra* note 14.

<sup>18</sup> U.S. CONST. amend. V (Takings Clause); U.S. CONST. art. I, § 10 (Contracts Clause).

private hands during periods of environmental deregulation, but hard to reverse the process afterward.

As reviewed in Section I.C, the Supreme Court has labored to reconcile the awkward confluence of public and private law norms in its Contracts Clause jurisprudence, but the same issues have now migrated to its Takings Clause jurisprudence. To prepare the analysis that follows, Section I.D probes the intersection between regulatory takings and environmental law. After reviewing the relevant doctrine, it introduces the property law paradigm that overvalues private claims at the expense of public interests in natural resource commons, misaligning them with stronger private rights to property that owners wield more autonomously. Yet the comparatively encumbered rights in natural resource commons differ in important ways, warranting more tailored legal protection informed by more nuanced legal theory.

#### A. *Public Natural Resource Commons*

In contrast to conventional forms of private property, which owners possess and from which they can generally exclude others, public natural resource commons are publicly-owned resources jointly held by all members of a legal community. As Elinor Ostrom has famously described, commons resources are often characterized by problems of exclusion, rivalrousness, and subtractability—circumstances that make it difficult to exclude users and in which exploitation by one reduces availability to others.<sup>19</sup> These features create dilemmas for those seeking to avoid the “tragedy of the commons,” or the short-sighted destruction of commons resources that can occur when individual users’ immediate incentives to aggressively exploit the resource before others do undermine their longer-term shared interests in using the resource sustainably.<sup>20</sup> Conventional governance strategies to avoid this tragic result include propertization and regulation of the resource.<sup>21</sup>

As noted, all public natural resources began as common pool resources—collectively owned by everyone, subject to diminution by anyone, and theoretically open to all comers—although most have subsequently been

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<sup>19</sup> See Ostrom et al., *supra* note 13, at 278-82 (summarizing the features of common pool resources and the regulatory dilemmas that attend them); see also ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 29-32 (1990) (discussing principles of self-organization and self-governance and related issues of subtractability).

<sup>20</sup> Ostrom et al., *supra* note 13, at 279; see also Garrett Hardin, *The Tragedy of the Commons*, 162 SCI. 1243, 1244-45 (1968) (explaining how each individual seeks to maximize their own gain to the ruin of all); Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 712 (1986) (noting the concern that private capture within “public property” can result in a wasteland).

<sup>21</sup> See Hardin, *supra* note 20, at 1245 (proposing privatization and exclusion as solutions to commons problems).

regulated to manage the tragedy of the commons and other governance problems associated with open commons. In some cases, the government removes natural resources from private exploitation by designating them as National Parks or protected Wilderness Areas.<sup>22</sup> However, even laws designed to protect associated environmental values inevitably privilege some users over others, for example by sacrificing environmental quality in congestible parks to facilitate public recreation.<sup>23</sup>

In other cases, the government avoids tragic results by privatizing the commons, as the federal government privatized the U.S. public domain during the nineteenth century under a raft of national policies including the Homestead Act of 1862,<sup>24</sup> the General Mining Law of 1872,<sup>25</sup> the Desert Lands Act of 1877,<sup>26</sup> and the Timber and Stone Act of 1878.<sup>27</sup> These proposals effectively ended the underlying commons by definitively disbursing public lands in the form of property rights, privatizing the resources and removing nearly all public claims to them.<sup>28</sup> Indeed, some of the modern privatization strategies explored in this Article, such as opportunities to patent hard rock mining claims from available public lands, function similarly to the Homestead Act and other programs from this earlier era.<sup>29</sup>

Today, however, the government more frequently resolves the commons problems through an intermediate approach of maintaining public ownership of the underlying commons while disbursing private rights to extract tradable resources from them—such as minerals, oil and gas, fish and wildlife, forest and range resources, and pollution sink—through a variety of legal means that include leasing rights, profits, and extraction permits. Each of these operates differently, and each implicates the themes of this inquiry in

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<sup>22</sup> National Park Service Organic Act of 1916, 16 U.S.C. § 1; Wilderness Act of 1964, 16 U.S.C. § 1131.

<sup>23</sup> See Thomas M. Duncan, Comment, *Driving Americans' Perception of Recreation: Awaiting the Park Service's Long-Term Solution to Address Snowmobile Access in Yellowstone National Park*, 19 VILL. SPORTS & ENT. L.J. 699, 703-04 (2012) (describing the competing concerns in Yellowstone National Park of preserving park resources and increasing access to recreation); see also James Splett, *Personal Watercraft Use: A Nationwide Problem Requiring Local Regulation*, 14 J. ENV'T L. & LITIG. 185, 190-91 (1999) (discussing the conflicting values of using personal watercraft and reducing adverse environmental impacts on public waterways).

<sup>24</sup> Pub. L. No. 37-64, 12 Stat. 392 (repealed 1976).

<sup>25</sup> 30 U.S.C. §§ 22-54.

<sup>26</sup> 43 U.S.C. §§ 321-39.

<sup>27</sup> Timber and Stone Act, ch. 151, § 1, 20 Stat. 89 (1878) (repealed 1955).

<sup>28</sup> Even so, there are exceptions, including the public rights that remain intact in navigable waterways on these lands under legal background principles such as the public trust doctrine and federal navigational servitude. See *infra* notes 283-2284 and accompanying text (describing these doctrines and their legal bases).

<sup>29</sup> For a discussion of hard rock mining patents, see *infra* notes 220-2223 and accompanying text.

different ways, but they all serve the same function of enabling the private extraction of value from an underlying public commons.

Over the last century, governments have increasingly set some public commons aside, limiting extractive use in order to conserve the public values provided and maintained within.<sup>30</sup> In these cases, the underlying public commons continues to provide a store of unique values to the public, which can range from the same marketable interests subject to private extraction (e.g., oil, timber, fish) to the more diffuse environmental values that benefit the public as a whole. These latter values include the ecosystem services associated with many natural resource commons that are hard to trade in the marketplace<sup>31</sup> (and even harder to replace once lost), such as carbon sinks that buffer climate change, pollinators that enable agriculture, and porous bottomlands that filter water pollution and provide flood control to surrounding communities.<sup>32</sup> They may also include scientific, recreational, and aesthetic values, which may be valued by present and future generations for their own enjoyment or even for their mere existence,<sup>33</sup> or for spiritual, biocentric, or intrinsic reasons independent from direct utility.<sup>34</sup>

During the Trump Administration, many laws regulating the balance of public and private interests in these resource commons were altered to facilitate greater private access to the valuable natural resources within them. Concerned that the regulatory balance had shifted too far in favor of private rights at the expense of public environmental interests, many citizens and environmental advocates campaigned for new national leadership, worked to safeguard state and local regulations from federal ceiling preemption, and

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<sup>30</sup> See PUB. LANDS FOUND., AMERICA'S PUBLIC LANDS: ORIGIN, HISTORY, FUTURE 7-12 (Dec. 2014), [https://publicland.org/wp-content/uploads/2016/08/150359\\_Public\\_Lands\\_Document\\_web.pdf](https://publicland.org/wp-content/uploads/2016/08/150359_Public_Lands_Document_web.pdf) [<https://perma.cc/3M5T-BRFG>].

<sup>31</sup> See, e.g., Michael Pappas & Victor B. Flatt, *The Costs of Creating Environmental Markets: A Commodification Primer*, 9 U.C. IRVINE L. REV. 731, 752 (2019) (analyzing hurdles for market-based mechanisms in environmental governance, including problems of pricing and severing discrete environmental values from their web of interconnected ecological and legal relationships into discrete market-cognizable goods).

<sup>32</sup> See James Salzman, Barton H. Thompson, Jr. & Gretchen C. Daily, *Protecting Ecosystem Services: Science, Economics, and Law*, 20 STAN. ENV'T L.J. 309, 310-12 (2001) (describing the "variety of critical services" performed by healthy ecosystems that would require extraordinary costs to replace using artificial means).

<sup>33</sup> See Erin Ryan, Holly Curry & Hayes Rule, *Environmental Rights for the 21st Century: A Comprehensive Analysis of the Public Trust Doctrine and Rights of Nature Movement*, 42 CARDOZO L. REV. 2447, 2545 (2021) [hereinafter Ryan et al., *Environmental Rights for the 21st Century*] (discussing non-priced public environmental values, including option, existence, and bequest values); see also Catherine M.H. Keske, *How to Value Environmental and Non-Market Goods: A Guide for Legal Professionals*, 39 DENV. J. INT'L L. & POL'Y 423, 427-28 (2011) (defining option, existence, and bequest values).

<sup>34</sup> See Ryan et al., *Environmental Rights for the 21st Century*, *supra* note 33, at 2552-57 (discussing intrinsic, biocentric, and ecocentric environmental values).

considered novel options for environmental protection by subnational and private governance.<sup>35</sup> However, the analysis that follows reveals why these changes may prove insufficient to restore the protections for public environmental values that these citizens voted for.

Reversing the rollback of environmental protections may require more than just a new slate of lawmaking. Advocates must also reckon with the two-step legal strategy by which privatization may be perpetuated over time, through the deployment of new private rights in formerly protected natural resource commons. In the first step, the proponents of privatization remove the legal infrastructure that protects these commons from the impacts of private extractive industry—for example, dismantling a ban on mining in a pristine national monument, or overturning forest management plans that prevent logging in roadless areas, or removing limits on other extraction activities that could adversely modify critical marine habitat.

The second step, however, is the critical element of the strategy that enables the entrenchment of environmental deregulation over time. To prevent future lawmakers from simply restoring the protective legal infrastructure removed in the first step, the architects of privatization seed the newly unregulated public commons with leases, licenses, and other permissions for private extraction that endure past their own temporal jurisdiction. These private interests can alter both the natural and political state of a previously protected resource by altering the pristine natural environment and eroding the publicness of the commons with the insertion of new private rights. More important to the strategy, some of these new rights may be eligible for constitutional protection under the Takings Clause, metaphorically salting the land against future efforts to restore previous environmental protections—unless the government can raise funds to buy back these private rights, even if they were initially given away for free.<sup>36</sup>

### B. *Property Rights as a Tool of Policy Entrenchment*

This Section details the use of private property rights as a policy tool for entrenching environmental deregulation by taking advantage of asymmetries in public and private law norms. Of note, “deregulation” is a slippery term, since the state can pursue one goal or change course to accomplish the seemingly opposite goal, in either direction, through regulation. For example, the state uses regulatory authority not only to conserve public lands in a

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<sup>35</sup> See Ryan, *Problems of Preemption and Political Scale*, *supra* note 9, at 159–62 (describing efforts to fight ceiling preemption in air pollution regulation and to unify environmental policy in land use planning through a model sustainability code).

<sup>36</sup> See discussion *infra* subsection IV.D.2 (discussing the “Just Pay for It” objection and counterarguments).

national park, but also to open public lands to oil and gas drilling. Both are examples of regulation that can be reinforced or undone by subsequent acts of regulation, which can then be framed as either regulation or deregulation.

For the purposes of this conversation, however, deregulation refers specifically to the conversion of protected public interests in natural resource commons into private hands—entitling the new rightsholder to extract value for private purposes (especially in ways that are difficult to reverse). In this context, deregulation will often amount to “divestment” of the public’s interest, even though the newly private property may remain subject to other forms of regulation. Combined with the threat of takings liability for regulatory interference with these new interests, the entrenchment strategy can ossify private carveouts from public commons, reducing the force of legal protections for remaining environmental values there.

The entrenchment strategy is all about endurance. After all, environmental policymaking does not just unfold across space or the various levels of American government, it also unfolds over time—and for that reason, regulatory strategists must consider temporal factors. It took more than fifty years to build the modern edifice of federal environmental law,<sup>37</sup> but deregulation interests were able to roll back nearly one hundred of them in just the four years between 2017 and 2021.<sup>38</sup> The precariousness of regulatory durability rightly preoccupies environmental stakeholders.

For the same reason, those engaged in deregulation during the Trump Administration understood that even if they succeeded in dismantling federal environmental laws at the time, shifting political currents could always bring them back in the future. State and local lawmaking might fill some gaps left open by federal deregulatory efforts,<sup>39</sup> but even if the threat of subnational regulation was neutralized by forceful ceiling preemption,<sup>40</sup> the risk remained that any or all protections could be resurrected by a simple change in leadership.

Deregulators might try to preserve their gains legislatively, but that would be challenging. Legal rules enacted in the present can ordinarily be revisited and reversed, making it purposefully difficult for elected officials in power

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37 See RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 50–51 (2006) (describing the passing of environmental laws in the 1970s as a culmination of protests by environmental justice movements throughout the nineteenth and twentieth centuries).

38 See Popovich et al., *supra* note 4 (reporting on ninety-eight environmental rules and regulations officially reversed, revoked or otherwise rolled back under Trump, with an additional fourteen contemplated reversals that were not finalized by the end of his term).

39 See Ryan, *Problems of Preemption and Political Scale*, *supra* note 9, at 160–62 (discussing the promise and limits of coordinated regional governance as a viable alternative to federal environmental law).

40 *Id.* at 152–56 (discussing the threat of ceiling preemption).

today to limit the choices of legislators elected in the future.<sup>41</sup> That way, no matter what bad (or good) ideas the sitting legislature comes up with, future lawmakers can always respond to public concern and try something new. A similar dynamic applies to the executive branch, though judicial review and public participation requirements under the Administrative Procedure Act pose additional complications for agency reversals.<sup>42</sup>

These public law limitations on the authority by which legislatures govern is considered an inviolable feature of democratic sovereignty.<sup>43</sup> A fundamental feature of good governance, it is the mechanism that ensures that government remains accountable to the public, ensuring that those invested with authority in the present lack the power to make precommitments on behalf of future citizens who may have different concerns. In his scholarship on this issue, Professor Christopher Serkin explains the theory of democratic legitimacy that underlies this important public law norm:

In a democracy, governments are not allowed to bind future governments. Ordinary legislation cannot be made unrepealable, and future governments are free to revisit the policy choices of their predecessors. The prohibition against entrenchment, as it is called in the academic literature, is meant to ensure that each government can be democratically responsive to its own electorate and is not bound by the preferences of the past.<sup>44</sup>

The proponents and opponents of environmental regulation have both attempted to entrench preferred policies despite this norm,<sup>45</sup> but deregulators have discovered a particularly powerful tool for consolidating their power

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<sup>41</sup> See Serkin, *Public Entrenchment*, *supra* note 14, at 881 ("In a democracy . . . future governments are free to revisit the policy choices of their predecessors.").

<sup>42</sup> See 5 U.S.C. § 702 (authorizing judicial review of agency decisions); *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 40 (1983) (affirming the "arbitrary and capricious" standard to be used for judicial review of agency actions). A decision that rescinds rights previously granted by a rule will have to pass very high judicial scrutiny, as the decision requires every agency to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Id.* at 43 (internal quotation marks omitted). Therefore, legitimate private rights that have already been granted will *more than likely* remain secure, notwithstanding the shift in political winds. For more specific examples of constraints on administrative reversals, see 16 U.S.C. § 1604(d)(1), which provides for public involvement in land management planning for the National Forest System, 42 U.S.C. § 4332(2)(C), which provides for public review of environmental impact statements, *Kleppe v. Sierra Club*, 427 U.S. 390, 405-06 (1976), which illustrates judicial review of NEPA decisions, and Keiter, *supra* note 7, at 1150 n.151, which discusses all of these examples.

<sup>43</sup> Serkin, *Public Entrenchment*, *supra* note 14, at 934 ("[I]t may be that limits on the temporal scope of government actions are implied by the nature of sovereignty.").

<sup>44</sup> *Id.* at 881.

<sup>45</sup> See *infra* notes 51-52 and accompanying text (discussing the use of consent decrees by proponents of regulation).



over time: perpetuating policy accomplishments through the strategic creation of private property rights in deregulated natural resource commons.<sup>46</sup> The trick, roughly speaking, is in blurring the public and private law functions in which governments engage.

Private law governs the legal relationships between private parties, often through the doctrines of tort, contract, and property law, while public law orders legal relationships involving the government, often through the media of constitutional, criminal, and administrative law.<sup>47</sup> When the government is acting in its sovereign capacity as a regulator, it is governed by public law norms consistent with these sources, including the anti-entrenchment principle.<sup>48</sup>

However, to accomplish the public functions of government, public agents must inevitably engage in the realms of private law that are not subject to all the same public law constraints. Most organs of government own real estate, vehicles, and other property to operate, and they must hire employees and contract with other agents to perform needed tasks. When they do so, they generally operate under the same private law constraints of property and contract that apply to other parties, so the private rights public actors create by sale and contract are not necessarily time-limited in the same way as conventional public law legislation.<sup>49</sup> A contract generally lasts as long as its specified term, and property rights can be perpetual if they are not time-limited by the terms of a lease or other future interest. These terms can extend long beyond any given legislative session, allowing a sitting legislature to commit the government to action long beyond its time in office.<sup>50</sup> Strategically deployed, these private law tools provide handy deregulatory workarounds for the public law anti-entrenchment hurdle.

Of course, the proponents of environmental protection have also attempted to create enduring legal limitations that can withstand political

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<sup>46</sup> See generally Stephen A. Siegel, *Understanding the Nineteenth Century Contract Clause: The Role of the Property-Privilege Distinction and "Takings" Clause Jurisprudence*, 60 S. CAL. L. REV. 1 (1986).

<sup>47</sup> See Michel Rosenfeld, *Rethinking the Boundaries Between Public Law and Private Law for the Twenty First Century: An Introduction*, 11 INT'L J. CONST. L. 125, 125-28 (2013) (analyzing the relationship between private and public law and the implications of their distinction); see also Jianlin Chen, *Optimal Property Rights for Emerging Natural Resources: A Case Study on Owning Atmospheric Moisture*, 50 U. MICH. J.L. REFORM 47, 47-54 (2016) (examining the different types of private interests that may be created in natural resources and that may be deemed as property).

<sup>48</sup> See Serkin, *Public Entrenchment*, *supra* note 14, at 881.

<sup>49</sup> See generally *id.*

<sup>50</sup> For additional examples of perpetual rights entrenched into the future, see *id.* at 882, which states that "using tax increment financing to fund public infrastructure can commit a local government to predetermined spending priorities far into the future." For example, the City of Chicago effectively entrenched parking meters as the sole method for managing parking problems by committing to durable physical and legal infrastructure. See *id.* at 895 (discussing potential breach of contract claims if the city were to attempt novel responses to parking and other transportation problems).

fluctuation, most notably through the use of judicial consent decrees. Environmentalists may sue the relevant natural resource agency to advance their goals, but then settle with agreeable agency staff through a judicial consent decree that will bind future agency staff even after the political winds could shift.<sup>51</sup> A robust literature exploring, critiquing, and defending so-called “sue-and-settle” tactics highlights this potential for entrenching policy decisions through means other than the creation of enduring private rights.<sup>52</sup> This practice of entrenching regulation warrants scrutiny as well, but there are important distinctions. Consent decrees operate only until an agency follows proper administrative process to revisit rulemaking through conventional public law means, so that change through public law processes always remains an option. By contrast, the entrenchment of policy through private property rights implicates constitutional protection unavailable to—and untouchable by—public rulemaking.<sup>53</sup>

To be sure, some scholars have questioned the usefulness of the anti-entrenchment norm as a concept, pointing out all the various ways that

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<sup>51</sup> See, e.g., Travis A. Voyles, *Clearing Up Perceived Problems with the Sue-And-Settle Issue in Environmental Litigation*, 31 J. LAND USE & ENV'T L. 287, 293 (2016) (describing the consent decree controversy and noting that the “main thrust of the assault on sue-and-settle” is that it dodges the typical protections inherent in rulemaking processes).

<sup>52</sup> *Id.*; see also Tracy Hester, *Consent Decrees as Emergent Environmental Law*, 85 MO. L. REV. 687, 713, 737 (2020) (discussing the regulation of consent decrees and their potential to create enduring and persuasive precedent that can withstand political changes through deferential judicial review, and concluding that despite criticism, sue-and-settle practices provide a needed avenue for the implementation of regulations in times of political quagmire); Stephen M. Johnson, *Sue and Settle: Demonizing the Environmental Citizen Suit*, 37 SEATTLE U. L. REV. 891, 895 (2014) (discussing the negative impacts of sue-and-settle tactics, such as collusion between nongovernmental organizations and agencies, which limits public engagement in the lawmaking process, and the creation of long-lasting rules with rushed and procedurally inadequate processes).

<sup>53</sup> Additional examples of policies that could be characterized as entrenching environmental regulations include the creation of conservation easements or national monuments, although these are also distinguishable. Conservation easements are created using private law tools from the start, often arranged by private actors without any public participation at all (for example, between an individual landowner and a private land trust), and they can be undone through such private law tools as the doctrine of *cy près*. Breana Behrens, *Extinguishing, Transferring, and Amending Conservation Easements*, LANDCAN LIBR., <https://www.landcan.org/article/extinguishing-transferring-and-amending-conservation-easements/727> [<https://perma.cc/47NJ-YWP6>]. Still, they have also been critiqued for ossifying indefinite decisions about land uses that may warrant reconsideration for changed circumstances later. See, e.g., Jessica Owley, *Conservation Easements at the Climate Change Crossroads*, 74 L. & CONTEMP. PROB. 199, 199 (2011) (“A conservation easement that is too changeable endangers the perpetual protection that is the cornerstone of conservation easements.”). By contrast, the creation of national monuments relies squarely on the public law vehicle of presidential authority, but as suggested by the examples discussed in Section II.C, they appear undoable by subsequent presidents using the same authority.

stakeholders seek to entrench their preferred policies into law.<sup>54</sup> For example, in recent work, Professors Daryl Levinson and Benjamin Sachs distinguish between formal and functional entrenchment, arguing that we judge formal entrenchment much more harshly than more commonplace forms of functional entrenchment, but for reasons that are hard to defend.<sup>55</sup> Nevertheless, in exploring public entrenchment through the vehicles of private law, Professor Serkin has persuasively demonstrated how policymakers can perpetuate otherwise reversible public policies by strategically fortifying them with supportive property and contract law rights, in ways that circumvent democratic accountability norms.<sup>56</sup>

### C. Public and Private Law Stickiness in Constitutional History

At bottom, the problem is that public and private law tools are meant to have fundamentally different degrees of “stickiness”—the force with which they endure over time—because of the different purposes they serve. Public law tools—legislation and regulation—are designed *not* to be sticky, to prevent political actors from attempting to extend power beyond their rightful time in office.<sup>57</sup> By contrast, private law tools like property and

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<sup>54</sup> See Daryl Levinson & Benjamin Sachs, *Political Entrenchment and Public Law*, 125 YALE L.J. 400, 402-08 (2015) (exploring the potential breadth of public law entrenchment and questioning the utility of the underlying concept).

<sup>55</sup> *Id.* at 454-56. Levinson and Sachs might characterize the strategy described here, of coupling the rollback of environmental regulations with the creation of private extractive rights in their wake, as *functional* political entrenchment, reflecting ordinary democratic politics rather than a statutory attempt to block future policy fluidity. *See id.* at 405-06, 426 (outlining the enactment of statutes as a method distinct from “a range of functional entrenchment strategies”). Arguably, however, the takingsification phenomenon represents a hybrid model of formal and functional entrenchment, in that the factors that ossify deregulation include both formal and political barriers. The chilling effects of formal takings and administrative law act as barriers, but they are coupled with surmountable political barriers (as there are actions that *could* be taken to reregulate within these formal constraints, such as satisfying the administrative process or buying back the new private rights).

Nevertheless, even if takingsification is viewed through this lens as more non-threateningly functional than formal entrenchment, then the tactic is even less likely to raise the democratic accountability concerns than would a more forthright statute creating permanent private carveouts in a formerly public commons—making the entrenchment tool even more pernicious and problematic. *See id.* at 403-04 (highlighting how a functional entrenchment tool is more problematic because it is less likely to raise red flags from the perspective of public law).

<sup>56</sup> Serkin, *Public Entrenchment*, *supra* note 14, at 881 (“[A]n increasingly important mechanism for propelling policy into the future, antientrenchment rules notwithstanding[,] [is] governments’ use of private law and private rights to make binding intertemporal precommitments.”).

<sup>57</sup> *See, e.g.*, Aaron L. Nielson, *Sticky Regulations*, 85 U. CHI. L. REV. 85, 90-91 (2018) (discussing the stickiness dilemma in the public law context of administrative law); Brett H. McDonnell, *Bylaw Reforms for Delaware’s Corporation Law*, 33 DEL. J. CORP. L. 651, 653-54 (2008) (noting that in the corporate law context, some default rules are stickier than others, which may make them more difficult to alter).

contract are rightfully designed to stick hard, so that individuals can make meaningful conveyances and trustworthy promises.<sup>58</sup>

Yet the actual practice of governance necessarily blurs these lines, and with it, the simple rationale beneath them. As Professor Stephen Siegel describes, it is important to enable governments to make durable promises (like any private party) when they contract for services, employ individuals, or buy and sell real estate.<sup>59</sup> At the same time, it is problematic to allow the legitimate constraints on public lawmaking to be circumvented by political actors' strategic use of private law tools, as is currently taking place in the accelerating privatization of public natural resources—and has previously taken place in the context of public contracts.<sup>60</sup>

The Supreme Court reluctantly recognized exactly this problem in an earlier iteration of constitutional history, when it struggled to cope with the awkward nexus between private law contract norms and public law governmental responsibilities.<sup>61</sup> In the first half of the nation's history, a related problem of legal theory and Supreme Court jurisprudence presented itself when early state actors made guarantees that, when interpreted as contracts, entrenched private rights in derogation of the state's police power obligations to the public.<sup>62</sup> Over time, the Court was forced to shift from its initial interpretation of the Contract Clause,<sup>63</sup> which it applied uniformly to all public and private agreements, to its later recognition that public promises require a more nuanced application of private law contract principles.<sup>64</sup>

As Professor James Ely describes, before states had more sophisticated means of formalizing corporate charters or arranging public-private partnerships, state actors occasionally used sovereign authority to confer regulatory benefits on private parties that would eventually be deemed incompatible with public law obligations. Creating a state-sanctioned franchise, monopoly, or other preferred economic status became indefensible

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<sup>58</sup> See, e.g., Stephen A. Siegel, *Understanding the Nineteenth Century Contract Clause: The Role of the Property-Privilege Distinction and "Takings" Clause Jurisprudence*, 60 S. CAL. L. REV. 1, 76-86 (1986) (exploring the evolution of public contracting law to manage the need for sticky state contracts, specifically for the permissible ordinary subjects of private contract). *But see* Christopher Serkin, *What Property Does*, 75 VAND. L. REV. 891, 895 (2022) (arguing that the institution of property protects reliance interests, but that reliance interests in the context of property are more dynamic, and thus perhaps less sticky, than contract law reliance).

<sup>59</sup> Siegel, *supra* note 58, at 70-72.

<sup>60</sup> Ely, *Still in Exile*, *supra* note 11, at 95-98.

<sup>61</sup> Siegel, *supra* note 58, at 73-75.

<sup>62</sup> *Id.* at 42-44.

<sup>63</sup> See U.S. CONST. art. I, § 10 ("No state shall . . . pass any . . . Law impairing the Obligation of Contracts . . .").

<sup>64</sup> See Siegel, *supra* note 58, at 50-54 (describing the Supreme Court's changing treatment of taxing and police powers previously abrogated by contract); Ely, *Still in Exile*, *supra* note 11, at 95-98 (depicting the general evolution of the Supreme Court's application of the Contract Clause).

as other interests entered the field.<sup>65</sup> But when later office holders attempted to modify these arrangements, the Supreme Court construed them as public contracts, enforceable under the Constitution's Contract Clause, and therefore disallowed repeal or amendment—no matter the resulting public harm.<sup>66</sup> In his work, Ely describes how Chief Justice John Marshall in particular “developed the Contract Clause into a muscular restraint on state authority.”<sup>67</sup>

For example, the Court's early application of the Contract Clause limited states' power to enact legislation to provide public benefits construed as impairing contractual terms. In *Sturges v. Crowninshield*, the Court held that New York could not enact state debt-relief laws without violating the Contract Clause because those laws impaired obligations of contracts with private parties, effectively giving private contracts constitutional protection over the constitutionally recognized public law tool of allowing the insolvent to discharge their debt.<sup>68</sup>

A few decades into the nation's history, after these early state moves wrought havoc, Ely reports that the Court gradually shifted its position on the application of the Contract Clause to public lawmaking. For example, in 1875, the Massachusetts legislature chartered the Charles River Bridge

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<sup>65</sup> JAMES W. ELY, *THE CONTRACT CLAUSE: A CONSTITUTIONAL HISTORY* 29-32 (2016) [hereinafter ELY, *THE CONTRACT CLAUSE*] (discussing the robust nature of the Contract Clause in the early nineteenth century). During legislative debates, Ely explains, “corporate charters were increasingly likened to contracts, which could not be rescinded.” *Id.* at 32.

<sup>66</sup> *Id.* at 38; see also Ely, *Still in Exile*, *supra* note 11, at 95-96 (“[John] Marshall notably construed the provision to cover public as well as private contracts . . . . In addition, Taney vigorously wielded the Contract Clause to . . . maintain the integrity of contracts, and to secure their faithful execution throughout this Union, by placing them under the protection of the Constitution of the United States.” (internal quotation marks and citation omitted)).

<sup>67</sup> Ely, *Still in Exile*, *supra* note 11, at 95; see also ELY, *THE CONTRACT CLAUSE*, *supra* note 65, at 32-36 (describing *Fletcher v. Peck*, 10 U.S. 87, 135 (1810), which held that state land grants constituted public contracts vesting absolute rights and “a repeal of the law cannot divest those rights” pursuant to the Contract Clause). In his book, Ely critiques this doctrine, arguing that cases such as *Trustees of Dartmouth College v. Woodward*, 17 U.S. 518, 711-713 (1819) (holding that Dartmouth College was a private corporation despite a public charter establishing it for educational and charitable purposes, and protecting it under the Contract Clause from subsequent state legislation altering the charter) and *Fletcher* were wrongly decided because the Constitution did not envision the protection of corporate charters under the Contract Clause. See ELY, *THE CONTRACT CLAUSE*, *supra* note 65, at 32-39.

<sup>68</sup> See *Sturges v. Crowninshield*, 17 U.S. (4 Wheat.) 122, 206 (1819) (arguing that the Contract Clause must be read broadly in order to prohibit the discharge of debt, notwithstanding the Bankruptcy Clause); U.S. CONST. art. I, § 8, cl. 4 (authorizing Congress to enact “uniform Laws on the subject of Bankruptcies”); see also Ely, *Still in Exile*, *supra* note 11, at 97 (“Although paying lip service to *Dartmouth College*, the Supreme Court adhered to the strict construction principle and moved away from the notion of inviolate corporate charters. Moreover, the Court gradually embraced the concept of an alienable police power to safeguard public health, safety, and morals. Accordingly, a state could not relinquish such power by entering a contract.”).

Company to construct a bridge and collect tolls,<sup>69</sup> but some fifty years later, in 1828, it chartered the Warren Bridge Company to build a free bridge nearby, thus depriving the old bridge of traffic and tolls.<sup>70</sup> The first company filed suit, claiming that the legislature had defaulted on its initial contract and that the second charter violated protected economic interests under the Contract Clause.<sup>71</sup> Departing from its earlier and more “muscular” Contract Clause analyses, the Court concluded that the Contract Clause did not preclude state authorization of the later bridge. It ruled that the state neither offered, nor could have offered, exclusive control over the waters of the river by the original charter, and that it was barred from invading corporate privilege by interfering with the company’s profit-making ability in establishing the free bridge.<sup>72</sup> In balancing the company’s private rights of property and contract against the state’s obligation to facilitate transportation, commerce, and economic development, the Court found that the latter public interests had to take priority.<sup>73</sup>

Reviewing the Court’s evolving treatment of the Contract Clause over the later nineteenth century, Professors Siegel and Ely both note that the Clause began to fade in significance as the Court embraced the doctrine of inalienable state police powers to safeguard the public health, safety, and morals, which the state could not relinquish by entering into a contract.<sup>74</sup> For example, the Mississippi legislature had granted a twenty-five year statutory monopoly to one corporation to conduct lotteries, two years before a new state constitution and its implementing legislation in 1870 forbade all lotteries.<sup>75</sup> When the lottery corporation sued, claiming the new legislation

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<sup>69</sup> *Charles River Bridge Co. v. Warren Bridge Co.*, 36 U.S. (11 Pet.) 420, 423 (1837).

<sup>70</sup> *See id.* at 428 (“The bill[] . . . charged, as a ground for relief, that the act for the erection of the Warren bridge impaired the obligation of the contract between the state of Massachusetts and the proprietors of the Charles river bridge; and was, therefore, repugnant to the constitution of the United States.”).

<sup>71</sup> *Id.* at 428-29.

<sup>72</sup> *Id.* at 464-66.

<sup>73</sup> *See id.* at 466 (“[A]ttributes of sovereignty . . . [a]re intrusted to the legislature, to be exercised, not bartered away. . . . In regard to public property, the power of the legislature to alienate it, is conceded. The limitation now contended for, extends only to those sovereign powers which are deemed essential to the constitution of society.”).

<sup>74</sup> *See* Siegel, *supra* note 58, at 52 (“[Some jurists] began distinguishing between police regulations promoting the public health, safety, and morals from those promoting the public convenience. The former were, and the latter were not, sufficiently crucial to social welfare to justify the revocation of express charter provisions.”); Ely, *Still in Exile*, *supra* note 11, at 97 (finding that the Contract Clause “began to gradually fade in significance”); *see also* ELY, THE CONTRACT CLAUSE, *supra* note 65, at 152-55 (discussing criticism of the *Dartmouth College* doctrine and citing Gilded Age legal writers’ observations that the claim of inviolable corporate charters was unworkable in light of a burgeoning economy and rapid technological innovation).

<sup>75</sup> *See* *Stone v. Mississippi*, 101 U.S. 814, 817 (1879) (discussing how a provision of the Constitution adopted in 1868 barred the sale of lottery tickets, controverting an earlier act granting

violated the Contract Clause, the Court held that any such contract with the state would be unenforceable.<sup>76</sup> Even though the earlier state constitution did not prohibit the legislature from granting rights to conduct lotteries, the Court held that it was patently clear, as a matter of public law, “that the legislature cannot bargain away the police power of a State,” which included the state’s power and obligation to protect the public health and morals from the potentially deleterious effects of gambling.<sup>77</sup>

The Contract Clause began to wane as a protector of private prerogative against public regulation. Professor Siegel observes that as the application of the Contract Clause to state-granted franchises became increasingly controversial, courts abandoned the clause as the primary tool of constitutional protection for private privilege:

Their search for a source of constitutional limitations of governmental power over both chartered institutions and ordinary contracts migrated to the due process clause, and that clause rose to take the contract clause’s place at the center of constitutional thought. The judicial controversy and scholarly debate engendered by the rise of the inalienable police power doctrine signalled the end of the contract clause’s reign as the focus of constitutional litigation.<sup>78</sup>

Siegel’s work also suggests, perhaps not coincidentally, that as the early Contract Clause faded as a means of protecting private wealth and privilege, the Due Process and ultimately Takings Clauses would take up that slack.<sup>79</sup>

This history demonstrates that just as private benefits in public commons can be entrenched through the deployment of property rights protected by the Takings Clause, so can private benefits in public law contexts via the

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the Mississippi Agricultural, Educational, and Manufacturing Aid Society the right to sell certificates for “the casting of lots, or by lot, chance, or otherwise”).

<sup>76</sup> See *id.* at 820-21 (“[T]he right to suppress [lottery tickets is governmental, to be exercised at all times by those in power, at their discretion. . . . [T]he people, in their sovereign capacity, . . . may resume it at any time when the public good shall require, whether it be paid for or not.”).

<sup>77</sup> See *id.* at 817-18 (holding that the state has the sovereign’s power to govern, which extends to all matters involving public health or morals, including gambling).

<sup>78</sup> Siegel, *supra* note 58, at 54.

<sup>79</sup> See *id.* at 82-83 (discussing the fall of the Contract Clause’s prominence and the rise of constitutional protection of property rights). Siegel notes that “ordinary contracts received greater protection under the contract clause than land received under the takings clause” until “[l]egislatures shifted from focusing mainly on promoting economic activity to regulating it.” *Id.* at 105. While the protection of property rights was first conferred by the Due Process Clause, it would eventually be more meaningfully provided by the Takings Clause. See *Lingle v. Chevron*, 544 U.S. 528, 539-42 (2005) (ending assessment of takings claims under a Due Process Clause test and fully centralizing them under Takings Clause jurisprudence, which had slowly gathered force over the twentieth century).

Contract Clause.<sup>80</sup> And while some degree of entrenchment may be necessary for ordinary public contracts and property conveyances to work, the stickiness of these private law tools should not be used to overcome legitimate public law safeguards. Early Supreme Court treatments of the matter failed to appreciate this discontinuity, but as the complexity of public-private contracts disputes evolved, so too did both the legislative and judicial treatment of the problem. On the legislative side, state contracting law evolved to cope more explicitly with the need to reach the appropriate balance between public and private interests, while judicially, the Court revised its Contract Clause jurisprudence to better account for the complexity of these competing rights.<sup>81</sup> The same nuanced evolution is now required in the context of public commons subject to Takings Clause claims.

Indeed, current struggles over the direction of environmental and natural resource management are marked by the deployment of contested property and contract rights, designed to accomplish the same intertemporal precommitments that Professor Serkin, Professor Ely, and Professor Siegel describe. Part II of this Article demonstrates the success of this strategy in recent efforts to increase oil and gas leasing, hard rock mining patents, and fishing rights on public lands, among other forms of privatization in former public commons contexts. First, however, it is important to understand how the protection of private rights in these contexts has been amplified by the evolving ambit of constitutional takings jurisprudence.

#### D. *Takingsification in American Property Law*

This Section reviews regulatory takings doctrine and its increasingly fractious relationship with the environmental laws protecting natural resource commons. The struggle to balance public and private interests in natural resource commons has been heightened by the tendency to characterize only the private rights in these public commons as worthy of legal protection—particularly constitutional takings protection. The entrenchment phenomenon facilitated by takings liability extends to other legal obstacles that also make it hard to reverse the privatization of public commons, such as the threat of administrative law actions and political liability. These factors all combine to chill efforts to reinvigorate environmental protection, but this analysis focuses on the takings element because it is the most powerful driver of the phenomenon, it dovetails with

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<sup>80</sup> See Ely, *Still in Exile*, *supra* note 11, at 95 (“[T]he Contract Clause . . . [may] cover public as well as private contracts.”).

<sup>81</sup> See Siegel, *supra* note 58, at 43-46 (discussing the rise of the inalienable state powers doctrine which sought to clarify the line between powers that are “‘inherent’ or ‘essential’ aspects of sovereignty” with those that could be bartered away via contract).



the property theory analysis in Part III, and it provides useful conceptual tools for Part IV's proposal for defusing the problem.

In the United States, few legal claims command more protection than allegations that private property rights have been violated. Threats to property receive the full attention of the Takings Clause, which requires compensation when the government expropriates—or “takes”—private property for public use.<sup>82</sup> When the plaintiff prevails, the government must either compensate the owner for her loss or rescind the regulation (or in some cases, both), providing a strong disincentive for regulatory overreach.<sup>83</sup>

Nevertheless, the definition of what constitutes a “taking” continues to evolve, sometimes creating uncertainty for environmental regulators regarding the boundary separating regulatory overreach from legitimate enforcement. Over time, courts have interpreted the clause to require compensation not only when the state takes ownership or possession of property, or unduly burdens the owner's right to exclude,<sup>84</sup> but even when a regulation interferes with that owner's economic enjoyment of property.<sup>85</sup> Under the Supreme Court's “regulatory takings” jurisprudence, adjudicators must assess whether a regulation has effected a taking by balancing the character of the regulation, its economic impact on the owner, and the extent to which it interferes with the owner's reasonable, investment-backed expectations for engaging in the restricted use.<sup>86</sup> The standard balancing test thus requires the adjudicator to assess both the public and private interests at issue, weighing the nature of the challenged regulation that protects the public against the fairness of the economic impacts it creates for the private owner.<sup>87</sup>

More recently, the Court has clarified that certain kinds of regulations will always be considered takings without application of the ad hoc balancing test,

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<sup>82</sup> See U.S. CONST. amend. V (“[N]or shall private property be taken for public use, without just compensation”).

<sup>83</sup> See *First Eng. Evangelical Lutheran Church v. Cnty. of Los Angeles*, 482 U.S. 304, 316-17 (1987) (stating that compensation is required by the Constitution in the event of a taking, and that while the government may choose to abandon a taking through various means to potentially avoid liability, compensation may still be required during the time period over which an owner was wrongfully denied enjoyment); see also Daniel L. Siegel & Robert Meltz, *Temporary Takings: Settled Principles and Unresolved Questions*, 11 VT. J. ENV'T L. 479, 481 (2010) (explaining that *First English Evangelical Lutheran Church* affirmed a right to compensation for regulatory takings, even where temporary).

<sup>84</sup> See, e.g., *Cedar Point Nursery v. Hassid*, 141 S. Ct. 2063, 2073 (2021) (concluding that a state labor regulation that required farm owners to allow regular visitation by union representatives constituted a physical taking).

<sup>85</sup> See *Pa. Coal vs. Mahon*, 260 U.S. 393 (1922) (holding, for the first time, that a regulatory interference with economic use alone, and not with title or possession, could constitute a taking).

<sup>86</sup> *Pa. Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

<sup>87</sup> For an outstanding review of takings jurisprudence in environmental fields and across the board, see generally Dave Owen, *The Realities of Takings Litigation*, 47 BYU L. REV. 577 (2022).

and without consideration of the public interests they serve. For example, regulations that create a permanent physical occupation of space, no matter how small and regardless of purpose, will require compensation as a “per se” taking—even the small exterior space occupied by mandated cable television wires outside a rental apartment building.<sup>88</sup> More relevant to environmental law, the Court has also concluded that a regulation eliminating all economically valuable use of property is a taking per se,<sup>89</sup> even if the restricted economic use would harm the public—such as building restrictions to prevent imminent coastal erosion or the loss of critical ecosystem services associated with coastal wetlands.<sup>90</sup> (An important exception to this rule, reviewed later in this chapter, limits its application if the restricted use is one already prohibited by the “background principles” of state property law.<sup>91</sup>) Related examples surface in energy law and utilities regulation, where takings liability has been found if later regulations are found to compromise guarantees to the private utility’s return on investment.<sup>92</sup>

These per se rules expand the availability of takings challenges for private owners where public and private interests conflict with regard to land use regulations, but that result is not necessarily problematic. The indemnity principle at the heart of the Takings Clause—the idea that the government cannot just take things of value from individuals without compensation—is a bedrock feature of American constitutional law, and one that warrants respect. Few seriously question the value of the Clause in safeguarding the

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<sup>88</sup> See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 434-35 (1982) (“[W]hen the character of the governmental action[] . . . is a permanent physical occupation of property, our cases uniformly have found a taking to the extent of the occupation, without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner.”) (quotation and citation omitted). The Court’s more recent decision in *Cedar Point Nursery* does not overrule *Loretto* but instead establishes a confusingly analogous rule that repeated physical invasions can constitute a physical taking. *Cedar Point Nursery*, 141 S. Ct. at 2073.

<sup>89</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1018 (1992) (ruling that regulations that “leave the owner of land without economically beneficial or productive options for its use” constitute takings).

<sup>90</sup> Cf. *id.* at 1034-35 (Kennedy, J., concurring) (voicing concern that the majority’s willingness to find a taking whenever a regulation curtails all economic use must be constrained to enable regulations that prevent newly recognized forms of public harm that may not be cognizable under traditional principles of common law of nuisance).

<sup>91</sup> See, e.g., *id.* at 1029-30 (noting that compensable takings do not occur where regulatory action effectively eliminates “the land’s only economically productive use,” but does not proscribe uses that were “previously permissible under relevant property and nuisance principles”).

<sup>92</sup> Utility companies are legally entitled to a certain percentage return on the equity they invest in constructing generating facilities. Courts have found regulatory takings in rules that limit the amount the utility could charge, if such rules interfere with this guaranteed return on equity. See generally J. Gregory Sidak & Daniel F. Spulber, *Deregulatory Takings and Breach of the Regulatory Contract*, 71 N.Y.U. L. REV. 851 (1996) (comparing a regulatory agency’s promise to a utility of guaranteed return on equity to the legally enforceable contracts in private leases, which are protected by conventional private law remedies for breach of contract or unconstitutional taking of property).

most conventionally cherished forms of private property, such as a family home or small business, against perfunctory public expropriation. The Fifth Amendment provides a bulwark against arbitrary governmental action that is admired and even coveted by vulnerable individuals in authoritarian regimes in other parts of the world.<sup>93</sup>

Yet the takings calculus becomes more complicated when individuals seek protection for private interests in natural resource commons that all members of the public enjoy, such as public lands, forests, waters, and mineral resources—especially when per se takings rules obscure full consideration of the public interests at issue there.<sup>94</sup> As discussed further in Part III, takings analyses can too easily equate the more circumscribed private interests created in commons resources with stronger private interests in more autonomously held forms of private property, such as a home—sloppily protecting the former with a degree of force more suitable to the latter, and too often disregarding the correlative public interests intertwined in public commons.<sup>95</sup> As a wider scope of interests win protection under the Takings Clause, and as stricter per se rules limit the implicit public-private balancing built into the standard ad hoc test, regulatory takings litigation has grown in complexity and weakened government incentive to protect the public interest in these commons.<sup>96</sup>

In recent decades, courts' enthusiastic application of these rules has resulted in what we might call the "takingsification" of American property, land use, and environmental law—focusing attention on private interests to the exclusion of all other considerations. Moreover, the federal Takings Clause is partnered with analogs in state constitutions, some even more protective of private property than the federal constitution, and corresponding state legislation that bolsters the legal protection of private

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<sup>93</sup> See, e.g., Ian Johnson, *Picking Death Over Eviction*, N.Y. TIMES (Sept. 8, 2013), <https://www.nytimes.com/2013/09/09/world/asia/as-chinese-farmers-fight-for-homes-suicide-is-ultimate-protest.html> [<https://perma.cc/M9U7-WF4B>] (detailing the phenomenon of suicide among Chinese farmers as a form of protest against forcible land expropriation); Andrew Jacobs, *Chinese Businesses Resist Eviction by Developers*, N.Y. TIMES (Dec. 30, 2009), <https://www.nytimes.com/2009/12/31/world/asia/31nailhouse.html>? [<https://perma.cc/2QZS-XMBW>] (describing how efforts by Chinese small business owners to resist demolition by government-affiliated developers are frequently met with violence).

<sup>94</sup> See Josh Eagle, *A Window into the Regulated Commons: The Takings Clause, Investment Security, and Sustainability*, 34 ECOLOGY L.Q. 619, 654 (2007) (discussing the complicated relationship between private parties and the government when it comes to regulations around common, public areas).

<sup>95</sup> See *infra* Section III.A.

<sup>96</sup> Cf. Michael C. Blumm & Lucas Ritchie, *Lucas's Unlikely Legacy: The Rise of Background Principles as Categorical Takings Defenses*, 29 HARV. ENV'T L. REV. 321, 363-66 (2005) (discussing categorical takings, background principles, and the post-*Lucas* courts' denials of claims for takings of "less-than-fee-simple" rights, including revocable grants to public resources).

over public interests.<sup>97</sup> The resulting shift of regulatory power toward the protection of private rights at the expense of the public has raised eyebrows among jurists and property scholars around the world.<sup>98</sup> Even Western democracies that share our historical legal roots in British common law, such as Canada and Australia, have pointedly rejected the U.S. regulatory takings model as incompatible with the strong legal protections for the public interest that undergird their legal systems.<sup>99</sup>

Flanked by such powerful constitutional protections, the recognition of private property rights can thus be an effective means of countering environmental regulations that burden economic use. Regulations that substantially interfere with economic uses of private property are more

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<sup>97</sup> See *Kelo v. City of New London*, 545 U.S. 469, 489 (2005) (“We emphasize that nothing in our opinion precludes any State from placing further restrictions on its exercise of the takings power.”); see also Gerald S. Dickinson, *Federalism, Convergence, and Divergence in Constitutional Property*, 73 U. MIAMI L. REV. 139, 183-84 (2018) (noting that while state constitutions largely conform to federal takings law, many states adopted more plaintiff-friendly interpretations of the public use limitation after *Kelo*, through both statutory and state constitutional amendments); Mark W. Cordes, *Leapfrogging the Constitution: The Rise of State Takings Legislation*, 24 ECOLOGY L.Q. 187, 204, 212 (1997) (discussing two categories of state takings legislation, assessment statutes and compensation statutes).

<sup>98</sup> See, e.g., RACHELLE ALTERMAN, *TAKINGS INTERNATIONAL: A COMPARATIVE PERSPECTIVE ON LAND USE REGULATIONS AND COMPENSATION RIGHTS* 5 (2010) (“Regulatory takings in the United States are probably the most-analyzed topic in land use law anywhere in the world.”); Melanie Benesh, *Model or Anti-Model? The Role of U.S. Regulatory Takings Doctrine in Foreign Jurisdictions*, 24 CARDOZO J. INT’L & COMPAR. L. 289, 305-11 (2016) (noting that while Canada and Australia considered U.S. models in developing their own approaches to takings law, they rejected the U.S. regulatory takings doctrine as inconsistent with their own systems of property law, even though all three derive from British common law).

Indeed, I have observed that non-U.S. participants at international property law gatherings often react with surprise at how influential takings concerns are in American law in comparison to their own countries (occasionally with envy, when their home countries show insufficient regard for private rights, but more often with disapproval, when compared to home countries with stronger legal protections for public interests). Cf. Krithika Ashok, Paul T. Babie & John V. Orth, *Balancing Justice Needs and Private Property in Constitutional Takings Provisions: A Comparative Assessment of India, Australia, and the United States*, 42 FORDHAM INT’L L.J. 999, 1003-04 (2019) (contrasting the relationship between social justice and private interests relating to property in the constitutional takings provisions of the Indian, Australian, and American constitutions); Miles Walser, *Putting the Brakes on Rent Increases: How the United States Could Implement German Anti-Gentrification Laws Without Running Afoul of the Takings Clause*, 36 WIS. INT’L L.J. 186, 188 (2018) (noting that the United States consistently favors private over public interests in the context of affordable housing, and arguing that Germany’s anti-gentrification laws provide a better model for allowing use of state police power to maintain adequate and affordable rental housing without running afoul of the Takings Clause).

<sup>99</sup> See Benesh, *supra* note 98, at 305 (“Canada and Australia have both ultimately decided that the U.S. regulatory takings doctrine would not be viable in their constitutional and political systems.”); see also Ashok et al., *supra* note 98, at 1003-04 (contrasting U.S., Australian, and Indian approaches to balancing public and private interests in property law).

vulnerable to takings challenges than they have been previously,<sup>100</sup> and environmental laws are particularly vulnerable because they often curb land uses associated with economic benefit.<sup>101</sup> Many environmental regulations have been challenged on these grounds, including those prohibiting development in wetlands,<sup>102</sup> vulnerable coastal areas,<sup>103</sup> or endangered species habitat.<sup>104</sup> Management approaches that require potentially valuable natural resources to be left unharvested (following the “leave it in the ground” school<sup>105</sup>) are equally vulnerable.<sup>106</sup> The threat of takings litigation, even if it

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<sup>100</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1043-60 (1992) (Blackmun, J., dissenting) (tracing how the new rule requiring compensation for economic harm departs from the Court’s past precedents); see also *id.* at 1063-75 (Stevens, J., dissenting) (same).

<sup>101</sup> See Erin Ryan, *Environmental Federalism’s Tug of War Within*, in *THE LAW AND POLICY OF ENVIRONMENTAL FEDERALISM: A COMPARATIVE ANALYSIS* 355, 371-72 (Kalyani Robbins ed., 2015) (discussing the strong relationship between environmental law and land use regulation); see also Erin Ryan, *Negotiating Environmental Federalism: Dynamic Federalism as a Strategy for Good Governance*, 2017 WIS. L. REV. FORWARD 17, 20-23 (same).

<sup>102</sup> See, e.g., *Palazzolo v. Rhode Island*, 533 U.S. 606, 611 (2001) (describing a complaint filed by a private owner of property within designated wetlands, asserting a taking after a Rhode Island council rejected certain development proposals).

<sup>103</sup> See, e.g., *Lucas*, 505 U.S. at 1007-09 (outlining a complaint filed by a landowner in a vulnerable coastal zone alleging a taking due to a South Carolina environmental law act prohibiting construction past a coastal erosion marker).

<sup>104</sup> See, e.g., *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 324 (2001) (holding in favor of a takings claim by California irrigators after water delivery under a state contract was temporary suspended while the state complied with restrictions under the Endangered Species Act); cf. Barton H. Thompson, Jr., *The Endangered Species Act: A Case Study in Takings & Incentives*, 49 STAN. L. REV. 305, 309 (1997) (discussing how to align conservation goals and compensation for landowners under the Endangered Species Act, which does not strictly require compensation but has inspired takings litigation); Robert Innes, Stephen Polasky & John Tschirhart, *Takings, Compensation and Endangered Species Protection on Private Lands*, 12 J. ECON. PERSPS. 35, 36-37 (1998) (same). But see *Casitas Mun. Water Dist. v. United States*, 708 F.3d 1340, 1360 (Fed. Cir. 2013) (dismissing a takings claim by a California irrigator required by the Endangered Species Act to create fish passage lanes). For more on the complicated *Casitas* trilogy, see *infra* notes 312, 411 and accompanying text.

<sup>105</sup> A growing movement advocates that natural resources such as oil and gas, minerals, and even subsurface water be “left in the ground” rather than extracted. See, e.g., Nicholas Kusnetz, *These Candidates Vow to Leave Fossil Fuel Reserves in the Ground, a 180° Turn from Trump*, INSIDE CLIMATE NEWS (April 20, 2019), <https://insideclimatenews.org/news/17042019/warren-sanders-coal-oil-gas-drilling-moratorium-federal-lands-offshore-renewable-energy-campaign-2020> [<https://perma.cc/GN4F-3Q7Z>] (“A ban on new federal leases . . . would represent a major shift in federal policy. The Trump administration has pushed to unleash fossil fuel production with its ‘energy dominance’ campaign, and even the Obama administration promoted some natural gas and oil drilling.”).

<sup>106</sup> For example, when rural Mora County, New Mexico became the first county in the United States to ban the extraction of hydrocarbons (before any such activity had taken place), the federal district court decided that the regulation effectively destroyed the economic value of an oil and gas leasehold, setting the stage for a takings claim against the County. *SWEPI, LP v. Mora Cnty.*, 81 F. Supp.3d 1075, 1149-50 (D. N.M. 2015) (holding that the plaintiffs could challenge the county’s ban on oil and gas extraction as a taking but that the claim was not yet ripe). Following Supreme Court

has only a modest chance of success, can dampen the ambitions of environmental lawmakers, regulators, and land use planners at all levels of government—but especially within local government, where most land use regulation takes place.<sup>107</sup>

The strategic use of property rights as a tool of policy entrenchment, described in Section I.B, brings the legal impacts of takingsification one step further. In these instances, the Takings Clause does not just protect the rights of existing owners against new environmental regulations that could affect property they already have. When property rights are strategically deployed for the purpose of policy entrenchment, they can provide new private owners with constitutional leverage to oppose future environmental protection on existing public lands—or, as in the current political context, to oppose the reinstatement of environmental protections that were removed in order to grant these new property rights.

In some contexts, potential administrative law claims may be the more daunting factor for regulators considering the reclamation of public rights in a formerly protected natural resource commons.<sup>108</sup> And even in contexts where takings claims are wholly unsuitable, such as fishing permitting,<sup>109</sup> the political liabilities that could accrue to a regulator can be enough to chill the reversal of private interests converted from the regulated commons resource back to the public. Taken all together, and buttressed by the errant strain of property theory that overprotects private interests and underprotects public interests in natural resource commons,<sup>110</sup> these factors of takingsification generate the privatization paradox: the combined forces of law, politics, and theory that make it easy to convert public interests in these commons into private ones but, concomitantly, very difficult to reverse.

## II. THE PRIVATIZATION PARADOX IN ACTION: SALTING PUBLIC COMMONS WITH PRIVATE RIGHTS

This Part demonstrates the privatization paradox in action, the inexorable pattern by which legal and political forces converge to make it easy to shift public interests in natural resource commons into private hands, but hard to

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precedent on previous regulations banning coal extraction, the court concluded that the “right to oil and gas consists in the right to extract it.” *Id.* at 1150.

<sup>107</sup> Cf. Hannah Jacobs, Note, *Searching for Balance in the Aftermath of the 2006 Takings Initiatives*, 116 YALE L.J. 1518, 1539–54 (2007) (discussing the burden that takings litigation increasingly imposes on state and municipal regulatory policy as well as different responses to the problem).

<sup>108</sup> See *supra* note 42 and accompanying text (discussing administrative law liability for regulatory changes).

<sup>109</sup> See Eagle, *supra* note 94, at 654 (noting the limited applicability of takings claims in fisheries regulation).

<sup>110</sup> See *infra* Part III.

shift them back. Having set forth the mechanism by which property rights can be used to entrench environmental deregulation, this Part exhibits the strategy now underway in several formerly protected natural resource commons. The proliferation of oil and gas leases on newly opened public lands represents a sobering example of the privatization strategy as it unfolds, markedly demonstrated by evolving federal policy on offshore drilling during the transition between the Obama and Trump Administrations. Other examples include the expansion of private oil and gas leasing on public lands, such as the Arctic National Wildlife Refuge in Alaska; hard rock mining patents in contested National Monuments, including the Bears Ears and Grand Staircase lands in Utah; rapidly issued shellfish aquaculture and finfish mariculture licenses in formerly protected coastal waters; and the rush to secure development permits after wetlands protections under Clean Water Act were weakened.

The privatization paradox operates differently in different resource contexts, but the core dynamic remains constant. As described in Part I, the pattern begins with environmental deregulation that facilitates the conversion of protected public interests in a natural resource commons into private interests, generally to enable the new rights holder to extract private value.<sup>111</sup> This can take the form of weakening protective regulations that fence out private claims or expanding existing opportunities for private access to a public natural resource commons. The contested commons elements may have independent economic value, such as oil or timber reserves, or they may lack direct market value but provide public ecosystem services that would be expensive or impossible to replace, such as carbon sequestration or pollination.<sup>112</sup> Contested commons elements may hold direct economic value to a private extractor and simultaneously hold diffuse noneconomic value to the public, through anthropocentric enjoyment, option values on wilderness, or bequest values to future generations.<sup>113</sup> Parts of the public may also value contested elements for ecocentric reasons independent of human needs.<sup>114</sup>

The pattern continues through the various vehicles of takingsification described in Part I, by which private rights carved out of the commons are effectively ossified, chilling resumed environmental protection or conversion back to the public. As noted, the threat of takings liability is the most

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<sup>111</sup> See *supra* Section I.B (defining deregulation for the purpose of this Article).

<sup>112</sup> See Salzman, *supra* note 5 (defining ecosystem services and suggesting their resistance to traditional economic valuation).

<sup>113</sup> See Ryan et al., *Environmental Rights for the 21st Century*, *supra* note 33, at 2545-46 ("Even the term 'ecosystem service' implies anthropocentrism, as people are the primary intended beneficiaries of the service.").

<sup>114</sup> See *id.* at 2548-55 (explaining ecocentrism, a philosophy that considers rights accorded to biotic beings as intrinsic and on par with rights accorded to humans).

powerful driver of this phenomenon, but the weighty threats of administrative law claims and adverse political consequences can also forestall efforts to resume conservation.

A colorful metaphor to convey the strategy is that the new private rights effectively “salt the land” against environmental regulation in the future. After sacking Carthage in the final Punic War in 146 B.C.E., the Romans are said to have salted the earth, so that nothing could grow upon the land and the barren city could not be rebuilt.<sup>115</sup> The two-step privatization strategy outlined here is less dramatic but strategically similar: (1) after weakening the legal protections that had preserved environmental values in public natural resource commons, (2) create private rights of extraction in the formerly protected commons that can impede the restoration of conservation measures with constitutional, administrative, or other legal or political barriers. After that, environmental measures may be derailed by objections that the moves will constitute a taking of private property. Moreover, the strategy works regardless of how its architects understand their own motivations, and whether or not it is deployed intentionally.

It is important to note that some natural resource commons are more vulnerable to takings claims than others. For example, mining interests receive robust protection under the Takings Clause,<sup>116</sup> leases to drill for oil and gas on public lands receive less as smaller property interests than fee simple,<sup>117</sup> and permits to fish in public waters have been interpreted as mere revocable licenses with no constitutional protection at all.<sup>118</sup> Some private

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<sup>115</sup> See R.T. Ridley, *To Be Taken with a Pinch of Salt: The Destruction of Carthage*, 81 CLASSICAL PHILOLOGY 140, 140 (1986) (“[T]his sowing of the ruins of Carthage with salt, apparently as a symbol of its total destruction and perhaps as a means of ensuring the soil’s infertility, is a tradition in Roman history well known to most students.”).

<sup>116</sup> See *infra* notes 220–223 and accompanying text (discussing the ease of acquiring mining patents and the strong protection accorded to those patents once acquired).

<sup>117</sup> While the Outer Continental Shelf Lands Act (OCSLA) entitles lessees “to explore, develop, and produce the oil and gas contained within the lease area,” 43 U.S.C. § 1337(b)(4) (1994) (as amended by Pub. L. No. 95-372, § 205, 92 Stat. 629, 644 (1978)), these rights and leases are qualified by numerous other requirements. See 43 U.S.C. § 1337(b) (requiring due diligence and plan approvals by the Interior Department and subjecting all leases to suspension and cancellation provisions). Even so, the Supreme Court in *Mobil Oil Exploration & Producing Southeast, Inc. v. United States* found a small but protectable private property interest in an offshore oil and gas lease, despite the numerous ways the lease could have been undone. 530 U.S. 604, 620–24 (2000). But see Robin Kundis Craig, *Mobil Oil Exploration, Environmental Protection, and Contract Repudiation: It’s Time to Recognize the Public Trust in the Outer Continental Shelf*, 30 ENV’T L. REP. 11104, 11121 (2000) (“The Supreme Court decided *Mobil Oil Exploration* on pure contract principles, giving improper weight to the environmental requirements of the OCSLA and ignoring the public trust acknowledged in the language of that Act.”).

<sup>118</sup> See, e.g., *Conti v. United States*, 291 F.3d 1334, 1342 (Fed. Cir. 2002) (holding that a fishing permit bestowed a revocable license, not a Fifth Amendment property right); *Am. Pelagic Fishing Co. v. United States*, 397 F.3d 1363, 1377 (Fed. Cir. 2004) (holding that the Takings Clause does not apply when fisheries regulations reduce the value of commercial fishing permits, vessels, or gear);



interests carved out of public commons are treated as forms of property (like water rights), others as contractual rights (like water supply contracts), and some as interests that bear resemblance to property but have been formally removed from Fifth Amendment protection (like fishing permits). Each of these forms of private interests comes with different degrees of endurance and protection.<sup>119</sup> However, the entrenchment strategy can be effective even for weak property interests, because even when takings liability is less formidable, the threat of administrative and political liability can be enough to deter renewed conservation.

Public commons subject to privatization also differ in other important ways, with some more vulnerable to conventional commons problems than others,<sup>120</sup> and important differences among the strategies of environmental deregulation deployed within them. Sometimes deregulation accelerates privatization by changing existing rules to facilitate private access (e.g., limiting the scope of Clean Water Act protections for wetlands),<sup>121</sup> sometimes it is accomplished by removing existing barriers to private access (e.g., opening the previously protected Arctic National Wildlife Refuge to drilling),<sup>122</sup> and other times privatization is accelerated simply by approving more permission for private access under existing regulations (e.g., vastly expanding public lands available for offshore oil and gas exploration under otherwise unchanged regulatory terms).<sup>123</sup> In each case, however, the end

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Eagle, *supra* note 94, at 644 (discussing *American Pelagic* and the difficulty of bringing regulated commons takings cases).

<sup>119</sup> There are also distinctions to be drawn between interests that start out as part of the public commons and can be entirely privatized and those that start out public but retain some public proprietary aspect even after the private interest is removed. In the first category, for example, mining claims can lead to the complete extinguishment of underlying public landownership, and owners permitted to permanently fill wetlands fully sever them from the connected public commons of navigable waterways. By contrast, water rights enable private removal of water from the public commons, but they remain limited by principles of correlative rights or beneficial use, extraction leases on public lands may remain subject to environmental protections for the underlying lands, and submerged lands impressed with public trust obligations remain subject to public constraints even when traversing private lands.

<sup>120</sup> The vulnerability to commons problems may be based on how easily exploited a commons is. For example, although they are both open-access ocean resources before regulation, offshore oil and gas reserves are simply harder to access than many fishing grounds. As a result, conventional commons overuse problems may be more easily managed in the oil and gas context (although many environmentalists would argue that the law governing seabed drilling fails to protect the public values that are effectively privatized when the atmospheric commons is used as a carbon sink for oil and gas resources there harvested).

<sup>121</sup> See *infra* notes 285–303 and accompanying text (discussing expanded Clean Water Act § 404 permits to fill wetlands).

<sup>122</sup> See *infra* notes 176–190 and accompanying text (discussing the opening of the Arctic National Wildlife Refuge (ANWR) to oil and gas drilling).

<sup>123</sup> See *infra* notes 140–147 and accompanying text (discussing dramatic expansion of offshore leasing opportunities).

result is the proliferation of new private interests that very often conflict with the environmental values associated with public natural resource commons in a more pristine state.

Of course, the government can theoretically purchase whatever impeding private rights are needed to right the balance between public and private interests, although the combined force of public fiscal scarcity and resistance to higher taxes is often enough to defuse reclamation by this route.<sup>124</sup> Still, it is critical to note that even if the shift from public to private could be unwound, in many cases, the impacted public environmental values cannot be reset. For example, if mining is allowed in a former national monument and then subsequently banned, then even if the mining activity stops, there is now a mine amid a former wilderness. If logging or drilling is allowed and roads are built to facilitate the extractive activity, then even if extraction is halted, the roads are left behind, fragmenting habitat and facilitating forest erosion that weakens healthy ecological function of the watershed. If overfishing is permitted, impacted species may not recover. This is why the paradox so often creates a one-way ratchet toward privatization.

It is also why, from the perspective of environmental deregulators, creating private extraction rights in public resource commons is such a winning strategy. Rather than just dismantling existing federal environmental protections, and perhaps even preempting responsive state or local regulations<sup>125</sup>, it is much more effective to buttress these efforts with new private rights in the opened public arena that could pose administrative, constitutional, or existential barriers to renewed restrictions in the future. If the goal is to promote extractive industry on protected public lands, one must first remove whatever regulations currently prevent that—but even more effective to then issue as many oil and gas leases on these newly opened public lands as possible. If the strategy is allowed to cycle, it will eventually extinguish not only the protectedness but also the publicness and the naturalness of these formerly protected public natural resource commons.<sup>126</sup>

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<sup>124</sup> After the Court in *Lucas* required the South Carolina Coastal Council to compensate a private plaintiff for prevailing on a takings claim against state environmental law, the state eventually sold the parcel to raise funds for the payout, rather than enforcing the underlying environmental law. See Vicki Been, *Lucas v. The Green Machine: Using the Takings Clause to Promote More Efficient Regulation?*, in *PROPERTY STORIES* 221, 238–39 (Gerald Korngold & Andrew P. Morriss eds., 2004) (describing the subsequent sale of the properties).

<sup>125</sup> See Ryan, *Problems of Preemption and Political Scale*, *supra* note 9, at 155 (discussing the use of ceiling preemption to prevent state and local regulation after federal deregulation).

<sup>126</sup> *Cf.* Keiter, *supra* note 7, at 1154 (discussing the privatization principle of creating vested property rights in public resources and the resulting competition between private and public interests). As Professor Keiter notes, this competition can be mediated in different ways—sometimes the private carveout becomes a constitutionally protected right (like mining claims and mineral leases), while other times the government extends a mere contractual entitlement or license defined by statute and regulation (such as timber sale contracts and grazing leases). *Id.* at 1157.

### A. Offshore Oil and Gas Leasing on Public Lands

The leasing of rights to extract oil and gas from public lands provides a compelling example of the deployment of private rights as a tool of anti-regulatory entrenchment.<sup>127</sup> The underlying public lands begin as quintessential public commons, from which private rights are incrementally withdrawn as business interests are granted leases to withdraw privately valuable resources from the public commons over a period of time.

The offshore leasing process is complicated and unfolds in many steps, such that the private leaseholder must secure additional permissions from both the federal Bureau of Ocean and Energy Management and relevant state agencies before actual drilling can begin on leased land.<sup>128</sup> Nevertheless, the lease is the necessary starting point for extraction, and it confers important legal entitlements. Leases include elements of both contract and property law, each of which derives constitutional protection.<sup>129</sup> Thanks to the Takings Clause, however, it is the property component that gives these leases their most powerful punch.<sup>130</sup> The threat of takings liability, administrative law hurdles, and political fallout for interference with private rights conferred in

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<sup>127</sup> Cf. Bruce R. Huber, *The Durability of Private Claims to Public Property*, 102 GEO. L.J. 991, 999 (2014) (discussing the increasing phenomenon of private claims to public property and urging policymakers to view these claims with historical perspective and appropriately tempered skepticism).

<sup>128</sup> After receiving the lease, the private party must still get approval from the Bureau of Ocean Energy Management (BOEM) and submit an Exploration Plan and a Development and Production Plan for approval by BOEM and the state. See 43 U.S.C. § 1351 (detailing BOEM's requirements for approving Development and Production Plans). The state's approval of exploration and development plans are also subject to a consistency determination under the Coastal Zone Management Act (CZMA). See 15 C.F.R. § 930.3 ("[T]he Director of the Office of Ocean and Coastal Resource Management (Director) shall review the performance of each State's implementation of the federal consistency requirement."). However, states almost always concur with BOEM's approvals. Since 1978, there have been only eighteen appeals of state objections, with the most recent being in 1999. Procedural Changes to the Coastal Zone Management Act Federal Consistency Process, 84 Fed. Reg. 8628, 8632 (Mar. 11, 2019) (codified at 15 C.F.R. pt. 930).

<sup>129</sup> Leasehold interests, including mineral leases, are considered a form of real property interest like any other, eligible for constitutional takings protection. Mark S. Barron, *Constitutional Protections for Mineral Interest Holders: Oil and Gas Regulation and the Takings Clause*, 61 ROCKY MTN. MIN. L. INST. 13-1, 13-14 (2015); see also *supra* note 128 and accompanying text (specifying that a leaseholder must obtain permissions from the Bureau of Ocean Energy Management before receiving the final right to drill). However, once a lease has been granted, the leaseholder's opportunity to seek permission to drill cannot be revoked by later administrations. See *infra* note 130 and accompanying text.

<sup>130</sup> See *Shedden v. Anadarko E. & P. Co.*, 136 A.3d 485, 493 (Pa. 2016) (holding that an oil and gas lease is considered a conveyance of a property interest); see also Mary Gilliam Zuchegno, *How New Rules Affect Existing Oil and Gas Leases*, COLO. LAW., Oct. 1990, 2073, 2075 (stating that the federal government's power to regulate oil and gas production operations is limited by the due process and takings clauses of the Fifth Amendment).

a lease can create formidable barriers to prevent the subsequent shift of commons interests from private hands back to the public.<sup>131</sup>

Efforts to encumber public lands with private property rights for oil and gas extraction between 2016 and 2020 reveal the disturbing possibilities of this trend.<sup>132</sup> Oil and gas leasing on public lands slowed during the second term of the Obama Administration, which issued a three-year moratorium on new leases on federal land to consider their effect on the climate.<sup>133</sup> In the waning days of his administration, President Obama went even further, permanently banning new offshore drilling along the Arctic and Atlantic Coasts.<sup>134</sup> This action took advantage of President Obama's authority under the Outer Continental Shelf Lands Act (OCSLA), which authorizes the president to withdraw unleased lands from further disposition for oil and gas development.<sup>135</sup> More recently, the Biden Administration used this power to freeze timber sales of old growth stands in the Tongass National Forest in Alaska.<sup>136</sup>

Such moves by the Obama and Biden administrations, discussed further below,<sup>137</sup> may be viewed as a flip-side attempt to entrench environmental *regulation* into the future, rather than *deregulation*. Nevertheless, the strategy is definitionally less effective, and therefore less worrying for public policy, because one can always begin drilling on formerly pristine lands, but one can

131 See Eric Biber & Jordan Diamond, *Keeping it All in the Ground?*, 63 ARIZ. L. REV. 279, 283 (2021) (analyzing the legal possibilities for terminating existing oil and gas leases by legislative or executive action, albeit with the possibility that compensation to leaseholders might be required).

132 See e.g., Darryl Fears, *Trump Administration Tears Down Regulations to Speed Drilling on Public Land*, WASH. POST (Feb. 1, 2018), <https://www.washingtonpost.com/news/energy-environment/wp/2018/02/01/trump-administration-tears-down-regulations-to-speed-drilling-on-public-land> [https://perma.cc/Q644-VZP3] (describing Trump-era federal policies aimed at bypassing environmental review to accelerate the sale of mineral rights to private investors).

133 See Erin Corbett, *Federal Judge Blocks Trump Administration from Drilling on Federal Land*, FORTUNE (Mar. 20, 2019), <http://fortune.com/2019/03/20/federal-judge-oil-drilling-federal-lands> [https://perma.cc/4S2Y-VYK2] (reporting that the Obama administration issued an oil and gas lease moratorium in response to a lawsuit by two advocacy groups).

134 See Darryl Fears & Juliet Eilperin, *President Obama Bans Oil Drilling in Large Areas of Atlantic and Arctic Oceans*, WASH. POST (Dec. 20, 2016), <https://www.washingtonpost.com/news/energy-environment/wp/2016/12/20/president-obama-expected-to-ban-oil-drilling-in-large-areas-of-atlantic-and-arctic-oceans> [https://perma.cc/KL3W-JDPQ] (“President Obama . . . [withdrew] hundreds of millions of acres of federally owned land in the Arctic and Atlantic Ocean from new offshore oil and gas drilling.”).

135 See Outer Continental Shelf Lands Act, 43 U.S.C. § 1341(a) (“The President of the United States may, from time to time, withdraw from disposition any of the unleased lands of the outer Continental Shelf.”).

136 Matthew Daly & Becky Bohrer, *US to End Large, Old-Growth Timber Sales in Alaska Forest*, ASSOCIATED PRESS (July 15, 2021), <https://apnews.com/article/lifestyle-travel-business-environment-and-nature-alaska-f535e8188eb598f6d6857c1173968483> [https://perma.cc/H5JK-ACFG].

137 For further discussion of this strategy and its unsettled treatment by the courts, see *infra* notes 161–172 and accompanying text.

never undo drilling that has already begun. Moreover, while OCSLA may allow the president to withdraw lands from leasing, the president is prevented from withdrawing lands *already* leased by the Department of the Interior.<sup>138</sup> This statutory limitation follows conventional property law norms associated with leaseholds, which prevent an owner from conveying rights for possession and use of leased property that have already been conveyed to the tenant under the lease agreement (at least for the duration of that lease).<sup>139</sup> At the same time, the statute demonstrates how oil and gas leases that extend past the tenure of the granting administration can effectively entrench deregulatory policies into the future, at least for the lands encumbered by those leases.

Oil and gas leasing picked up markedly under the Trump Administration, which moved swiftly to undo the Obama-era withdrawals and open as much land as possible to new leasing.<sup>140</sup> President Trump's effort to reverse President Obama's withdrawals by executive order met resistance in federal district court,<sup>141</sup> a ruling he appealed.<sup>142</sup> However, President Trump effectively leveraged his power to grant new leasing rights as a countervailing means of deregulation. Immediately after taking office, he moved aggressively to open as much public land to private leasing as he could, while simultaneously greasing the regulatory wheels to expedite approval.

In early 2017, President Trump issued an executive order requiring federal agencies to streamline environmental review of proposed extraction activities on public lands to facilitate approvals with maximum efficiency.<sup>143</sup> In March

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<sup>138</sup> Outer Continental Shelf Lands Act, 43 U.S.C. § 1341(a).

<sup>139</sup> See JOSEPH WILLIAM SINGER, PROPERTY 434-35 (3d ed. 2010) (describing the transfer of possessory rights in a conventional leasehold).

<sup>140</sup> See Eric Lipton & Hiroko Tabuchi, *Driven by Trump Policy Changes, Fracking Booms on Public Lands*, N.Y. TIMES (Oct. 27, 2018), <https://www.nytimes.com/2018/10/27/climate/trump-fracking-drilling-oil-gas.html> [<https://perma.cc/R485-MC5D>].

<sup>141</sup> See *League of Conservation Voters v. Trump*, 363 F. Supp. 3d 1013, 1024-25 (D. Alaska 2019) (holding that the President lacked authority under Section 12(a) of OCSLA to revoke President Obama's withdrawal of certain offshore lands from leasing, even though other presidents had made modifications to previous withdrawals under the statute).

<sup>142</sup> See Federal Appellant's Opening Brief, *League of Conservation Voters v. Trump*, No. 19-35460 (9th Cir. Nov. 7, 2019) (appealing the lower court's determination that President Trump lacked authority to revoke withdrawal of offshore lands from leasing). President Biden then issued an executive order to reinstate President Obama's withdrawals and undo President Trump's move to extinguish them, leading the court to ultimately dismiss the case as moot. *League of Conservation Voters v. Biden*, 843 F. App'x 937, 938 (D. Alaska Apr. 13, 2021).

<sup>143</sup> Darryl Fears, *Trump Tries to Pave the Way for Development by Accelerating Environmental Reviews*, WASH. POST (Jan. 24, 2017), [https://www.washingtonpost.com/news/energy-environment/wp/2017/01/24/trump-tries-to-pave-the-way-for-development-by-accelerating-environmental-reviews/?utm\\_term=.cd2bf994ccfa](https://www.washingtonpost.com/news/energy-environment/wp/2017/01/24/trump-tries-to-pave-the-way-for-development-by-accelerating-environmental-reviews/?utm_term=.cd2bf994ccfa) [<https://perma.cc/T8Q7-54U2>]; see also Bennett et al., *supra* note 9, at 151-52 (defending the new Trump administration policies for dismantling harmful administrative bureaucracy and highlighting the economic benefits of deregulation).

of 2018, a record-setting seventy-seven million acres of federal land near the Gulf of Mexico were offered for private oil and gas leasing,<sup>144</sup> dwarfing the twenty-six million that had been leased to developers in 2017.<sup>145</sup> The scale of leasing options alone belies the breadth of President Trump's ambition. Whereas the Obama Administration had limited planned leasing to small offshore areas in the Central Gulf of Mexico and mid-Atlantic program areas, where drilling made the most economic sense,<sup>146</sup> the Trump Administration opened virtually every single offshore area in the United States to leasing.<sup>147</sup>

The 2018 sale was the largest offer in U.S. history, but strikingly, it generated only a tenth of the revenue produced by a much smaller Gulf region sale in 2013—for the marked reason that only one percent of the 2018 offer drew actual bids.<sup>148</sup> In fact, the number of oil and gas-producing leased acres on federal land has remained remarkably constant in the last decade, hovering around twelve million, notwithstanding the remarkable shifts in political landscape over that time.<sup>149</sup>

The lethargic response to the 2018 sale indicates both the lack of interest in the offered lands and the availability of better priced opportunities

<sup>144</sup> Press Release, John Filostrate, U.S. Dep't of the Interior, Secretary Zinke Announces Largest Oil & Gas Lease Sale in U.S. History (Sept. 29, 2021), <https://www.doi.gov/pressreleases/secretary-zinke-announces-largest-oil-gas-lease-sale-us-history> [<https://perma.cc/N6LW-V7TQ>].

<sup>145</sup> Mark K. DeSantis, *Oil and Gas Companies Gain by Stockpiling America's Federal Land*, CTR. FOR AM. PROGRESS (Aug. 29, 2018, 12:01 AM), <https://www.americanprogress.org/issues/green/reports/2018/08/29/455226/oil-gas-companies-gain-stockpiling-americas-federal-land> [<https://perma.cc/7HKM-ZAD9>].

<sup>146</sup> See BUREAU OF OCEAN & ENERGY MGMT., 2017-2022 OUTER CONTINENTAL SHELF OIL AND GAS LEASING DRAFT PROPOSED PROGRAM, at S-5 (Jan. 2015), <https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Leasing/Five-Year-Program/2017-2022/2017-2022-DPP.pdf> [<https://perma.cc/T5SL-NQAU>] (highlighting program areas open for leasing under the Obama Administration, which were limited to the entire coastal areas of Louisiana and Texas and more remote coastal areas off the coasts of Virginia, North Carolina, and South Carolina).

<sup>147</sup> CONG. RSCH. SERV., R44692, FIVE-YEAR OFFSHORE OIL AND GAS LEASING PROGRAM FOR 2019-2024: STATUS AND ISSUES IN BRIEF, at 6, <https://fas.org/sgp/crs/misc/R44692.pdf> [<https://perma.cc/ZU7L-ZKRD>] (Aug. 10, 2022) (highlighting program areas open for leasing under the Trump Administration as the entire U.S. coast, except for the Florida Gulf Coast, which is listed as open though under a Congressional moratorium through 2022).

<sup>148</sup> Richard Valdmanis, *Drillers Give Tepid Response to Record U.S. Offshore Lease Sale*, REUTERS (Mar. 21, 2018, 7:07 AM), <https://www.reuters.com/article/us-usa-drilling-gulfmexico/drillers-give-tepid-response-to-record-u-s-offshore-lease-sale-idUSKBN1GX18D> [<https://perma.cc/Q2EJ-BCWC>].

<sup>149</sup> See *Oil and Gas Statistics*, U.S. DEP'T OF INTERIOR, BUREAU OF LAND MGMT., <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics> [<https://perma.cc/BRU4-ZRVY>] (click "Documents (.zip)" under Fiscal Year 2021 Statistics, then open "Table 6") (presenting the total number of acres in each state covered by producing leases on federal land).

abroad<sup>150</sup>—but either way, it exposes a hard truth about the Trump Administration’s underlying policy. The largest sale of oil and gas leases on public land in American history was not a response to the demands of a well-functioning competitive market or solid economic policy. Deregulation proponents justify the move by highlighting compliance cost savings through administrative streamlining,<sup>151</sup> but from the standpoint of conventional supply and demand, the policy is hard to defend. As a matter of policy *entrenchment*, however, the move makes perfect sense. It appears to have been designed primarily to burden as many acres of public lands with private leases as possible, and in the shortest period of time. The leases that result may or may not produce economic value, but strategically, they are valuable in and of themselves—as a means of entrenching the rollback of public lands conservation.

On January 27, 2021, President Biden temporarily froze new oil and gas leases on public lands and in offshore waters, pending a review of the program in light of the administration’s differing environmental and climate priorities.<sup>152</sup> However, as discussed further in Section II.B, in reference to lease sales in the Arctic National Wildlife Refuge, such an administrative “pause” does not necessarily impact existing leases.<sup>153</sup> Moreover, private rights in those sale areas are now accruing once again, after Congress officially reinstated the Trump Administration lease sales that the Biden

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<sup>150</sup> *Id.*

<sup>151</sup> Bennett et al., *supra* note 9, at 151–52. For example, critics of Clean Power Plan requirements state that the forced closure of coal plants would result in \$220–\$292 billion in compliance costs for the energy sector. *Id.* at 162.

<sup>152</sup> Tackling the Climate Crisis at Home & Abroad, Exec. Order No. 14,008, 86 Fed. Reg. 7619, 7624–25 (Jan. 27, 2021). The leases referenced in this sale were a part of “Lease Sale 257.” *See* 86 Fed. Reg. 54728 (Oct. 4, 2021) (announcing “Lease Sale 257”); *see also* 86 Fed. Reg. 57689 (Oct. 18, 2021) (announcing “restricted joint bidders” for Outer Continental Shelf oil and gas lease sales).

<sup>153</sup> *See infra* Section II.B. When President Biden’s moratorium was temporarily blocked by a federal judge in Louisiana, the administration proceeded with Lease Sale 257. *See Louisiana v. Biden*, 543 F. Supp. 3d 388, 419 (W.D. La. 2021). Eventually, the sale was fully reinstated in 2022. *See infra* notes 154–155 and accompanying text.

Administration had paused<sup>154</sup> and also required the Interior Department to reopen additional lease sales off Alaska and the Gulf of Mexico.<sup>155</sup>

From the deregulatory perspective, then, the policy is an all-around win. These leases do not just yield a potential extractive victory for industry in the present—they can also complicate efforts to dial back extraction efforts in the future, because they may now secure a thicker layer of legal protection (at least during the period of the lease, and possibly beyond, if the government's decision not to renew a lease is challenged by the leaseholder).<sup>156</sup> Moreover, these leases may frustrate subsequent regulatory efforts even if they are not producing any minerals in the political moment. As noted, OCSLA authorizes the president to withdraw public lands from development, but exempts lands that have already been leased—presumably even if leaseholders fail to secure the needed state and federal permissions to actually begin drilling.<sup>157</sup> Leases can thus act as a placeholder to entrench deregulation against later conservation efforts, even if they are just a means of running down the clock for a more favorable regulatory environment at a later time.

Finally, even if there are good arguments that leaseholders' claims in a takings lawsuit should fail,<sup>158</sup> the mere threat of litigation can be a chilling factor for policymakers, especially for potential regulatory actions taken at more local levels of government.<sup>159</sup> The Supreme Court has already ruled

<sup>154</sup> In January 2022, Lease Sale 257 was vacated after a federal court found that the required environmental review failed to adequately consider all greenhouse gas emissions related to the offshore oil and gas lease sale. See *Friends of the Earth v. Haaland*, 583 F. Supp. 3d 113, 144-47 (D.D.C. 2022), *appeal filed*, No. 22-5037 (D.C. Cir. Feb. 11, 2022). However, it was later reinstated by the Inflation Reduction Act of 2022, H.R. 5376, 117th Cong. § 50251, 136 Stat. 1818 (2022), which offered eighty million acres in the Gulf of Mexico to 307 high bidders for a total of 1.7 million acres leased—the largest lease sale in U.S. history. See Starr Spencer, *BOEM Reinstates US Gulf of Mexico Lease Sale 257 According to Recent Agreement*, S&P GLOB. (Sept. 14, 2022), <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/091422-boem-reinstates-us-gulf-of-mexico-lease-sale-257-according-to-recent-agreement> [<https://perma.cc/E4ZX-UCAN>].

<sup>155</sup> See 82 Fed. Reg. 6643, 6643-44 (Jan. 19, 2017); see also BUREAU OF OCEAN ENERGY MGMT., 2023–2028 NATIONAL OCS OIL AND GAS LEASING PROPOSED PROGRAM 5 (2022), [https://www.boem.gov/sites/default/files/documents/oil-gas-energy/national-program/2023-2028\\_Proposed%20Program\\_July2022.pdf](https://www.boem.gov/sites/default/files/documents/oil-gas-energy/national-program/2023-2028_Proposed%20Program_July2022.pdf) [<https://perma.cc/SYA2-BUX7>] (presenting the BOEM's potential lease sale schedule for Alaska and the Gulf of Mexico).

<sup>156</sup> The primary term for oil and gas leases on federal lands is ten years, and they can be extended for as long as oil and gas are being produced in paying quantities. ADAM VANN, CONG. RSCH. SERV., R40806, ENERGY PROJECTS ON FEDERAL LANDS: LEASING AND AUTHORIZATION 7-8 (Feb. 1, 2012), <https://fas.org/sgp/crs/misc/R40806.pdf> [<https://perma.cc/W4NS-L98G>].

<sup>157</sup> See *supra* notes 128–135 and accompanying text (discussing the mechanics of Section 12(a) of OCSLA).

<sup>158</sup> See generally Huber, *supra* note 127.

<sup>159</sup> See *Sweepi, LP v. Mora Cnty.*, 81 F. Supp.3d 1075, 1149-53 (D. N.M. 2015) (discussing the takings claim against Mora County, NM after it banned fossil fuel production); Jacobs, *supra* note 107, at 1539-54 (discussing takings claims against local governments).



against the government in such a case, awarding \$156 million to private companies when the government repudiated its promise to allow the companies to explore drilling opportunities off the coast of North Carolina.<sup>160</sup>

The offshore drilling example demonstrates why we should carefully scrutinize efforts to create new private property rights in public natural resource commons. After identifying those rights that are legitimate, public advocates should oppose those designed primarily to lock out present or future protections of public environmental rights in natural resource commons. At the same time, we might consider opportunities to protect these public rights in natural resource commons through related but countervailing means—by protecting present decisions to honor public rights against private encroachment into the future.

Even the disputed Section 12(a) of the Outer Continental Shelf Lands Act provides a potential model for this strategy. For example, in holding that President Trump could not reverse President Obama's withdrawals of public marine land from oil and gas leasing, District Court Judge Sharon Gleason of the District of Alaska concluded that Section 12(a) enables the president to privilege public environmental rights in the resource commons against erosion by private extractive rights granted by future administrations.<sup>161</sup> Quoting from President Eisenhower's OCSLA withdrawal of marine territory off the Florida coast to form the Key Largo Coral Reef Preserve in 1960,<sup>162</sup> Judge Gleason affirmed the president's authority to prevent private development of offshore public lands in order to "preserve[] the scenic and scientific values of this area unimpaired for the benefit of future generations."<sup>163</sup>

Judge Gleason acknowledged that this interpretation enables earlier presidents to bind the discretion of later presidents,<sup>164</sup> subject only to later

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<sup>160</sup> See *Mobil Oil Exploration & Producing Se., Inc. v. United States*, 530 U.S. 604, 624 (2000). The Court in *Mobil Oil* held that the government had to pay private companies \$156 million for repudiating a promise to explore offshore areas. The companies paid \$156 million to gain a promise that, if government regulations permitted, they could explore offshore North Carolina. The Court used a complex contract analysis to determine the government repudiated the promise when it denied the companies from certain permission-seeking opportunities. *Id.* at 620-21.

<sup>161</sup> *League of Conservation Voters v. Trump*, 363 F. Supp. 3d 1013, 1024-25 (D. Alaska 2019).

<sup>162</sup> See Press Release, James C. Hagerty, U.S. Fish & Wildlife Serv., Press Release and Presidential Proclamation: Establishing the Key Largo Coral Reef Preserve, Department of the Interior (Dec. 9, 1960), <https://www.fws.gov/sites/default/files/documents/historic-news-releases/1960/19601209.PDF> [<https://perma.cc/77E4-UQTM>] (referencing the president's authority under Section 12(a) of OCSLA to set these offshore lands aside from future disposition).

<sup>163</sup> *League of Conservation Voters*, 363 F. Supp. 3d at 1029.

<sup>164</sup> She continues, writing

But as the Attorney General opinions reveal, Congress has previously authorized the President to tie future Presidents' hands. As one of the Attorney General opinions cited by Plaintiffs states, "My predecessors have held that if public lands are reserved

congressional revision,<sup>165</sup> but so do other natural resource statutes that enable the president to permanently withdraw public land and marine areas from future extractive use, including those governing the establishment of national parks,<sup>166</sup> national monuments,<sup>167</sup> wilderness areas,<sup>168</sup> national wildlife refuges,<sup>169</sup> and wild and scenic rivers.<sup>170</sup> The Trump Administration immediately appealed her decision, pointing to other instances in which presidents have modified earlier withdrawals under the statute,<sup>171</sup> but after President Biden reinstated President Obama's withdrawals, the case was eventually dismissed by the Ninth Circuit for mootness<sup>172</sup>—another example of the inter-administrative, pendulum-like instability in this area of law.

Dismissal on grounds of mootness leaves the actual legal issue unsettled, however, so Judge Gleason's holding may or may not be the last word. If her conclusions of law are not overturned, they represent an interesting example of how laws may be crafted to provide a purposeful, counterbalancing remedy to the concern raised in this article: statutory devices, short of declaring a full national park or its equivalent, designed to protect public environmental rights in unharvested resource commons from later dissolution into private hands for extractive use. In other words, in the case of offshore oil drilling, once public lands are privately leased under OCSLA, the statute clearly holds future presidents to honor those leases, protecting those private rights against assertions of wider public interests regardless of changes in overall natural resource policy. Judge Gleason's interpretation of OCSLA confers the counterbalancing privilege on presidents to preserve the public rights in offshore resource commons against future erosion by private claims. Under her interpretation, a president may not undo leases that previous presidents have made, but they can prevent future presidents from granting leases on open land by creating an irreversible decision to withdraw it.

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by the President for a particular purpose under express authority of an act of Congress, the President is thereafter without authority to abolish such reservation."

*Id.* (citation omitted).

<sup>165</sup> *Id.* ("Congress could readily reverse such an action by either revoking the withdrawal itself or amending Section 12(a) to expressly provide that a future President could also revoke a prior presidential withdrawal." (citation omitted)).

<sup>166</sup> National Park Service Organic Act, 54 U.S.C. §§ 100101, 100301–02.

<sup>167</sup> Antiquities Act of 1906, 54 U.S.C. § 320301.

<sup>168</sup> Wilderness Act, 16 U.S.C. §§ 1131–32.

<sup>169</sup> National Wildlife Refuge System Administration Act, 16 U.S.C. § 668dd.

<sup>170</sup> Wild and Scenic Rivers Act, 16 U.S.C. § 1271.

<sup>171</sup> Reply Brief of Federal Appellants at 34–35, *League of Conservation Voters v. Trump*, No. 19–35460 (9th Cir. Mar. 26, 2020).

<sup>172</sup> *League of Conservation Voters v. Biden*, 843 F. App'x 937, 938–39 (9th Cir. 2021).

B. *Private Leasing in the Arctic National Wildlife Refuge*

Legislative developments in the waning days of the Trump Administration establish that the use of private leasing to entrench deregulatory policy objectives is not limited to the executive branch. Carving private interests out of the public commons can also be accomplished through legislation that opens previously protected lands for private leasing—as demonstrated by dramatic legislative changes to federal management plans for the Arctic National Wildlife Refuge (ANWR or Refuge).

Comprised of twenty million acres of northeast Alaskan wilderness, ANWR is recognized as the only remaining unit of the U.S. conservation system that “protects, in an undisturbed condition, a complete spectrum of the Arctic ecosystems in North America.”<sup>173</sup> The area is home to 135 species of migratory birds and is designated as a critical habitat for polar bears, which are federally listed under the Endangered Species Act as a threatened species.<sup>174</sup> The Refuge may also have significant oil and gas potential, though drilling has long been prohibited. The U.S. Geological Survey estimates that the ANWR’s coastal plain alone may produce between 4.3 and 11.8 billion barrels of oil on federal lands.<sup>175</sup>

As part of the budget reconciliation process associated with the 2017 Tax Cuts and Jobs Act, Congress rolled back longstanding prohibitions on oil and gas exploration at the Refuge.<sup>176</sup> The Act directed the Secretary of the Interior to establish an oil and gas leasing program for ANWR’s coastal plain.<sup>177</sup> Section 20001(c)(1) also requires that the federal government conduct at least two area-wide leasing sales of at least 400,000 acres, one of which is required to take place within four years of the law’s enactment.<sup>178</sup> Although authorized by Congress, these sales would be conducted by the overseeing executive agency within the Department of Interior, the Bureau of Land Management (BLM).

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<sup>173</sup> LAURA B. COMAY, MICHAEL RATNER & R. ELIOT CRAFTON, CONG. RSCH. SERV., RL33872, ARCTIC NATIONAL WILDLIFE REFUGE (ANWR): AN OVERVIEW 18 (2018).

<sup>174</sup> *Id.* at 18, 20.

<sup>175</sup> *Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, Including Economic Analysis*, U.S. GEOLOGICAL SURVEY (Nov. 29, 2016, 5:52 PM), <https://pubs.usgs.gov/fs/fs-0028-01/fs-0028-01.htm> [<https://perma.cc/47AP-MFP3>].

<sup>176</sup> Pub. L. No. 115-97, 131 Stat. 2054, 2236 (2017).

<sup>177</sup> Press Release, U.S. Dep’t of Interior, Secretary Bernhardt Signs Decision to Implement the Coastal Plain Oil and Gas Leasing Program in Alaska (Aug. 17, 2020), <https://www.doi.gov/pressreleases/secretary-bernhardt-signs-decision-implement-coastal-plain-oil-and-gas-leasing-program> [<https://perma.cc/2L3G-ZY59>].

<sup>178</sup> *Id.*

On August 17, 2020, the BLM finalized plans to open the Refuge's coastal plain to oil and gas exploration.<sup>179</sup> Opponents argued that oil and gas exploration is irreconcilable with the purposes for which the Refuge was originally established.<sup>180</sup> Tribal and environmental organizations challenged the leasing program on a number of grounds, alleging that the action itself is arbitrary and capricious, the Final Environmental Impact Statement (EIS) was insufficient under the National Environmental Policy Act, and that the biological opinion issued by the Fish and Wildlife Service does not comply with its legal obligations under the Endangered Species Act.<sup>181</sup> On the last day before the scheduled sale date, and just two weeks before the Trump Administration would vacate the White House, a federal district court denied the plaintiffs' motion for a preliminary injunction and allowed the lease sales to proceed.<sup>182</sup>

Shortly thereafter, on January 6, 2021, the BLM conducted the long anticipated lease sale.<sup>183</sup> Despite the political fanfare accompanying the sale, only half of the available tracts received bids.<sup>184</sup> The vast majority of leases were taken by the Alaska Industrial Development and Export Authority, Alaska's state-owned economic development agency.<sup>185</sup> In all, the BLM received only thirteen bids totaling \$14,412,458.<sup>186</sup> No major oil companies participated in the lease sale,<sup>187</sup> likely signifying distrust in the political stability of the proposal. Indeed, the ANWR sale mirrored the Trump Administration's monumental sale of coastal offshore drilling rights in 2018, in both the fiscally disappointing results and the likely rationale behind it.<sup>188</sup>

179 BUREAU OF LAND MGMT., COASTAL PLAIN OIL AND GAS LEASING PROGRAM RECORD OF DECISION 1-2, (2020).

180 See Complaint for Declaratory and Injunctive Relief at 2-3, Nat'l Audubon Soc'y v. Bernhardt, 3:20-cv-00206-TMB (D. Alaska Aug. 24, 2020) (arguing that the BLM's plans are irreconcilable with the agency's obligations).

181 *Id.* at 2, 21; see also Order Denying Motion for Preliminary Injunction at 3 n.5, Nat'l Audubon Soc'y v. Bernhardt, 3:20-cv-00205-SLG (D. Alaska Jan. 15, 2021).

182 Order Denying Motion for Preliminary Injunction at 3, Nat'l Audubon Soc'y v. Bernhardt, No. 3:20-cv-00205-SLG (D. Alaska Jan. 15, 2021).

183 *Trump Administration Conducts First ANRW Coastal Plain Oil and Gas Lease Sale*, BUREAU OF LAND MGMT. (Jan. 6, 2021), <https://www.blm.gov/press-release/trump-administration-conducts-first-anwr-coastal-plain-oil-and-gas-lease-sale> [<https://perma.cc/9VFR-FK5V>].

184 Surya Milner, *Oil Lease Sale for Alaska's Arctic National Wildlife Refuge Draws Few Bidders*, HIGH COUNTRY NEWS (Jan. 15, 2021), <https://www.hcn.org/articles/north-oil-in-an-underwhelming-lease-sale-major-oil-companies-steered-clear-of-alaskas-arctic-national-wildlife-refuge> [<https://perma.cc/QUF5-4HCS>].

185 *Id.*

186 Tegan Hanlon & Nathaniel Herz, *Arctic Refuge Lease Sale Goes Bust, as Major Oil Companies Skip Out*, ALASKA PUB. MEDIA (Jan. 6, 2021), <https://www.alaskapublic.org/2021/01/06/long-awaited-arctic-refuge-oil-lease-sale-attracts-little-interest> [<https://perma.cc/QUF5-4HCS>].

187 *Id.*

188 See *supra* notes 146-150 and accompanying text (analyzing Trump's 2018 sale of offshore drilling rights).

The day before President Biden took office, the BLM officially issued leases on nine tracts in the Refuge,<sup>189</sup> seven to the Alaska development agency and the remaining two to small drilling companies, Knik Arm Services and Regenerate Alaska.<sup>190</sup>

The lack of interest among conventional corporate bidders led many observers to declare the ANWR lease sale a bust.<sup>191</sup> The sale produced far less in proceeds for the public fisc than originally expected, and at least half of all available lands remain unclaimed.<sup>192</sup> Those lands that were leased were mostly claimed by the state of Alaska, acting as a holding company to preserve the possibility of private leasing arrangements in the future, given the striking lack of private interest at present.<sup>193</sup> The lackluster industry response may betray the unsuitability of the resource for commercial development, corporate discomfort with the legal and political controversy surrounding ANWR leasing, or strategic avoidance of foreseeable administrative policy reversals under the coming Biden Administration.<sup>194</sup>

Nevertheless, to see the sales as a bust is to miss the importance of the privatization strategy itself. From the perspective of deregulation, the sale represents a success. Even though the majority of leases were granted to a public body, these leases still convey private rights of extraction, and Alaska took them in a proprietary capacity, with the ability and presumed intention

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<sup>189</sup> BUREAU OF LAND MGMT., 2021 COASTAL PLAIN LEASE REPORT (Jan. 2021), [https://www.blm.gov/sites/blm.gov/files/docs/2021-01/AK\\_CoastalPlain\\_OilandGas\\_LeaseReport\\_January%202021\\_508.pdf](https://www.blm.gov/sites/blm.gov/files/docs/2021-01/AK_CoastalPlain_OilandGas_LeaseReport_January%202021_508.pdf) [<https://perma.cc/64P9-DVYU>].

<sup>190</sup> *Id.*; Press Release, Bureau of Land Mgmt., Leases Issued for ANWR Coastal Plain Oil & Gas Program (Jan. 19, 2021), <https://www.blm.gov/press-release/leases-issued-anwr-coastal-plain-oil-gas-program> [<https://perma.cc/HCH5-6K6Y>]. The very next day, President Biden signed an executive order pausing ANWR oil and gas leasing on grounds that the previous administrative process was legally flawed. Exec. Order No. 13,990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021); *see also infra* note 198–200 and accompanying text (discussing the Biden Administration's decision to pause such oil and gas leasing and the subsequent Department of the Interior investigation into such processes).

<sup>191</sup> Hanlon & Herz, *supra* note 186 (“It was, in the oil industry terms, a dry hole. A bust.”).

<sup>192</sup> *Id.*

<sup>193</sup> *See* Tegan Hanlon, *Alaska's State Development Corporation Weighs Bidding in ANWR Lease Sale*, ALASKA PUB. MEDIA (Dec. 24, 2020), <https://www.alaskapublic.org/2020/12/24/alaskas-state-development-corporation-can-now-spend-up-to-20m-on-anwr-lease-sale> [<https://perma.cc/S2BL-Q5DZ>] (describing the Alaska Industrial Development and Export Authority's bidding approval process); Resolution of the Alaska Industrial Development and Export Authority, AIDEA Resolution No. G620-31, (2020).

<sup>194</sup> *See, e.g.,* Lananh Nguyen, *Bank of America Says It Won't Finance Oil and Gas Exploration in the Arctic*, BLOOMBERG NEWS (Nov. 30, 2020, 4:38 PM), <https://www.bloomberg.com/news/articles/2020-11-30/bofa-says-it-won-t-finance-oil-and-gas-exploration-in-the-arctic> [<https://perma.cc/NS38-U8Z4>] (noting public pressure and organized campaigns opposing financing for oil and gas exploration in the ANWR).

of transferring them to private industry in the future.<sup>195</sup> By acquiring these leases, Alaska has effectively privatized the commons—transforming public rights in federal natural resources into private rights of extraction for eventual conversion into fully private property. Unless the leases are judicially overturned for underlying legal defects, the state now holds designated rights for future lease activity, no matter what policy changes the Biden Administration subsequently implements. These rights will be carved out of later changes, because the extraction entitlements have already been withdrawn from the public commons subject to future policymaking. The preserved option to convert commons resources into private hands, together with constitutional protections for those options, makes these lease sales as powerful a carving tool as the offshore oil and gas leases discussed in Section II.A.

Therefore, even if the lease sale itself was not economically valuable, from a deregulatory perspective, the policy was a parting triumph by the Trump Administration. The resulting leases are not just a victory for the oil and gas industry in the present; they will complicate efforts to dial back extraction efforts in the future, because they may now enjoy that secondary layer of constitutional protection that private property rights enjoy under U.S. law.

Political struggles over the best use of resources at the ANWR continue. On his first day in office in January of 2021, President Biden placed a temporary moratorium on all federal oil and gas leasing activities in the ANWR, citing the “alleged legal deficiencies underlying the program, including the inadequacy of the environmental review . . . .”<sup>196</sup> In June, 2021, the Department of Interior halted implementation of Trump’s Coastal Plain Oil and Gas Leasing Program in the Refuge to conduct comprehensive review under the National Environmental Policy Act (NEPA).<sup>197</sup> The Department notified lessees that oil and gas leases in the Refuge would be suspended pending analysis to determine whether they should be “reaffirmed, voided, or subject to additional mitigation measures.”<sup>198</sup> In August 2021, however, following robust legal resistance from the American Petroleum Institute and

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<sup>195</sup> See Chen, *supra* note 47, at 96 (discussing the optimal balance between private and public interests when states grant certain private rights but retain title to the underlying land).

<sup>196</sup> Exec. Order No. 13,990, 86 Fed. Reg. 7037, 7039 (Jan. 20, 2021).

<sup>197</sup> SEC’Y OF THE INTERIOR, COMPREHENSIVE ANALYSIS AND TEMPORARY HALT ON ALL ACTIVITIES IN THE ARCTIC NATIONAL WILDLIFE REFUGE RELATING TO THE COASTAL PLAIN OIL AND GAS LEASING PROGRAM (2021).

<sup>198</sup> Tegan Hanlon, *Biden Administration Puts Arctic Leases On Ice As It Asks for New Environmental Reviews*, ALASKA PUB. MEDIA (Jun. 1, 2021), <https://www.alaskapublic.org/2021/06/01/biden-administration-puts-arctic-refuge-leases-on-ice-as-it-asks-for-new-environmental-reviews> [<https://perma.cc/66EM-9QDT>]. See generally George Cameron Coggins & Jane Elizabeth Van Dyke, *NEPA and Private Rights in Public Mineral Resources: The Fee Complex Relative*, 20 ENV’T L. 649 (1990) (discussing NEPA’s effect on the acquisition of private property rights in public mineral resources).

other industry groups, the Biden Administration backed away from this “pause,” enabling some leasing sales to resume even as litigation over the matter plays out in court.<sup>199</sup> The analysis to determine the validity of leases has now begun, and the Department is conducting a supplementary EIS.<sup>200</sup>

The battle over environmental policy thus continues for yet another iteration, but the entrenchment analysis stands. If those leasing rights really were created through a legally flawed process, then environmental advocates may succeed in this instance, because the property rights alleged may never have been actually created. But if property rights were secured through legitimate regulatory processes, then they will be protected with the full force of the Constitution, entrenched beyond the reach of a subsequent administration with contrary policy preferences. After all, the conservationists’ claims are mostly based on flaws in administrative process that justify regulatory reconsideration, while the extractors may be able to claim property rights that will become baked-in limitations on future regulatory choices. For that reason, property rights are generally more powerful than administrative process.

### C. National Monuments and Hard Rock Mining.

The privatization of public commons has not been limited to oil and gas leasing; other extraction industries have also benefited from related legislative strategies, such as the hard-rock mining industry’s use of public lands.

Private rights to valuable hard rock minerals have long been carved out of public commons through statutes as old as the General Mining Law of 1872,<sup>201</sup>

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<sup>199</sup> See Kevin Dobbs, *Biden Administration Begrudgingly Agrees to Resume Oil, Natural Gas Lease Sales on Federal Property*, NAT. GAS INTEL. (Aug. 17, 2021), <https://www.naturalgasintel.com/biden-administration-begrudgingly-agrees-to-resume-oil-natural-gas-lease-sales-on-federal-property> [<https://perma.cc/XRF8-YQ9K>].

<sup>200</sup> Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, 86 Fed. Reg. 41989, 41989 (Aug. 4, 2021).

In late 2021, the Interior Department released a report reviewing on and offshore oil and gas programs that commented on the substantial number of unused permits and the danger of unnecessary leasing in the midst of a climate crisis. The review found that

As of September 30, 2021, the oil and gas industry holds more than 9,600 approved permits that are available to drill. In fiscal year (FY) 2021, BLM approved more than 5,000 drilling permits, and more than 4,400 are still being processed. Industry suggests that the significant surplus of leases and permits is necessary for a successful business model, but this speculative approach contributes to unbalanced land management.

U.S. DEP’T OF THE INTERIOR, REPORT ON THE FEDERAL OIL AND GAS LEASING PROGRAM 5 (Nov. 2021), <https://www.doi.gov/sites/doi.gov/files/report-on-the-federal-oil-and-gas-leasing-program-doi-eo-14008.pdf> [<https://perma.cc/VYQ2-T484>] (citation omitted).

<sup>201</sup> See generally 30 U.S.C. §§ 22–54 (codifying the current formulation of the General Mining Law of 1872).

enabling the transfer of previously public resources to private property rights holders.<sup>202</sup> A patent program requiring formal process for these transfers was suspended in 1994, when Congress imposed a moratorium on spending appropriated funds to process mineral patent applications,<sup>203</sup> but strikingly, *unpatented* mining claims retain much of the force of property under existing law.<sup>204</sup> As a result, whatever its original objective may have been, the moratorium has only further facilitated the transfer of public mining interests into private hands, which now requires even less formal process.<sup>205</sup> Even so, certain lands have long been exempted from the scope of those available for public extraction, such as national parks and monuments. To avoid those constraints, the Trump Administration legally redefined the boundaries of certain national monuments, specifically to open these previously protected lands to private speculation.

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<sup>202</sup> See 30 U.S.C. § 22 (opening “all valuable mineral deposits in lands belonging to the United States” to purchase by citizens); 30 U.S.C. § 29 (setting forth legal terms and procurement procedures for these patents).

<sup>203</sup> Department of the Interior and Related Agencies Appropriations Act of 1995, Pub. L. No. 103-332, §§ 112–113, 108 Stat. 2499, 2519 (1994) (stating that funds made available pursuant to this law shall not be spent on the processing, acceptance or issuance of mining patent applications).

<sup>204</sup> See BUREAU OF LAND MGMT., U.S. DEP’T OF THE INTERIOR, MINING CLAIM PACKET 9 (July 30, 2014), [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd539233.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd539233.pdf) [<https://perma.cc/QGB6-SXA5>] (“The owner of an unpatented claim is entitled to mine, remove and sell all valuable mineral deposits within his claim boundaries provided he follows the regulations for Surface Management under 43 [C.F.R. §] 3809, and is entitled to such surface rights necessary for mining operations.”).

<sup>205</sup> However, the owner of an unpatented mining claim does not retain all of the rights associated with fee simple ownership, such as the right to exclude. According to the Bureau of Land Management,

Owning a federal unpatented mining claim is not like owning private property. As an owner of an active Federal unpatented mining claim, you have exclusive rights to explore and extract the minerals within its boundary from the date you located the mining claim as long as the claim remains active. The government can examine your claim at any time to determine if you have valid existing rights. If you have these rights, the government must recognize these rights and allow you to continue mining or purchase these rights . . . .

The public has the conditional right to cross mining claims or sites for recreational and other purposes and to access federal lands beyond the claim boundaries. The public may not interfere with exploration or mining activities. Activities that require fencing or the exclusion of the public for legitimate safety reasons may be approved by agencies like the BLM, the Forest Service, the Mine Safety and Health Administration or state mine safety agencies.

U.S. DEP’T OF THE INTERIOR, BUREAU OF LAND MGMT., BUYING A MINING CLAIM: IMPORTANT INFORMATION YOU SHOULD KNOW 2 (2017), [https://www.blm.gov/sites/default/files/documents/files/2017\\_Buying%20Mining%20Claim.pdf](https://www.blm.gov/sites/default/files/documents/files/2017_Buying%20Mining%20Claim.pdf) [<https://perma.cc/4KJ4-B53Z>].



In April of 2017, President Trump issued a controversial executive order mandating Review of Designations Under the Antiquities Act,<sup>206</sup> a statute that empowers the President to declare national monuments to protect objects of historic, cultural, and scientific interest.<sup>207</sup> The order required the Secretary of the Interior to conduct a review of all national monuments exceeding 100,000 acres that were created or expanded since 1996, or under circumstances determined by the Secretary to have lacked “adequate public outreach and coordination . . . .”<sup>208</sup> The Antiquities Act that empowers presidential declaration of national monuments lacks any requirement for public outreach or coordination,<sup>209</sup> but commercial interests in some western states have objected to monument designations that have conflicted with economic activity.<sup>210</sup>

Under that order and a partner executive order, Secretary of the Interior, Ryan Zinke, selected twenty-seven monuments for review, including twenty-two terrestrial monuments and four marine monuments.<sup>211</sup> Secretary Zinke released a two-page summary of the subsequent public comment period and noted that comments were “overwhelmingly in favor of maintaining existing monuments[,]” although he also attributed that to a “well-orchestrated national campaign organized by multiple organizations.”<sup>212</sup> Ultimately, he recommended modifications to ten of the monuments under review, over a third of the total, including the Bears Ears National Monument, established

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206 Exec. Order No. 13,792, 82 Fed. Reg. 20429, 20429 (Apr. 26, 2017).

207 Antiquities Act, 54 U.S.C. § 320301(a) (“The President may, in the President’s discretion, declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on the land owned or controlled by the Federal Government to be national monuments.”).

208 Exec. Order No. 13,792, 82 Fed. Reg. at 20429.

209 CAROL HARDY VINCENT & LAURA A. HANSON, CONG. RSCH. SERV., R44988, EXECUTIVE ORDER FOR REVIEW OF NATIONAL MONUMENTS: BACKGROUND AND DATA 2 (2017) (“The [Antiquities Act] does not specifically require public outreach and coordination in monument designations.”).

210 See Mark Squillance, *The Looming Battle over the Antiquities Act*, HARVARD L. REV. BLOG (Jan. 6, 2018), <https://blog.harvardlawreview.org/the-looming-battle-over-the-antiquities-act> [<https://perma.cc/F5DP-XJKD>] (noting the contentious nature of designations and the economic considerations of certain designations).

211 Exec. Order No. 13,795, 82 Fed. Reg. 20815 (Apr. 27, 2017) (“Implementing an America-First Offshore Energy Strategy”); Press Release, Dep’t of the Interior, Interior Department Releases List of Monuments Under Review, Announces First-Ever Formal Public Comment Period for Antiquities Act Monuments (May 5, 2017), <https://www.doi.gov/pressreleases/interior-department-releases-list-monuments-under-review-announces-first-ever-formal> [<https://perma.cc/R7VN-4FUT>] (listing the monuments under review and announcing the commencement of the public comment period).

212 U.S. DEP’T OF THE INTERIOR, REPORT SUMMARY BY U.S. SECRETARY OF THE INTERIOR RYAN ZINKE 2 (Aug. 24, 2017), <https://www.doi.gov/sites/doi.gov/files/uploads/monument-report-summary.pdf> [<https://perma.cc/4G63-AYRD>].

by President Obama in 2016, and the Grand Staircase Escalante National Monument, established by President Clinton in 1996.<sup>213</sup>

President Trump enacted these recommendations by formally changing the boundaries of Bears Ears and Grand Staircase to what the Secretary determined was the “smallest area compatible with proper care and management of the objects[,]” as required under the Antiquities Act.<sup>214</sup> Through this process, Bears Ears was dramatically reduced by about eighty-five percent, and Grand Staircase was reduced by approximately fifty percent.<sup>215</sup> The decisions provoked considerable political controversy about which objects had been intended for preservation,<sup>216</sup> which persisted into the Biden Administration, as conservationists passionately lobbied the new President to return the monuments to their former boundaries.<sup>217</sup> Indeed, on his first day in office, President Biden issued an executive order reviewing monument boundaries for both Bears Ears and Grand Staircase.<sup>218</sup>

However, the downsizing of these national monuments intersects with the privatization strategy because of what it enabled to happen next. National monuments are ordinarily withdrawn from availability for private mineral extraction claims.<sup>219</sup> However, once the downsizing of Bears Ears and Grand Staircase took effect, these lands became eligible for private hard rock mining patents under the General Mining Law of 1872.<sup>220</sup> As initially conceived in 1872, this statute—the oldest natural resource statute in the United States

<sup>213</sup> See Memorandum from Ryan K. Zinke, U.S. Sec’y of the Interior, to President Trump, Final Report Summarizing Findings of the Review of Designations Under the Antiquities Act 10-18 (2017), [https://www.doi.gov/sites/doi.gov/files/uploads/revised\\_final\\_report.pdf](https://www.doi.gov/sites/doi.gov/files/uploads/revised_final_report.pdf) [<https://perma.cc/44H3-PAEG>] (listing the monuments and their recommended modifications).

<sup>214</sup> See Proclamation No. 9681, 82 Fed. Reg. 58081, 58085 (Dec. 4, 2017) (modifying and reducing the boundaries of Bears Ears); Proclamation No. 9682, 82 Fed. Reg. 58089, 58089-90, 58093 (Dec. 4, 2017) (modifying and reducing the boundaries of Grand Staircase).

<sup>215</sup> Julie Turkewitz, *Trump Slashes Size of Bears Ears and Grand Staircase Monuments*, N.Y. TIMES (Dec. 4, 2017), <https://www.nytimes.com/2017/12/04/us/trump-bears-ears.html> [<https://perma.cc/Q88Q-UN8L>] (describing the magnitude of reductions to Bears Ears National Monument and the Grand Staircase-Escalante National Monument).

<sup>216</sup> *Id.* (discussing the backlash from President Trump’s decision).

<sup>217</sup> Stephanie Ebbs & Sarah Kolinovsky, *Biden Signs Orders Restoring Boundaries of Bears Ears, Other Monuments Shrunk by Trump*, ABC NEWS (Oct. 8, 2021, 3:21 PM), <https://abcnews.go.com/Politics/biden-restore-boundaries-bears-ears-monuments-shrunk-trump/story?id=80475522> [<https://perma.cc/2L98-S89X>] (describing the efforts of conservationists to pressure President Biden into restoring the boundaries of Bears Ears).

<sup>218</sup> Exec. Order No. 13,990, 86 Fed. Reg. 7037, 7039 (Jan. 20, 2021) (ordering the Secretary of the Interior to review the changed boundaries to Bears Ears and Grand Staircase).

<sup>219</sup> See Proclamation No. 9558, 82 Fed. Reg. 1139, 1143 (Dec. 28, 2016) (noting that Bears Ears’ designation as a national monument renders it ineligible for private use); see also BUREAU OF LAND MGMT., MINING CLAIMS AND SITES ON FEDERAL LANDS 12 (2011), <https://www.blm.gov/sites/blm.gov/files/MiningClaims.pdf> [<https://perma.cc/M79G-CAD6>] (noting the types of public lands where mineral entry is prohibited).

<sup>220</sup> See generally 30 U.S.C. §§ 22-54.

Code—enables private parties to stake a protectable claim for hard rock mining in most public lands, virtually for free.<sup>221</sup> For an initial fee of \$60 and an annual maintenance fee of \$165, a prospector is able to mine the lands for uranium, gold, silver, copper, and other precious metals.<sup>222</sup> After perfecting the claim, the prospector holds “the exclusive right of possession and enjoyment of all the surface included within the lines of their locations, and of all veins . . . throughout their entire depth.”<sup>223</sup>

This means that even though the Biden Administration ultimately acted on conservationists’ hopes in reclaiming the relinquished portions of Bears Ears<sup>224</sup> and Grand Staircase,<sup>225</sup> it lacks the authority to undo the private hard rock mining authorizations that have already encumbered these former public commons with private rights of extraction.

Indeed, the Washington Post reported that, as of February 2020, the BLM had already received fifteen mining claims on lands removed from Bears Ears and Grand Staircase.<sup>226</sup> Perhaps adding insult to injury, many of these claims on U.S. public lands are now held by foreign entities. For example, a Canadian mining firm, Glacier Lake Resources, Inc., acquired 200 acres of land excised from Grand Staircase.<sup>227</sup> The company had originally planned to mine copper and cobalt, though it has been reported that the project has since been abandoned due to internal financial issues.<sup>228</sup>

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<sup>221</sup> See 30 U.S.C. §§ 28(f), 29 (outlining the fees per claim or site and patent process); see also *supra* notes 203–204 and accompanying text (discussing the moratorium on mining patents, but the continued availability of mining claims under these older mining laws).

<sup>222</sup> *Mining Claim Fees*, U.S. DEPT OF THE INTERIOR, BUREAU OF LAND MGMT., <https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals/locatable-minerals/mining-claims/fees> [<https://perma.cc/7DXS-WVQW>] (listing the mining fee rates).

<sup>223</sup> 30 U.S.C. § 26.

<sup>224</sup> Proclamation No. 10,285, 86 Fed. Reg. 57321, 57331 (Oct. 8, 2021) (reclaiming the full Bears Ears National Monument).

<sup>225</sup> Proclamation No. 10,286, 86 Fed. Reg. 57335, 57344–45 (Oct. 8, 2021) (reclaiming the full Grand Staircase-Escalante National Monument).

<sup>226</sup> Sarah Kaplan & Juliet Eilperin, *These Southern Utah Sites Were Once Off-Limits to Development. Now, Trump Will Auction the Right to Drill and Graze There*, WASH. POST (Feb. 6, 2020, 12:01 PM), <https://www.washingtonpost.com/climate-environment/2020/02/06/trump-administration-will-allow-drilling-logging-sensitive-federal-lands-utah> [<https://perma.cc/5228-6ZPA>] (describing mining claims on Utah lands excised from Bears Ears and the Grand Staircase-Escalante National Monument).

<sup>227</sup> Shannon Van Sant, *Firm Prepares To Mine Land Previously Protected As A National Monument*, NAT’L PUB. RADIO (June 21, 2018, 6:31 AM), <https://www.npr.org/2018/06/21/622128554/firm-prepares-to-mine-land-previously-protected-as-a-national-monument> [<https://perma.cc/R6HA-7DBN>] (describing plans to mine the Colt Mesa deposit, formerly part of Grand Staircase).

<sup>228</sup> Chris D’Angelo, *Canadian Firm Scraps Plan to Mine Land That Trump Stripped from Utah Monument*, HUFFINGTON POST (Feb. 1, 2019, 12:50 PM), [https://www.huffpost.com/entry/grand-staircase-copper-mine-cancelled-trump-monument\\_n\\_5c54744ce4b00187b550761f](https://www.huffpost.com/entry/grand-staircase-copper-mine-cancelled-trump-monument_n_5c54744ce4b00187b550761f) [<https://perma.cc/4W2H-PLDS>] (describing the mining company’s financial issues and detailing their abandonment of the Colt Mesa deposit).

Despite pending legal challenges in federal court,<sup>229</sup> the BLM proceeded with new management plans for the reduced monuments and formally excised lands that had once been part of Grand Staircase. In February 2020, the BLM approved plans for what remained of the former Bears Ears National Monument (identified as the Indian Creek and Shash Jaa Units),<sup>230</sup> Grand Staircase, and the land excised from Staircase, now designated as the Kanab-Escalante Planning Area.<sup>231</sup> According to these plans, the agency sought to open the former monument land in the Kanab-Escalante Planning Area to oil, gas, and coal extraction.<sup>232</sup>

Moreover, in October 2020, the state of Utah leased thirty-three units of land that overlapped with the original boundaries of Bears Ears to oil and gas companies.<sup>233</sup> As these sales were being conducted, then-presidential

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<sup>229</sup> See, e.g., Max Greenberg, *5 Disastrous Consequences of Trump Admin's Final Bears Ears and Grand Staircase Plans*, WILDERNESS SOC'Y (Feb. 6, 2020), <https://www.wilderness.org/articles/blog/5-disastrous-consequences-trump-admins-final-bears-ears-and-grand-staircase-plans> [https://perma.cc/4W2H-PLDS] ("Though legal challenges to President Trump's unlawful attacks on Bears Ears and Grand Staircase-Escalante continue to advance in court, the [BLM] and Forest Service have now released their final plans for how to manage the . . . hugely diminished versions of Bears Ears and Grand Staircase-Escalante National Monuments."); Memorandum in Support of TWS Plaintiffs' Motion for Partial Summary Judgment at 45, *Wilderness Soc'y v. Trump*, No. 1:17-cv-02587 (D.D.C. Jan. 9, 2020), 2020 WL 131551, at \*27 ("In passing the Antiquities Act, Congress authorized the President to create national monuments, not to dismantle them. The President's proclamation subverts the Act's text and intrudes on Congress's sole authority by eliminating monument protections from nearly half of Grand Staircase . . .").

<sup>230</sup> See Proclamation No. 9681, 82 Fed. Reg. 58081, 58085 (Dec. 4, 2017).

<sup>231</sup> Notice of Availability of the Records of Decision and Approved Monument Management Plans for the Bears Ears National Monument Indian Creek and Shash Jaa Units, Utah, 85 Fed. Reg. 9800, 9800 (Feb. 20, 2020) (announcing availability of the Records of Decisions for the Approved Monument Management Plans for the Indian Creek and Shash Jaa units of the Bears Ears National Monument); Notice of Availability of the Records of Decision and Approved Resource Management Plans for the Grand Staircase-Escalante National Monument and Kanab-Escalante Planning Area, 85 Fed. Reg. 9802, 9802 (Feb. 20, 2020) (announcing availability of the Records of Decisions for the approved resource management plans for units within Grand Staircase-Escalante, as well as the Kanab-Escalante Planning Area which is a portion of land "excluded from [Grand Staircase-Escalante] by Proclamation 9682").

<sup>232</sup> Coral Davenport, *Trump Opens National Monument Land to Energy Exploration*, N.Y. TIMES (Feb. 6, 2020), <https://www.nytimes.com/2020/02/06/climate/trump-grand-staircase-monument.html> [https://perma.cc/JVN8-DTH5] (detailing the new management plan for land excised from the Grand Staircase-Escalante National Monument that permits fossil fuel companies to satisfy legal requirements to drill and extract on land that was once part of the Grand Staircase-Escalante National Monument in Utah).

<sup>233</sup> Zak Podmore, *Utah Criticized for Selling Oil and Gas Leases in the Original Bears Ears Monument*, SALT LAKE TRIB. (Dec. 26, 2020, 8:00 AM), <https://www.sltrib.com/news/2020/12/26/utah-criticized-selling> [https://perma.cc/8G43-ZZU4] ("Weeks before the November election, a Utah agency leased 33 units of land to mineral and hydrocarbon companies . . . . But environmentalists criticized the October sale's inclusion of four oil-gas leases in San Juan County that overlap with the [former] boundaries of Bears Ears National Monument . . .").

candidate Biden was campaigning to restore Bears Ears' former boundaries.<sup>234</sup> Although his Administration later acted to restore them to their original sizes, any private rights that were legally granted during the previous administration's term will already be protectable under the Takings Clause. As Stephen Bloch of the Southern Utah Wilderness Alliance described it, these lease sales acted as "a deliberate act to salt the ground" before a potential land exchange.<sup>235</sup> They cemented the deregulatory agenda of the previous administration beyond its temporal jurisdictional lease.

#### D. Commercial Fishing and Aquaculture

The same strategy of stealth privatization can also be applied to other extractable resource commons, for example, by opening up roadless forest areas to logging,<sup>236</sup> or facilitating the extraction of fish from protected marine sanctuaries, or other aquatic commons where fish species and habitat conditions are already under pressure. These private carveouts, usually in the form of licenses for extraction or the alteration of submerged public lands to facilitate extraction, can indelibly alter the public environmental values at stake in the protected aquatic commons. Once the forest is logged, it can never be roadless again. Once an ocean habitat is altered by industry-level fishing, it could take longer for the ecosystem to recover than some species will have to adapt.

Pursuing the same privatization strategy in the ocean context, the Trump Administration moved late in its term to expand both commercial fishing and aquaculture in federal waters by executive order.<sup>237</sup> Importantly, most permits for fishing and aquaculture in public waters do not create private rights as

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<sup>234</sup> *Id.*

<sup>235</sup> *Id.*

<sup>236</sup> See e.g., Juliet Eilperin, *Trump to Strip Protections from Tongass National Forest, One of the Biggest Intact Temperate Rainforests*, WASH. POST (Oct 28, 2020, 11:50 AM), <https://www.washingtonpost.com/climate-environment/2020/10/28/trump-tongass-national-forest-alaska> [<https://perma.cc/WHT8-BWV8>] (describing administrative action within the Trump Administration that allowed for logging and other extractive development in more than half of Alaska's Tongass National Forest); Special Areas; Roadless Area Conservation; National Forest System Lands in Alaska, 85 Fed. Reg. 68688, 68688 (Oct 29, 2020) (to be codified at 36 C.F.R. pt. 294) (granting Alaska an exemption for the Tongass National Forest from the 2001 Roadless Rule, which prohibits timber harvest and road construction/reconstruction with limited exceptions within designated inventoried roadless areas).

<sup>237</sup> Exec. Order No. 13,921, 85 Fed. Reg. 28471, 28472-74 (May 7, 2020) (directing the Secretary of Commerce to, among other things, push to remove barriers to American fishing by presenting a prioritized list of recommendations to ease burdens for the domestic fishing industry, grow the catch in domestic fishing, and identify at least two geographic areas that are high potential candidates for commercial aquaculture).

durable as hard rock mining rights.<sup>238</sup> With few potential exceptions,<sup>239</sup> courts have concluded that fishing permits do not create property interests protected by the Takings Clause, and they are therefore more easily amenable to later regulatory changes that could reinstitute environmental protections.<sup>240</sup>

Even so, the acceleration of fishing permits—private carveouts from the patent public commons of navigable waters and open oceans—still warrants consideration as a lesser example of the greater privatization trend. While policy shifts impacting fishing permits may not lead to successful takings litigation, the private interests created in these licenses still create policy inertia through the related entrenchment mechanisms of the privatization paradox, including political and administrative law liability. Moreover, while the permit for access itself may be revoked without creating takings liability, the extractable assets in the operation, such as the farmed fish or kelp, could potentially be considered property subject to takings protection.<sup>241</sup> And some types of fishing permits, such as the market-based Individual Transferable Quota systems that create tradable rights to fish, come closer to creating more conventional forms of property that might one day receive more focused constitutional protection than traditional fishing permits.<sup>242</sup>

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<sup>238</sup> See *supra* note 118 and accompanying text (discussing the differences between limited private interests in fishing and more protected private property rights other natural resource commons).

<sup>239</sup> See *infra* note 242 and accompanying text (discussing potentially more durable private rights protections in Individual Transferable Quota and Individual Fishing Quota fishing permit systems).

<sup>240</sup> See Eagle, *supra* note 94, at 627-46 (discussing historical regulation of fisheries and providing background on the *American Pelagic Fishing Co. v. United States*, in which the Federal Circuit upheld a statute that revoked a fishing permit on the grounds that the federal government owns and controls the fisheries in the Exclusive Economic Zone (EEZ) and therefore, fisherman are barred from using the Fifth Amendment to protect investments in vessels and equipment); see also Michael Pappas, *Disclaiming Property*, 42 HARV. ENV'T L. REV. 391, 393-95 (2018) (discussing instances in which policymakers have disclaimed constitutional property protections—such as protections under the Takings and Due Process clauses—for interests that could otherwise be regarded as property, including fishing and grazing permits). According to Professor Pappas, this has resulted in billions in “disclaimed property,” from natural resources to intellectual property, which may be bartered through sale or lease but can still be revoked without sufficient due process or compensation. *Id.*

<sup>241</sup> A successful claim in this context would depend on whether the government requires waiver of those interests in the event the permit is legally withdrawn. Offshore oil and gas drilling permits presumably require fixed gear to remain after drilling ceases, to prevent leaks from fouling of ocean waters. Mariculture permits might require that nonextractable gear remain in place, but the same would not likely hold for the extractable assets produced by the permit—the target species of farmed fish or kelp. Aggrieved holders of such property might bring a physical takings claim to defend it, analogizing it to raisin growers’ successful suit when forced to give up raisins under a state agricultural regulatory program to stabilize supply. *Horne v. Dep’t of Agric.*, 576 U.S. 351, 361 (2015) (holding that an administrative reserve requirement compelling raisin growers to physically set aside a percentage of their crop for the government constituted a physical taking).

<sup>242</sup> Some newer types of fishing permits, such as the Individual Fishing Quota (IFQ) and Individual Transferable Quota (ITQ) strategies deployed in stressed fisheries, come closer to creating traditional property rights that could receive more focused constitutional protection. In

### 1. Commercial Fishing in Protected Marine Sanctuaries

In the waning days of his term in office, President Trump issued an ambitious executive order, *Promoting American Seafood Competitiveness and Economic Growth*, to boost commercial seafood production by expanding private access to the domestic fishery commons.<sup>243</sup> The order dramatically expanded commercial fishing, aquaculture, and mariculture opportunities in domestic waters, including the opening of formerly protected marine sanctuaries, where private extraction was formerly prohibited, to commercial fishing operations.<sup>244</sup>

In May of 2020, as the next presidential election was heating up, fishing industry advocates in Hawaii asked President Trump to lift fishing restrictions in the Papahānaumokuākea underwater monument, arguing that restrictions in the marine national monuments were unnecessarily impeding America's three main Pacific tuna fisheries.<sup>245</sup> In the end, President Trump did not open Papahānaumokuākea, which had initially been designated by President George W. Bush and subsequently expanded by President Obama. However, within the month, and contemporaneously with a host of other regulatory rollbacks to facilitate commercial fishing operations, President Trump opened to commercial extraction the only national marine monument in the Atlantic Ocean, the Northeast Canyons and Seamounts Marine National Monument.<sup>246</sup>

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particular, the market-based IFQ systems aim to reduce pressure on fisheries by creating property-based incentives for fishers to preserve the sustainability of the resource by creating a competitive market for the trading of fishing rights. *See* 16 U.S.C. § 1802(23) ("The term 'individual fishing quota' means a [f]ederal permit under a limited access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person."). ITQ systems create transferable permissions for individuals to either take a designated amount of fish from the commons or sell the right to do so to someone else. *See, e.g.*, 50 C.F.R. § 648.74 (allowing ITQ permit holders to transfer "part or all of a quota share percentage").

<sup>243</sup> Exec. Order No. 13,921, 85 Fed. Reg. 28471, 28474 (May 12, 2020) ("[D]evelop and propose for public comment[] . . . [a] nationwide permit authorizing finfish aquaculture activities in marine and coastal waters out to the limit of the territorial sea and in ocean waters beyond the territorial sea within the exclusive economic zone of the United States . . .").

<sup>244</sup> *Id.*; *see also* Darryl Fears & Juliet Eilperin, *Trump Lifts Limits on Commercial Fishing at Ocean Sanctuary off New England*, WASH. POST (June 5, 2020, 6:15 PM), <https://www.washingtonpost.com/climate-environment/2020/06/05/trump-fishing-seamounts-marine-national-monument/> [<https://perma.cc/LM8G-WHXF>].

<sup>245</sup> Letter from Western Pacific Fishery Management Council to President Donald Trump (May 8, 2020), [http://www.wpcouncil.org/wp-content/uploads/2020/08/2020.05.08-WPRFMC-to-Trump\\_barriers-to-US-fisheries-3.pdf](http://www.wpcouncil.org/wp-content/uploads/2020/08/2020.05.08-WPRFMC-to-Trump_barriers-to-US-fisheries-3.pdf) [<https://perma.cc/HGQ9-QUC3>].

<sup>246</sup> Proclamation No. 10,049, 85 Fed. Reg. 35795, 35794-95 (June 5, 2020); *see also* *Northeast Canyons and Seamounts Marine National Monument*, NOAA FISHERIES (Nov. 8, 2022), <https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/northeast-canyons-and-seamounts-marine-national> [<https://perma.cc/U94V-DCJQ>] ("On September 15[, 2016],

Once described as the “Yellowstone of the North Atlantic,”<sup>247</sup> the Northeast Canyons and Seamounts Marine National Monument encompasses nearly 5,000 square miles of protected waters off the coast of Massachusetts and is home to deep marine ecosystems and rich biodiversity, including multiple species of whales, sea turtles, and other endangered species.<sup>248</sup> President Obama had designated the monument in 2016 specifically to protect the unique and unspoiled marine habitat from harm by private extraction,<sup>249</sup> disallowing oil and gas exploration, seabed mining, and commercial fishing.<sup>250</sup> President Trump’s executive order did not modify the monument’s boundaries, but opening Northeast Canyons and Seamounts to commercial fishing had the same effect as opening the Bears Ears and Grand Staircase to mining. Environmentalists protested that allowing commercial fishing there would gut the protections the monument designation was intended to provide—rendering it a “monument in name only.”<sup>251</sup>

Opening these protected marine areas to commercial fishing exemplifies the privatization paradox—carving private rights out of a public commons where extraction had previously been impossible. The other regulatory rollbacks in the same executive order accelerated opportunities for private carveouts in an environment where fishing had been previously permitted, but at a lower level of intensity. In both cases, the one-way ratchet loomed, because it is easier to lift regulations that limit private extraction than it is to

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President Obama designated the first marine national monument in the Atlantic Ocean, the Northeast Canyons and Seamounts Marine National Monument . . . . This is the first and only national marine monument in the Atlantic Ocean.”).

<sup>247</sup> See Josh Hrala, *‘Underwater Yellowstone’ Was Just Named a National Marine Monument in The US*, SCI. ALERT (Sept. 16, 2016), <https://www.sciencealert.com/underwater-yellowstone-named-a-national-marine-monument-in-us> [<https://perma.cc/3CH5-LGXV>].

<sup>248</sup> See *id.*; *Northeast Canyons and Seamounts Marine Natl. Monument*, U.S. FISH & WILDLIFE SERV., <https://www.fws.gov/national-monument/northeast-canyons-and-seamounts-marine> [<https://perma.cc/BH34-THGP>] (listing the species protected in the national monument); see also Press Release, U.S. Dep’t of the Interior, Secretaries Pritzker, Jewell Applaud President’s Designation of Northeast Canyons and Seamounts Marine National Monument (Sept. 15, 2016), <https://www.doi.gov/pressreleases/secretaries-pritzker-jewell-applaud-presidents-designation-northeast-canyons-and> [<https://perma.cc/CFB6-3LTF>] (describing the ecosystems and species found in the Northeast Canyons and Seamounts marine national monument, as well as its location and breadth of coverage).

<sup>249</sup> Proclamation No. 9496, *Northeast Canyons and Seamounts Marine National Monument*, 81 Fed. Reg. 65161, 65161 (Sept. 15, 2016) (acknowledging the Northeast Canyons and Seamounts Marine National Monument’s abundance, diversity, and unique ecological resources, and recognizing that “[t]hese habitats are extremely sensitive to disturbance from extractive activities”).

<sup>250</sup> *Id.* at 65164 (“The Secretaries shall prohibit . . . [e]xploring for, developing, or producing oil and gas or minerals, or undertaking any other energy exploration or development activities within the monument.”). The Proclamation made accommodations for existing red crab and American lobster permits to be phased out over a period of seven years.

<sup>251</sup> Complaint for Injunctive & Declaratory Relief at ¶ 125, *Conservation L. Found. v. Trump*, 1:20-cv-01589 (D.D.C. June 17, 2020).



shift back toward conservation policies later, given the legal and political drag exerted by the new private investment in extraction and the reasonable expectations it creates (even without the threat of actual takings litigation).

Even so, when President Biden took office in 2021, he directed reconsideration of the monument management policies altered by the 2020 executive order,<sup>252</sup> and later that year, despite extensive industry lobbying,<sup>253</sup> he reversed the Trump Administration order.<sup>254</sup> In this case, the privatization paradox was overcome—but several factors probably contributed. First, as noted, President Biden did not have to contend here with the full force of the takingsification phenomenon, as the threat of takings litigation was absent. Moreover, the policy was reversed quickly, before private actors could invest much in reliance on the old policy—and (though at risk of oversimplifying complex fishing regulations) those disappointed by the change remained free to shift operations elsewhere. However, President Trump's executive order also vastly expanded opportunities for aquaculture and mariculture in U.S. waters, creating private interests that lack purchase in takings litigation but could still create considerable friction for policy changes based on comparably more focused private investment in a specific permitted location.

## 2. Aquaculture and Mariculture

Aquaculture is the commercial farming of concentrated populations of aquatic organisms in a controlled environment, including fish, plants, algae, or other aquatic organisms. Aquaculture, and its saltwater subset, mariculture, stand in contrast with traditional fishing, in which individual vessels hunt

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<sup>252</sup> See Exec. Order No. 13,990, 86 Fed. Reg. 7037, 7039 (Jan. 20, 2021) (“The Secretary of the Interior, . . . shall, in consultation with [other officials], conduct a review of the monument boundaries and conditions that were established by [President Trump's proclamations affecting the Bears Ears National Monument, the Grand Staircase-Escalante National Monument, and the Northeast Canyons and Seamounts marine National Monument] to determine whether restoration of the monument boundaries and conditions that existed as of January 20, 2017, would be appropriate.”).

<sup>253</sup> David Abel, *President Biden's Flurry of Actions to Protect the Environment Reignites a Controversy About the Atlantic's Only Marine Monument*, BOS. GLOBE, (Jan. 21, 2021, 7:48 PM), <https://www.bostonglobe.com/2021/01/22/metro/bidens-flurry-actions-protect-environment-reignites-controversy-about-atlantics-only-marine-monument> [https://perma.cc/5N32-K6GR] (discussing extensive lobbying efforts by industry, as well as environmentalists, to influence President Biden's reconsideration of President Trump's executive order).

<sup>254</sup> See Proclamation No. 10,287, 86 Fed. Reg. 57349, 57352 (Oct. 8, 2021) (reinstating the Obama Administration's order declaring the Northeast Canyons area as a national monument); see also Kirk Moore, *Biden Restores Northeast Canyons Marine Monument*, NAT'L FISHERMAN (Oct. 8, 2021), <https://www.nationalfisherman.com/northeast/biden-restores-northeast-canyons-marine-monument> [https://perma.cc/XN6S-L4CN] (“In another reversal of Trump administration moves, President Biden on Friday reinstated all restrictions to the Northeast Canyons and Seamounts Marine National Monument, including plans to phase out commercial fishing for red crab and lobster by Sept. 15, 2023.”).

individual wild fish. Unlike the other extractive activities addressed in this Part, aquaculture extracts fish that have been introduced and bred within a public commons, rather than simply intercepted in the wild. However, like commercial fishing, aquaculture relies on the underlying ocean or aquatic public commons resources to feed, grow, and harvest commercially valuable individuals for extraction. Like commercial mining operations, aquaculture practitioners invest in expensive gear and center their operation in a specific location, affixing infrastructure to the publicly-owned submerged lands underlying the waterway. Like the collateral environmental impacts of forestry operations, such as roads and resulting soil erosion and watershed siltation, the practice of aquaculture changes the aquatic landscape both physically and biologically, leaving the scars of extraction behind.

Whether aquaculture and mariculture are environmentally preferable to commercial fishing is hotly debated,<sup>255</sup> and the answer almost certainly varies between species.<sup>256</sup> Cultivating large populations of farmed fish could protect overfished wild species of commercially valuable fish from collapse.<sup>257</sup> However, farmed fish are generally fed wild fish, which are extracted from the surrounding ocean commons by traditional means of commercial fishing, and a substantial harvest of wild fish must be extracted to feed every pound of farmed fish brought to market.<sup>258</sup> Aquaculture also introduces problems of disease, pollution, and invasive species that can severely harm the

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<sup>255</sup> Cf. Marcel Martinez-Porchas & Luis R. Martinez-Cordova, *World Aquaculture: Environmental Impacts and Troubleshooting Alternatives*, SCI. WORLD J., 2012, at 1, 1 (discussing both the benefits of the food access provided by aquaculture and the harms done to the environment through the activity).

<sup>256</sup> See Bridget Ferriss, Karl Veggerby, Molly Bogeberg, Letitia Conway-Cranos, Laura Hoberecht, Peter Kiffney, Kate Little, Jodie Toft & Beth Sanderson, *Characterizing the Habitat Function of Bivalve Aquaculture Using Underwater Video*, 13 AQUACULTURE ENV'T INTERACTIONS 439, 439-40 (arguing that the effectiveness of aquaculture depends on a variety of factors including species type); cf. Carlos Brais Carballeira Braña, Kristine Cerbule, Paula Senff & Insa Kristina Stolz, *Towards Environmental Sustainability in Marine Finfish Aquaculture*, FRONTIERS MARINE SCI., Apr. 21, 2021, at 1, 7 (detailing how the ratio of cultured to wild individuals in a species' population may impact the effects of aquaculture practices).

<sup>257</sup> Christian W. J. Bogmans & Daan van Soest, *Can Global Aquaculture Growth Help to Conserve Wild Fish Stocks? Theory and Empirical Analysis*, NAT. RES. MODELING, May 4, 2021, at 1, 7-8 (arguing that "local aquaculture growth incentivizes fishermen to leave fisheries and become fish farmers instead," increasing wild fish stocks).

<sup>258</sup> The exact "fish in: fish out" (FIFO) ratio is dependent on the type of fish, the nature of the fishing operation, the location, and operative regulatory constraints, but FIFO ratios are steadily improving, at least according to industry sources. For the conversion of wild feed fish to farmed salmon, the FIFO ratio first dipped below 1:1 in 2015, when it was measured at 1:1.22, indicating that farmed salmon now produce globally more consumable protein than is used in feed. See *Fish In: Fish Out Record for Salmon Farming*, FISH FARMING EXPERT (Feb. 24, 2018), <https://www.fishfarmingexpert.com/article/fish-in-fish-out-record-for-salmon-farming> [<https://perma.cc/5J64-ZRCF>] (noting that in 2015, salmon farming produced more fish protein than it used based on FIFO ratio).

surrounding ocean ecosystem.<sup>259</sup> Sometimes comparable to the confined animal feeding operations (CAFOs) of land-based factory farms, aquaculture operations rely on ocean currents to clear away concentrated waste that can poison surrounding habitat.<sup>260</sup>

For all these reasons, both environmentalists and commercial fishers have opposed expanding aquaculture and mariculture operations.<sup>261</sup> In 2019, as plans for President Trump's 2020 executive order were evolving, one hundred commercial fishers wrote an open letter to Congress urging the federal government not to undermine the delicate ocean commons ecosystem on which their own industry relies by facilitating maricultural activities likely to harm it.<sup>262</sup> Comparing marine finfish aquaculture to factory farming, they warned that "[a]s commercial fishermen, our livelihoods depend on good stewardship and science-based marine conservation to preserve sustainable fisheries for generations to come," but that mariculture "pollutes the natural ecosystem, degrades and threatens wild fish stocks, and challenges the economic viability of commercial fishing."<sup>263</sup> They concluded that "American commercial fishing and marine finfish aquaculture cannot coexist."<sup>264</sup>

Notwithstanding this opposition, in the 2020 order, "Promoting American Seafood Competitiveness and Economic Growth," President Trump directed the Army Corps of Engineers to develop nationwide permitting programs for private finfish, seaweed, and multispecies mariculture in the federal waters of the U.S. Exclusive Economic Zone (EEZ).<sup>265</sup> Nationwide permits are designed to expedite projects expected to cause minimal adverse environmental impacts by granting permission to applicants who agree to

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<sup>259</sup> See Carballeira Braña, *supra* note 256, at 4, 7 (discussing the main environmental effects of aquaculture like disease, pollution, and risking introduction of exotic species in pristine areas worldwide).

<sup>260</sup> See Mail Buoy, *Finfish Aquaculture Has No Place in U.S. Waters*, NAT'L FISHERMAN (Jan. 8, 2019), <https://www.nationalfisherman.com/viewpoints/national-international/finfish-aquaculture-has-no-place-in-u-s-waters> [<https://perma.cc/NSA8-4E7H>] ("These operations are essentially underwater factory farms relying on natural currents to advect their waste and detritus to other parts of the ocean.").

<sup>261</sup> Timothy Fanning, *Opposition Mounts Against Proposed Fish Farm Off the Coast of Sarasota*, SARASOTA HERALD-TRIB. (Sept. 30, 2020, 2:24 PM), <https://www.heraldtribune.com/story/news/local/sarasota/2020/09/30/opposition-mounts-against-proposed-fish-farm-off-coast-sarasota/3573728001> [<https://perma.cc/S3LD-24LH>].

<sup>262</sup> See Buoy, *supra* note 260 (opposing the expansion of finfish aquaculture in the U.S. EEZ and pleading with Congress to protect the wild-capture fishing industry and its ecosystem by opposing "attempts to legitimize open net pen finfish aquaculture in our oceans").

<sup>263</sup> *Id.*

<sup>264</sup> *Id.*

<sup>265</sup> Exec. Order No. 13,921, 5 Fed. Reg. 28471, 28471 (May 7, 2020). Under the U.S. Convention on the Law of the Sea, the U.S. EEZ extends to approximately 200 miles from the U.S. coastline to the boundary of the international high seas commons. Proclamation 5030, 48 Fed. Reg. 10605, 10605 (Mar. 14, 1983).

comply with a set menu of regulatory guidelines.<sup>266</sup> In early 2021, the Corps issued a series of new and modified nationwide permits to expand opportunities for offshore aquaculture,<sup>267</sup> which went into effect on March 15, 2021.

The new nationwide permits substantially increase the amount of extractive fishing permitted in federal waters. They create an expedited process for commercial entities to obtain private rights from the public ocean commons, including permission to make indelible changes to the natural features of that commons, with reduced scrutiny and public input.<sup>268</sup> They relax existing regulations for shellfish aquaculture and introduce new options for seaweed and finfish mariculture expected to increase related environmental impacts.<sup>269</sup> Shellfish regulations are relaxed by the removal of a pre-existing half-acre limit for impacts to submerged aquatic vegetation in areas that have not been impacted by commercial shellfish aquaculture activities over the last century.<sup>270</sup> The new seaweed permit allows for long-line fishing gear, floating racks, and other structures and equipment that may now be anchored to the seafloor.<sup>271</sup> The new finfish permit authorizes cages,

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<sup>266</sup> For example, the Army Corps has issued around fifty nationwide permits authorizing activities that could otherwise violate Section 404 of the Clean Water Act, 33 U.S.C. § 1344 (authorizing dredge and fill permits), including mooring buoys, residential developments, utility lines, road crossings, mining activities, wetland and stream restoration activities, and commercial shellfish aquaculture activities. See U.S. ARMY CORPS OF ENG'RS, NATIONWIDE PERMIT REISSUANCE 1 (Jan. 2021) [hereinafter NATIONWIDE PERMIT REISSUANCE FACT SHEET], <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll7/id/16919> [<https://perma.cc/6CCW-48TB>] (summarizing the range of activities for which nationwide permits have been authorized). These permits authorize approximately 35,000 reported projects each year, as well as an additional estimated 30,000 activities that do not require reporting to individual Corps districts. *Id.*

<sup>267</sup> Reissuance and Modification of Nationwide Permits, 86 Fed. Reg. 2744, 2744 (Jan. 13, 2021) (summarizing changes in nationwide permit reissuances for certain activities under the Clean Water Act).

<sup>268</sup> *About Nationwide and Regional General Permits*, U.S. ARMY CORPS OF ENG'RS: PORTLAND DIST., <https://www.nwp.usace.army.mil/Missions/Regulatory/Nationwide> [<https://perma.cc/K5KZ-3Y6Z>] ("Nationwide permits are issued by the Corps on a national basis and are designed to streamline Department of the Army authorization of projects such as commercial developments, utility lines or road improvements that produce minimal impact [on] the nation's aquatic environment.").

<sup>269</sup> 86 Fed. Reg. at 2787, 2804, 2807 (discussing Nationwide Permit No. (NWP) 48 for shellfish aquaculture, NWP 55 for seaweed and NWP 56 for finfish mariculture).

<sup>270</sup> *Id.* at 2791 (detailing changes to preconstruction notification (PCN) policies regarding new commercial shellfish mariculture). This requires a PCN for all new projects and existing projects seeking reauthorization that impact more than a ½-acre of submerged aquatic vegetation. *Id.*

<sup>271</sup> *Id.* at 2864 (summarizing the types of activities authorized by the new seaweed mariculture permits). They will also require preconstruction notification for any projects contained under these permits. *Id.*

net pens, floats, and structures anchored to the seafloor.<sup>272</sup> Permit durations are at the discretion of the district issuing the permit, though they are generally issued for aquaculture for a ten-year period.<sup>273</sup>

President Trump also directed the Secretary of Commerce to identify at least two geographic areas suitable for commercial development as an “Aquaculture Opportunity Area” to support some combination of finfish, shellfish and/or seaweed aquaculture.<sup>274</sup> The order provided the agency with wide latitude to designate expansive areas of the public ocean commons for private extractive industry. There is no predetermined size for an Aquaculture Opportunity Area, so the agency may set whatever boundaries it can justify on the basis of stakeholder input, monitoring considerations, and scientific indications of suitability.<sup>275</sup> In late 2020, NOAA announced that federal waters in the Gulf of Mexico and federal waters off the coast of Southern California would contain the first officially designated areas.<sup>276</sup> The order requires NOAA to complete a preliminary environmental impact study for each proposed site within two years, and to identify ten total sites for designation by 2025.<sup>277</sup>

As this piece goes to press, opponents continue to lobby the new administration to revoke these executive actions, which may yet be impacted by President Biden’s executive order requiring review of prior agency actions

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<sup>272</sup> *Id.* at 2864-65. Preconstruction notices are also required for any activities under this permit. *Id.* at 2865.

<sup>273</sup> U.S. ARMY CORPS OF ENG’RS, PERMITS AND PERMIT PROCESS FOR NEW AQUACULTURE ACTIVITIES 1, 37 (2011), [https://www.nws.usace.army.mil/Portals/27/docs/regulatory/permit%20guidebook/Aquaculture\\_SI\\_P\\_Presentation\\_\(2-15-2011\).pdf](https://www.nws.usace.army.mil/Portals/27/docs/regulatory/permit%20guidebook/Aquaculture_SI_P_Presentation_(2-15-2011).pdf) [<https://perma.cc/EY6T-39LQ>] (describing the timeline for standard individual permits for aquaculture as typically lasting for ten years). *But see* U.S. ARMY CORPS OF ENG’RS, FEDERAL AQUACULTURE REGULATORY FACT SHEET SERIES <https://www.ars.usda.gov/SCA/Fact%20Sheets/USACE%20Federal%20Aquaculture%20Regulatory%20Fact%20Sheet%20Series.pdf> [<https://perma.cc/34BN-RZA5>] (stating that nationwide permits themselves are valid for a period of only five years).

<sup>274</sup> Exec. Order No. 13,921, 85 Fed. Reg. 28471, 28474 (May 7, 2020) (articulating steps to identify locations suitable for aquaculture opportunity areas and assess impact of aquaculture facilities).

<sup>275</sup> *FAQ: Aquaculture Opportunity Areas*, NAT’L OCEANIC & ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/insight/aquaculture-opportunity-areas> [<https://perma.cc/77ZJ-227C>] (describing factors that the National Oceanic and Atmospheric Administration (NOAA) will use to determine potential Aquaculture Opportunity Areas).

<sup>276</sup> *US Names First Aquaculture Opportunity Area Regions*, FISH FARMING EXPERT (Aug. 21, 2020, 11:38 AM), <https://www.fishfarmingexpert.com/article/first-us-aquaculture-opportunity-area-regions-chosen> [<https://perma.cc/GVE3-AJ3C>] (specifying that the federal waters by the Gulf of Mexico and California would serve as regions in which the first Aquaculture Opportunity Areas would be chosen).

<sup>277</sup> *See id.* (detailing that in addition to two areas this year, the NOAA is required to select two more Aquaculture Opportunity Areas in each of the next four years).

inconsistent with his own administration's environmental prerogatives.<sup>278</sup> However, if the new permits authorized by President Trump's order are allowed to continue, they will have dramatically expanded commercial fishing in U.S. waters, increasing both the extractive yield and the related negative impacts to public environmental values associated with the underlying commons. General permits provide expedited review and authorization of activities that are deemed to "have minimal impact on the aquatic environment,"<sup>279</sup> making it much easier for industry to procure and with less public input than the ordinary permitting process, which is subject both to agency scrutiny and public notice and comment. Avoiding public scrutiny only further facilitates the accountability defeating features of the privatization strategy.

### E. *Private Rights to Dredge and Fill Public Waterways*

The race to carve private rights from public commons was also manifest in the contest to secure private rights to fill wetlands subject to Clean Water Act protections under the less restrictive regulatory terms that the Trump Administration procured in its final days. Wetlands, scientifically defined as hydric soils that can support aquatic plants, range from the submerged lands beneath navigable lakes and rivers to the non-navigable creeks that feed navigable rivers to the marshlands, prairie potholes, and seasonal streams that may even dry out at various times of the year.<sup>280</sup> Wetlands provide a host of

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<sup>278</sup> Exec. Order No. 13,990, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021) ("[T]his order directs all executive departments and agencies (agencies) to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives[] . . ."); see also Andrianna Natsoulas, *Tell Biden to Revoke Trump-Era Fish Farms*, DON'T CAGE OUR OCEANS (Aug. 4, 2022), <https://dontcageouroceans.org/tell-biden-to-revoke-trump-era-fish-farms> [<https://perma.cc/D5AC-AHM7>] (urging advocacy to revoke Executive Order 13,921); Louisiana Shrimp Association, *Executive Order 13921*, FACEBOOK (Mar. 24, 2022), <https://www.facebook.com/louisianashrimpers/posts/5112447428813515> [<https://perma.cc/U4T7-WWU6>] (same).

<sup>279</sup> NATIONWIDE PERMIT REISSUANCE FACT SHEET, *supra* note 266, at 1. For example, in comparison to the average of 264 days it takes to secure a standard individual permit, satisfying the nationwide permit for preconstruction purposes took only forty-five days in 2018. 86 Fed. Reg. 2744, 2745 (Jan. 13, 2021).

<sup>280</sup> See Ralph W. Tiner, *Technical Aspects of Wetlands: Wetland Definitions and Classifications in the United States*, U.S. GEOLOGICAL SURV.: NAT'L WATER SUMMARY ON WETLAND RES., <https://water.usgs.gov/nwsum/WSP2425/definitions.html> (last modified Mar. 7, 1997) [<https://perma.cc/5BDV-HJ53>] (describing wetlands as "different kinds of wet habitats"). "Wetlands" refer primarily to areas with hydric soils that are "wet for some period of time, but not necessarily permanently wet." *Id.*; see also 80 Fed. Reg. 37054, 37106 (June 29, 2015) (codified at 33 C.F.R. pt. 328) ("[W]etlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support . . . vegetation typically adapted for life in saturated soil conditions.").

valuable ecosystem services to the surrounding public, from water purification to fish nursery and habitat to flood control and storm surge protection.<sup>281</sup>

Wetlands occupy a complicated space in the matrix of public commons associated with waterways. It is important to note that the relevant commons is not the surrounding uplands, which might very well be private, but the network of navigable waterways that traverse public and private lands, of which wetlands are an integral, hydrologically connected part. This is most obvious for wetlands beneath or directly adjacent to navigable waterways, such as rivers, riparian marshlands, or coasts, but arguably as true for more distant wetlands up the watershed that nourish the navigable waterways downstream. Advocates for their protection contend that all wetlands are connected to the wider commons by virtue of the role they play in preserving the physical, chemical, and biological health of navigable waterways and the critical ecosystem services they provide the public.<sup>282</sup>

The public commons at issue is thus the matrix of waterways, not the adjacent lands, and private rights are carved out of the commons whenever the owners of surrounding lands are enabled to destroy wetlands, or remove them from the commons by routing water away from them or filling them with sediment. Navigable waterways are unquestionably public commons under various sources of state and federal law, including the public trust doctrine,<sup>283</sup> the federal navigational servitude,<sup>284</sup> and the Clean Water Act,<sup>285</sup> even when they traverse otherwise private property. Permanently hydrated wetlands adjacent to navigable waters are also uncontroversially included in Clean Water Act protections, as the Supreme Court has repeatedly

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281 See U.S. ENV'T PROT. AGENCY, WETLANDS FUNCTIONS AND VALUES (2016), <https://www.epa.gov/sites/default/files/2016-02/documents/wetlandfunctionsvalues.pdf> [<https://perma.cc/G853-TUCG>] (describing the ecological effects of wetlands for society); see also NICHOLAS A. ASHFORD & CHARLES C. CALDART, ENVIRONMENTAL LAW, POLICY, AND ECONOMICS: RECLAIMING THE ENVIRONMENTAL AGENDA 672 (2008) (describing the value of wetlands).

282 See, e.g., Robin Kundis Craig, *Justice Kennedy and Ecosystem Services: A Functional Approach to Clean Water Act Jurisdiction After Rapanos*, 38 ENV'T L. 635, 639 (2008) (describing the importance of wetlands on the overall ecosystem).

283 See, e.g., Erin Ryan, *A Short History of the Public Trust Doctrine and its Intersection with Private Water Law*, 39 VA. ENV'T L.J. 135, 145 (2020) [hereinafter Ryan, *A Short History*] (laying out the doctrine of state ownership of submerged lands under the public trust doctrine).

284 The Federal Navigational Servitude and the Clean Water Act derive their authority from the Commerce Clause of the U.S. Constitution, U.S. CONST. art. I, § 8, cl. 3, which confers federal authority over the channels of interstate commerce, such as navigable waterways—a constitutional doctrine that is arguably also rooted in the public trust doctrine's ancient recognition of public authority over navigable waterways.

285 Clean Water Act, 33 U.S.C. § 1251 (describing the federal goal of restoring and maintaining the nation's waters and the states' rights and responsibilities in achieving these goals).

affirmed.<sup>286</sup> However, in recent years, there has been substantial political and judicial controversy over which other wetlands are subject to the protection of the Clean Water Act, creating uncertainty about seasonal, remote, and otherwise hydrologically isolated wetlands on private lands.<sup>287</sup>

In 2006, after the Supreme Court failed to reach a majority consensus on how federal natural resource agencies should manage these decisions in *Rapanos vs. United States*, it fell to the permitting agencies to engage in discretionary inquiries to assess how closely each individual wetland impacted navigable waterways.<sup>288</sup> The uncertainty resulted in a de facto curtailment of Clean Water Act authority, because the agencies lacked sufficient resources to make individual inquiries in permitting decisions, without the benefit of previous categorical guidance.<sup>289</sup> In an attempt to alleviate the regulatory paralysis created by the fractured Supreme Court opinion, the Obama Administration proposed the Clean Water Rule, which reframed the scope of federal jurisdiction under the Act in what was arguably an attempt at compromise between the competing views taken by the Justices in *Rapanos*, but the rule was waylaid in court.<sup>290</sup>

In the final year of the Trump Administration, the EPA used its rulemaking authority to reverse the Obama Clean Water Rule and substantially narrow the scope of Clean Water Act protections even beyond the post-*Rapanos* period, including those designating which wetlands were subject to permitting requirements intended to protect them from destruction.<sup>291</sup> The newer, less inclusive standard would enable private

<sup>286</sup> *United States v. Riverside Bayview Homes*, 474 U.S. 121, 134 (1985) (determining that wetlands adjacent to waterways of the United States are reasonably defined as inseparable from the waters and therefore fall under the Clean Water Act); see also Erin Ryan, *Federalism, Legal Architecture, and the Clean Water Rule*, 46 ENV'T L. 277, 281-82 (2016) [hereinafter Ryan, *Federalism, Legal Architecture, and the Clean Water Rule*] (describing the state of controversy over the Waters of the United States rule on the eve of the Trump Administration).

<sup>287</sup> *Rapanos v. United States*, 547 U.S. 715, 718 (2006) (demonstrating the high level of controversy over jurisdictional waters under the Act, in a decision matching a mere plurality opinion with a concurrence on different reasoning and three separate dissents).

<sup>288</sup> *Id.*; see also Ryan, *Federalism, Legal Architecture, and the Clean Water Rule*, *supra* note 286, at 282-84 (describing how most circuits adopted the Kennedy concurrence approach, which requires agencies to make case-by-case assessments).

<sup>289</sup> Ryan, *Federalism, Legal Architecture, and the Clean Water Rule*, *supra* note 286, at 283 (describing how permitting agencies reacted by dropping substantial numbers of Clean Water Act enforcement actions and declining to exercise jurisdiction for lack of resources to make these assessments).

<sup>290</sup> See, e.g., *North Dakota v. U.S. Env't Prot. Agency*, 127 F. Supp. 3d 1047, 1060 (D.N.D. 2015) (issuing an order in response to a complaint by twelve states challenging the proposed Clean Water Rule and issuing a preliminary injunction to enjoin action by the EPA).

<sup>291</sup> See, e.g., Lisa Friedman & Coral Davenport, *Trump Administration Rolls Back Clean Water Protections*, N.Y. TIMES (Sept. 19, 2019), <https://www.nytimes.com/2019/09/12/climate/trump-administration-rolls-back-clean-water-protections.html> [<https://perma.cc/8D44-KY7V>] (“[EPA Administrator Andrew] Wheeler said the rollback would mean ‘farmers, property owners and



owners to fill previously regulated wetlands without satisfying Clean Water Act requirements that permit applicants must first attempt to avoid or minimize their destruction, and at least mitigate their loss by creating compensatory wetlands elsewhere.<sup>292</sup> On President Biden's first day in office, he put the Trump-era rule under review.<sup>293</sup>

In the interim, however, those seeking to perfect private rights to develop in this publicly regulated space acted swiftly to maximize their ability to do so with minimal public interference. This widely recognized moment of opportunity incentivized private actors to move quickly to obtain Section 404 dredging permits before the incoming administration realigned the operative rules back toward greater protection for the public interests in the wetlands commons.<sup>294</sup> One attorney observed that companies were eager to lock in jurisdictional determinations, valid for at least five years, about which bodies of water on their property are subject to Clean Water Act permitting requirements and which they were free to develop without permitting.<sup>295</sup> This attorney even stated that the rush to secure 404 permits was “‘regulatory insurance’ against any potential policy changes in a new administration.”<sup>296</sup>

During this gold rush to secure private rights free from the customary public constraints, private owners were able to secure permission to destroy, for example, 2,683 linear feet of ephemeral streams impacted by a rock quarry project in eastern Oklahoma that would likely have faced stiff opposition under the Biden Administration's return to previous Clean Water Act

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businesses will spend less time and money determining whether they need a federal permit and more time building infrastructure.”); Scott Neuman & Colin Dwyer, *Trump Administration Cuts Back Federal Protections for Streams and Wetlands*, NAT'L PUB. RADIO (Jan. 23, 2020, 10:37 AM), <https://www.npr.org/2020/01/23/798809951/trump-administration-is-rolling-back-obama-era-protections-for-smaller-waterways> [<https://perma.cc/J55N-BFST>] (“The Environmental Protection Agency is dramatically reducing the amount of U.S. waterways that get federal protection under the Clean Water Act—a move that is welcomed by many farmers, builders and mining companies but is opposed even by the agency's own science advisers.”).

<sup>292</sup> Clean Water Act, 28 U.S.C. § 1344 (permitting the moving of fill to wetlands when the loss is unavoidable, minimized, and mitigated).

<sup>293</sup> See, e.g., Zack Hale, *Biden Administration Proposes to Reverse Trump-Era Clean Water Act Rule*, S&P GLOB. (Nov. 19, 2021), <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/biden-administration-proposes-to-reverse-trump-era-clean-water-act-rule-67743692> [<https://perma.cc/GBA6-NGWR>] (“On his first full day in office, U.S. President Joe Biden issued an executive order directing the EPA and Army Corps to review the rule.”).

<sup>294</sup> Amena H. Saiyid, *Companies Eager to ‘Lock In’ Trump-Era Water Rule Exemptions*, BLOOMBERG L. (Sept. 10, 2020), [https://www.bloomberglaw.com/bloomberglawnews/environment-and-energy/X1O1LCROo00000?bna\\_news\\_filter=environment-and-energy](https://www.bloomberglaw.com/bloomberglawnews/environment-and-energy/X1O1LCROo00000?bna_news_filter=environment-and-energy) [<https://perma.cc/JPW3-P8RL>] (describing how businesses and individuals rushed to gain Clean Water Act exemptions in late 2020).

<sup>295</sup> *Id.*

<sup>296</sup> *Id.*

norms.<sup>297</sup> Similarly, owners secured fully private rights to dispose of 651 linear feet of ephemeral stream feeding Still Run, a tributary of the Guyandotte River in West Virginia, found to be impacted by an adjacent coal mine.<sup>298</sup>

Indeed, in the first three months after the new Trump Rule narrowed Clean Water Act jurisdiction, between June 22 and September 10, 2020, 758 out of 1,085 rulings found against federal jurisdiction, releasing wetlands from federal protection.<sup>299</sup> During the same time period, decisions were also made considerably faster. Between January 1 and August 27, 2020, the agencies made 1,921 determinations, but fifty-six percent of those were made in the three months between June 22 and August 27, doubling the rate of the previous six months before the new rule was set forth.<sup>300</sup> Almost two hundred requests were made on the first day that the new rule took effect and another one hundred were made the following week.<sup>301</sup> Additionally, twice as many decisions were made in the office instead of by site visits, suggesting that the agencies exerted lesser scrutiny, and the longest time to issue a finding declined startlingly to 59 days, in comparison to 976 days the year prior.<sup>302</sup> While COVID-19 may have had some effect on decisions to forgo site visits, one water policy consultant was surprised to find the Corps making rulings in a single day, flatly stating: “I have never seen that happen under previous administrations.”<sup>303</sup>

Although the nature of the public commons and the governing regulatory processes are admittedly different, these Clean Water Act § 404 permit seekers were essentially doing the same thing as lease seekers in the Arctic National Wildlife Refuge or mining interests in Bears Ears: carving durable private rights for commercial development out of a regulated commons, in this case, during a period in which the regulated wetlands commons had been shrunk by administrative rulemaking. The rush to secure permission to destroy wetlands under the temporarily diminished § 404 program demonstrates yet another way in which interests in public commons can be

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<sup>297</sup> *Id.*; see also U.S. ARMY CORPS OF ENGINEERS, REGULATORY PROGRAM: APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM) NAVIGABLE WATERS PROTECTION RULE [(July 28, 2020) [is there a website or some other information on where to find this?]] (determining that the waters were excluded from Clean Water Act jurisdiction).

<sup>298</sup> Saiyid, *supra* note 294; see also U.S. ARMY CORPS OF ENG'RS, APPROVED JURISDICTIONAL DETERMINATION FORM, ITMANN NO. 5 DEEP MINE U-3013-18 IBR-2, LRH-2020-00411-GUY (June 25, 2020) (finding that there were both waters within and outside of Clean Water Act jurisdiction at Still Run).

<sup>299</sup> Saiyid, *supra* note 294.

<sup>300</sup> *Id.*

<sup>301</sup> *Id.*

<sup>302</sup> *Id.*

<sup>303</sup> *Id.*

easily transferred to private hands and, once that is accomplished, not so easily recovered by the public.

### III. THE LIMITS OF PRIVATE INTERESTS IN PUBLIC COMMONS

The preceding Parts of this Article demonstrate the privatization paradox and reveal how the creation of private property rights in public commons to “salt the land” against environmental protections is well underway. Part III explores how the paradox is not just a problem of political strategy but one facilitated by underlying legal theory. For at the same time the commons are being salted with private rights, an ascending paradigm within property theory is reinforcing a preference for private rights in commons that conflict with public rights, both in takings challenges and the legal decisions made in their shadow. The salting of the commons may be the wizard waving the wand, but the man behind the curtain is this privatization bias in the underlying theory. This Part explores what is happening behind the curtain, revealing how the takingsification of environmental law is also—or perhaps even really—a problem of property law theory.

Professors Gregory Alexander and Eduardo Peñalver have defined property theory as “an attempt to provide a normative justification for allocating [property] rights in a particular way,” in order to “answer the question of which human interests are relevant to the project of allocating property rights,” noting that “[t]hose interests might be human autonomy, self-realization, aggregate well-being, or some combination of these (and perhaps others).”<sup>304</sup> As contrasting theories of property compete and evolve through jurisprudential processes, we must query whether the resulting paradigms are serving the right combination of human interests. The balance between human autonomy and interdependence is a fragile one, and property law so often sits at the fulcrum. To the extent that it privileges privatization in public natural resource commons, the present trajectory of property theory is missing the mark.

Even as environmental advocates resist the takingsification of public resources one commons at a time, other contributors to the discourse—through scholarship, litigation, legislative advocacy, and public conversation—must help shepherd the maturation of property theory toward greater public commons literacy, especially for the purpose of Fifth Amendment takings analyses. This Part reviews this conundrum for property theory, with special attention to its appearance in the contexts of water and grassland commons. After reviewing the continuum of private and public

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304 GREGORY S. ALEXANDER & EDUARDO M. PEÑALVER, AN INTRODUCTION TO PROPERTY THEORY 6 (2012).

property interests in Sections A and B, Section C reviews the application of this conundrum in the context of water law, including private water rights, the public trust doctrine, and related grazing permits, where judicial treatments are especially revealing. Water law acknowledges the theoretical dispute more openly than most other areas of natural resources law, and the multiplicity of judicial reactions shows that it has yet to be resolved. Section D expands the discussion to consider broader natural resource commons paradigms, where property theorists take diverging paths in considering commons governance.

### A. *Overprivatization as a Problem of Property Theory*

The strategic deployment of property rights to entrench deregulation is especially concerning when partnered with a misunderstanding of the nature of claims for private property in public commons. In addition to heightened scrutiny for private rights asserted in public commons, legal actors should recognize the important differences between the private rights claimed in natural resource commons and the stronger private property rights that we recognize in more autonomously held property, such as residential real estate, in which the owner controls more of the rights in the associated bundle.<sup>305</sup> Acknowledging the dynamic balance of public and private interests in all property, this Section explores why contingent private rights in a public commons (like water rights) will typically warrant lesser takings protection than the private rights held in comparatively autonomous resources (like a private home).

While all property rights are contingent on the dynamic circumstances that give rise to legitimate exercises of regulation and eminent domain,<sup>306</sup> takings protections for private rights in conventionally autonomous forms of property will almost always be more vigorous than the more circumscribed claims for private rights within resource commons that are jointly held by all members of a community. The latter claims are generally weaker because the asserted private rights are counterbalanced by public rights in the resource. These public rights also deserve protection in the property context, either as countervailing property interests in their own right, or as public interests that should also receive consideration in the legal calculus.

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305 See Hohfeld, *supra* note 1, at 24 (“[T]he fee simple owner’s aggregate of legal relations is far more extensive than the aggregate of the easement owner.”).

306 See *Kimball Laundry Co. v. United States*, 338 U.S. 1, 5 (1949) (“[T]he liability of all property to condemnation for the common good . . . is properly treated as part of the burden of common citizenship.”); see also Brian Angelo Lee, *Just Undercompensation: The Idiosyncratic Premium in Eminent Domain*, 113 COLUM. L. REV. 593, 622 (2013) (discussing the shared vulnerability to eminent domain as a common burden of citizenship).

Private rights to mine on leased federal lands—or drill for oil there, or harvest timber, or hunt or fish migratory wildlife, or take water from a navigable river—have never been the same autonomous interest as a family’s fee simple in a private home, over which owners typically possess the strongest possible rights to possess, exclude, use, and transfer, subject to reasonable police power limitations.<sup>307</sup> Even when these comparatively autonomous interests fall to countervailing public need under the state’s power of eminent domain—for example, to build an unavoidably interfering public highway or hospital—the owners can expect vigorous protections for these lost private rights through the requirement of just compensation.<sup>308</sup> Where markets are discernable, the Fifth Amendment promises compensation through the payment of fair market value, which can be easily determined for these conventionally autonomous private interests.<sup>309</sup>

By contrast, private rights in public commons are often more complex—suffused with indeterminacy about how rights are shared, what the rights actually entitle, and what exactly is lost when there is interference from competing public interests.<sup>310</sup> The private interest may warrant recompense, but the public interests in those resources also deserve protection in the property calculus. This tension between the public and private interests in property is what creates the need for balancing in the takings analysis, perhaps even in assessing an alleged physical takings (which, unlike regulatory takings, are not usually adjudicated under a balancing test).<sup>311</sup>

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<sup>307</sup> Cf. Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 389 (2001) [hereinafter Merrill & Smith, *What Happened to Property*] (discussing the importance of the right to exclude in property law and property theory); Thomas W. Merrill & Henry E. Smith, *Making Coasean Property More Coasean*, 54 J.L. & ECON., Nov. 2011, at S77, S90-91 (2011) (arguing that the right to exclude is among the most intuitive ways that lay people understand property rights).

<sup>308</sup> See *Kimball Laundry Co.*, 338 U.S. at 5 (describing fair market value as the measure of just compensation, because it can be determined relatively objectively).

<sup>309</sup> *Id.*

<sup>310</sup> See Blumm & Ritchie, *supra* note 96, at 364 (“[W]hen takings challenges arise from less-than-fee interests in public resources, those claims should not survive the threshold inquiry where access to the public resource is revocable”); Shelley Ross Saxer, *The Fluid Nature of Property Rights in Water*, 21 DUKE ENV’T L. & POL’Y F. 49, 50, 61 (2010) (distinguishing water rights from property rights in land, and noting how federal law imposes conditions on usage); Sandra B. Zellmer & Jessica Harder, *Unbundling Property in Water*, 176 ALA. L. REV. 680, 686 (2008) (“Non-constitutional sources of law do not treat water as a discrete, marketable asset or allow riparian landowners an irrevocable right to exclude others . . . . As a result, the appropriator may have a limited form of property for purposes of due process or common law claims, but not a full property right for purposes of regulatory takings law.”).

<sup>311</sup> See *supra* Section I.D. These dynamics are even clearer in a non-commons scenario. For example, nonexclusive private interests on private lands, such as a profit to extract timber, are constitutionally protected property interests. If the government condemns the underlying land and pays just compensation to the owner of the fee simple, the holder of the profit is likely entitled to a proportionate share—although the profit interest would likely be considered lesser to the fee, and

Nevertheless, some legal interpreters treat private claims in resource commons as interchangeable with more autonomous private rights in conventionally excludable property, in ways that can undermine environmental regulations designed to protect important public rights in natural resource commons—such as the critical ecosystem services associated with healthy ocean systems, wetlands, intact forests, pollinators, and atmosphere.<sup>312</sup>

At bottom, this conundrum indicates a problem of property theory, reflecting the as-yet immaturity of jurisprudential efforts to distinguish the nature and context of discrete interests in commons property. Discerning precise boundaries between (1) the conventionally autonomous interests in property that deserve protection from overly intrusive public interference and (2) the public property in resource commons that deserve protection from overly intrusive private interference is a problem that has preoccupied scholars for generations,<sup>313</sup> especially because the lines between these categories are not always sharp. A similar debate has arisen among intellectual property theorists, who have critiqued the misplaced analogy between real and intellectual property rights and their opposites, forcing ill-fitting analyses

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the owner's emotional and investment backed expectations would accordingly command less regard. When the government creates a right to extract from a public commons, however, the right is rarely as discrete.

<sup>312</sup> Good examples of legal dissensus over the appropriate treatment of a natural resource commons can be found in the arguments traded back and forth between the litigants, district courts, and appeals panels in several Western water rights conflicts in the Court of Federal Claims and Federal Circuit. *See, e.g.,* *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 319 (2001) (upholding a takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act); *Casitas Mun. Water Dist. v. United States*, 102 Fed. Cl. 443, 477 (2011) (reluctantly dismissing a water rights takings claim by a California irrigator required to create fish passage lanes to satisfy the Endangered Species Act). In *Casitas*, the Court of Federal Claims's treatment of the alleged taking was reversed on appeal, 543 F.3d 1276, 1296 (Fed. Cir. 2008) (rejecting the lower court's use of the regulatory takings framework to analyze the claim), but the plaintiff's effort to establish a physical taking was also eventually rejected, 708 F.3d 1340, 1360 (Fed. Cir. 2013). In the final analysis, the Federal Circuit concluded that the plaintiff's effort to claim state infringement of his water rights (as though they were autonomously held property) could not succeed, because those rights were intrinsically constrained by the limits of the beneficial use doctrine of California water law. *Id.* at 1354-55 ("Although appropriative rights are viewed as property under California law, those rights are limited to the 'beneficial use' of the water involved . . . . California courts have found the beneficial use limitation a valid exercise of state power to regulate water rights for public benefit and have deemed it an 'overriding constitutional limitation' on those rights." (citations omitted)).

<sup>313</sup> *Cf. Ostrom et al., supra* note 13, at 277-79 (discussing the challenges of governing common-pool resources); *Rose, supra* note 20, at 717 ("Why, in short, is any property inherently or even presumptively withdrawn from exclusive private appropriation? What characteristics of the property require it to be open to the public at large, and exempt from the classical economic presumption favoring exclusive control?"); *Hardin, supra* note 20, at 1244-45 (discussing the tragedy of the commons and possible solutions).

between these mixed private–public spaces.<sup>314</sup> As Professor James Boyle has warned, although the public domain and the ideas that move in and out of it have some features in common with public commons and private carveouts, underlying differences limit the overly simplistic analogy that the unsophisticated observer may draw.<sup>315</sup>

In all of these domains, however, diffuse public interests have always constrained the private use of property. This feature of property law governance is as old as the common law doctrines of nuisance and the constitutional durational limits on intellectual property.<sup>316</sup> At the same time, public interests in commons property sometimes reflect conventional private property norms, such as the public ownership of the White House or exclusionary management of military bases. Nevertheless, this project proceeds from the assumption that even if we cannot draw perfect boundaries around blurry categories in every instance, there is enough to distinguish the conventionally private and public in the clearest examples that we can consider how these differences should inform the ongoing development of property theory (and then argue about how to characterize more marginal cases in the next stage of the discourse).

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<sup>314</sup> See James Boyle, *Foreword: The Opposite of Property?*, 66 L. & CONTEMP. PROBS., Winter/Spring 2003, at 1, 7–8 (2003) [hereinafter Boyle, *Foreword*]; James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 L. & CONTEMP. PROBS., Winter/Spring 2003, at 33, 44 (2003) [hereinafter Boyle, *The Second Enclosure*]; Charlotte Hess & Elinor Ostrom, *Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource*, 66 L. & CONTEMP. PROBS., Winter/Spring 2003, at 111, 118–19 (2003).

<sup>315</sup> See Boyle, *Foreword*, *supra* note 314, at 8 (highlighting different realms of property law that encompass public domains and public commons and discussing how the two are similar but can be wrongfully analogized). Boyle writes,

In the debates over intellectual property policy, we have been familiar with a conceptual scheme that portrays “intellectual property” as a monopoly, and “the public domain,” as its conceptual opposite—a realm of vaguely defined “freedom.” In contrast, the commons literature gives us a conceptual scheme in which property, seen as a regime of individual, legal, market-based control is juxtaposed to its conceptual opposite—the well-run commons, a realm of collective, and sometimes informal, controls that avoids the tragedy of the commons without a need for single party ownership. The former juxtaposes monopolies against freedom, the latter juxtaposes individual formal controls against collective, and often informal, ones. Both give us a realm of property and a realm in which its opposite, or alternative, are offered.

*Id.*

<sup>316</sup> See F. William Brownell, *State Common Law of Public Nuisance in the Modern Administrative State*, 24 NAT. RES. & ENV'T, Spring 2010, at 34 (“The common law of public nuisance arose in twelfth century England as a criminal writ, brought by a sovereign to protect the exercise of rights common to his subjects.”); U.S. CONST. art. I, § 8, cl. 8 (empowering Congress “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”).

### B. *The Dynamic Continuum of Public and Private Interests in Property*

A discussion such as this one requires me to clarify my terms. Before exploring the proposition that private rights in public commons warrant distinct consideration under the Takings Clause, this section offers some preliminary definitions, explanations, and contextualization of the vocabulary I rely on to facilitate this discussion. It addresses the differences between the public and private interests in commons and autonomously held property, and the different theoretical lenses we might use to understand them.

#### 1. The Contested Category of Public Resource Commons

As noted earlier, the public commons that are the focus of this inquiry are natural resource systems that are held in common by all members of a given body of the public. Originally in a state of nature, today most are managed by the state for the benefit of the public through various regulatory programs, limiting the most overt commons tragedies.<sup>317</sup> Most obviously, these include navigable waterways and other water resources;<sup>318</sup> fisheries in public waterways;<sup>319</sup> land, forest, and mineral resources on public lands and waters;<sup>320</sup> fixed wildlife and plant biodiversity on public lands;<sup>321</sup> fugitive

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<sup>317</sup> See *supra* notes 19–36 and accompanying text (discussing public natural resource commons and the variety of strategies used to protect them from tragedies of the commons).

<sup>318</sup> See Ryan, *A Short History*, *supra* note 283, at 137 (exploring the public trust in water resources); see also Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 452 (1892) (“[T]he State holds the title to the lands under the navigable waters . . . in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.”).

<sup>319</sup> See Gary D. Libecap, *State Regulation of Open-Access, Common-Pool Resources*, in HANDBOOK OF NEW INSTITUTIONAL ECONOMICS 545 (Claude Menard & Mary M. Shirley eds., 2005) (highlighting fisheries as a common-pool resource that often requires some type of regulation of private access and use to avoid overexploitation); see also Robin Kundis Craig, *Fish, Whales, and a Blue Ethics for the Anthropocene: How Do We Think About the Last Wild Food in the 21st Century?*, 96 S. CAL. L. REV. 101, 102–04 (forthcoming 2022) (discussing moral and ethical issues surrounding fisheries and the Blue Foods movement).

<sup>320</sup> See, e.g., *Our Mission*, U.S. DEP’T. OF THE INTERIOR BUREAU OF LAND MGMT., <https://www.blm.gov/about/our-mission> [<https://perma.cc/864T-MQPJ>] (listing the Bureau of Land Management’s tasks, including, inter alia, management of public lands to support timber harvesting, hunting and fishing, energy development).

<sup>321</sup> See Lauren Anderson, *Introduction to Wildlife Management on Public Lands*, in THE ENVIRONMENTAL POLITICS AND POLICY OF WESTERN PUBLIC LANDS 160, 161 (Erika Allen Wolters & Brent S. Steel eds., 2020) (setting out the structure of wildlife management in the United States at the state and federal levels).



wildlife;<sup>322</sup> arguably, the upper and lower levels of the atmosphere;<sup>323</sup> and certainly the outer space commons.<sup>324</sup> They may also be defined to include solar, wind, geothermal, and ocean wave sources of energy,<sup>325</sup> or even scientifically valuable sources of data<sup>326</sup> or anthropocentrically valued viewsheds associated with other public commons.<sup>327</sup>

It may be possible to further extend this category to include other forms of public commons more thoroughly explored by other scholarship—such as broadcast spectrum;<sup>328</sup> public domain artworks;<sup>329</sup> established ideas and other

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322 The seminal case regarding public ownership of fugitive wildlife is *Geer v. Connecticut*, 161 U.S. 519 (1896), which was overruled almost a century later by *Hughes v. Oklahoma*, 441 U.S. 322 (1979). *Geer* stated that the state's power over wildlife "is to be exercised, like all other powers of the government, as a trust for the benefit of the people . . ." *Geer*, 161 U.S. at 529. Although *Hughes* overruled the reasoning in *Geer*, it upheld state ownership interests in wildlife and federal interests in fugitive wildlife under the Commerce Clause. *Hughes*, 441 U.S. at 335-36 ("[C]hallenges under the Commerce Clause to state regulations of wild animals should be considered according to the same general rule applied to state regulations of other natural resources.").

323 See Michael C. Blumm & Mary Christina Wood, "No Ordinary Lawsuit": *Climate Change, Due Process, and the Public Trust Doctrine* 67 AM. U.L. REV. 1, 21, 84-87 (2017) (discussing *Juliana v. United States and the Atmospheric Trust Project*, which argues for regulatory obligations to protect the atmospheric commons); see also MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER, pmbl., opened for signature Sept. 16, 1987, 1522 U.N.T.S. 29 (stating the signatories' intention to protect the Earth's ozone layer to avoid harm to human health worldwide).

324 TREATY ON PRINCIPLES GOVERNING THE ACTIVITIES OF STATES IN THE EXPLORATION AND USE OF OUTER SPACE, INCLUDING THE MOON, AND OTHER CELESTIAL BODIES, opened for signature Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 ("Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes . . .").

325 Pursuant to Title 30 Code of Federal Regulations (CFR) Part 585, the Bureau of Ocean Energy Management (BOEM) has regulatory authority over offshore energy development including conventional oil and gas exploration and production, and renewable energy production from wind, waves, and currents. See 30 C.F.R. § 585.101 (2022) ("The purpose of this part is to: (a) Establish procedures for issuance and administration of leases, right-of-way (ROW) grants, and right-of-use and easement (RUE) grants for renewable energy production on the Outer Continental Shelf (OCS) . . ."); 30 C.F.R. § 585.112 (2022) (defining "renewable energy" to include "wind, solar, and ocean waves, tides, and current").

326 Many fields of study rely on open-source data for research, and some, such as Indigenous cultural studies, are now regulated to prevent private expropriation or profiteering from data. See, e.g., *Indigenous Data Sovereignty Agreement*, LOCAL CONTEXTS (Oct. 17, 2022), <https://localcontexts.org/indigenous-data-sovereignty> [<https://perma.cc/35P8-JCEL>] ("[An agreement] support[ing] Indigenous Data Sovereignty and enhance Indigenous control of Indigenous data").

327 See, e.g., PA. CONST. art. I, § 27 ("[T]he people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment.").

328 Broadcast spectrum, accessible to all and nonexcludable in nature, is a public commons regulated by the FCC through licensing. See 47 U.S.C. § 151 (2018) (noting the Communications Act's purpose is, in part, to "regulat[e] interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States").

329 See, e.g., Cathay Y. N. Smith, *Community Rights to Public Art*, 90 ST. JOHN'S L. REV. 369, 384 (2016) ("Recently, public art, including murals, have started to appear on preservation registries in the United States and elsewhere, signifying a shift in societal attitudes regarding the importance

forms of potentially collective intellectual property;<sup>330</sup> DNA;<sup>331</sup> and perhaps even forms of more broadly conceived “regulatory property.”<sup>332</sup> However, I limit this initial inquiry to those natural resource commons that share features with conventionally tangible forms of real and personal property, and for that reason, are especially prone to takingsification problems in environmental law.

## 2. Conventional Autonomous Rights

When referencing private rights in conventionally autonomous forms of property, I mean the present estates that private owners can hold in items of real or personal property that they autonomously possess and control within the limits of reasonable regulation, and from which they may legally exclude others (at least in most circumstances). Owners of maximally autonomously held property control as many of the sticks in the bundle of rights associated with property as any one owner can, including rights associated with possession, exclusion, use, and transfer.<sup>333</sup> Of course, even the owners of maximally autonomous forms of property do not control all the sticks. For example, even presumptively excludable forms of private property may be legally accessed by others during emergency circumstances without constituting a trespass,<sup>334</sup> revealing the impossibility of establishing an absolute boundary between *purely* private and public interests, and why a better goal may be distinguishing *mostly* private or public interests.

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of preserving public art.”); Katherine J. Wu, *Smithsonian Releases 2.8 Million Images Into Public Domain*, SMITHSONIAN MAG. (Feb. 25, 2020), <https://www.smithsonianmag.com/smithsonian-institution/smithsonian-releases-28-million-images-public-domain-180974263> [<https://perma.cc/9L28-57WC>] (providing an example of how art can become a public good for free, unlimited use).

<sup>330</sup> See, e.g., Boyle, *The Second Enclosure*, *supra* note 314, at 44 (questioning the expansion of intellectual property rights in the digital age).

<sup>331</sup> See generally Arti K. Rai & Rebecca S. Eisenberg, *Bayh-Dole Reform and the Progress of Biomedicine*, 66 L. & CONTEMP. PROBS. 289 (2003) (discussing different biomedical contexts in which questions of property arise).

<sup>332</sup> See Christopher Serkin, *Penn Central Take Two*, 92 NOTRE DAME L. REV. 913, 940-42 (2016) [hereinafter Serkin, *Penn Central Take Two*] (discussing the concept and commonalities of regulatory property across a wide range of resources, values, and social contexts); Michael Pappas, *A Right to Be Regulated?*, 24 GEO. MASON L. REV. 99, 122, 136 (2016) [hereinafter Pappas, *A Right to Be Regulated*] (arguing that courts and legislatures already recognize some property rights in government regulatory actions and proposing administrable rules for assessing related claims).

<sup>333</sup> See Hohfeld, *supra* note 1, at 22 (defining “property” as “the right of any person to possess, use, enjoy, and dispose of a thing” and includes the right of excluding others from use as well).

<sup>334</sup> *Ploof v. Putnam*, 71 A. 188, 189 (1908) (holding that necessity will justify interferences that would otherwise have been trespass). In this case, the defendant could not assert his right against trespass after untying the plaintiff’s boat from his dock during a storm they had tried to escape there, leading to the family’s serious injury and risk of death when the boat was subsequently destroyed. *Id.* at 188-89.

Mushy modifiers like “conventional,” “reasonable,” and “most” further reveal that the concept is contingent by nature, and vulnerable to disagreement at the margins. Even so, this definition conveys a spectrum of relative certainty, where the zone of disagreement flows between relatively uncontroversial assertions at either end—those *mostly* private and *mostly* public interest. Even if we cannot resolve the exact points at which controversy begins and ends, this at least enables us to hold a meaningful conversation about the stark differences between the two uncontroversial ends of the spectrum—the conventionally autonomous property at one end, say, an unmortgaged detached private home, and the patent public commons at the other, like the Mississippi River.<sup>335</sup>

“Conventional” implies generalities that may shift over time, but I use the term to describe the most basic common law interests that an owner can autonomously hold in property under present possession—primarily the fee simple estate, albeit with the above qualifications, and potentially the leasehold or life estate.<sup>336</sup> The most straightforward would be a fee simple interest that is not held jointly among cotenants, but the concept probably reasonably extends to interests shared among a small number of closely aligned individuals, as in a marriage, a small family, or a close business partnership. As the number of cotenants grows, of course, the force of any one owner’s claim of autonomy is diluted by the strength of co-owners’ interests. The principles set forth here may or may not apply in varying degrees to more complex claims in property, including future interests and those that are the creation of statute or contract, but I leave consideration of that issue for future stages of inquiry.<sup>337</sup>

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335 See Blumm & Ritchie, *supra* note 96, at 364 (“[W]hen takings challenges arise from less-than-fee interests in public resources, those claims should not survive the threshold inquiry where access to the public resource is revocable.”).

336 This definition purposefully excludes future interests, as well as claims for property that are the more complex creations of statute or contract. See, e.g., *Goldberg v. Kelly*, 397 U.S. 254, 264-66 (1970) (finding public assistance is protected by procedural due process and requires welfare recipients to receive evidentiary hearings before termination); *Penn Central Transp. Co. v. N.Y.C.*, 438 U.S. 104, 122-23 (considering property rights in transferable development rights as a potential source of just compensation); JOHN HULL & ALAN WHITE, *VALUING CREDIT DEFAULT SWAPS I: NO COUNTERPARTY DEFAULT RISK* 3 (2000) (defining credit default swap as “a contract that provides insurance against the risk of a default by [a] particular company” and its “purpose is to allow credit risks to be traded and managed in much the same way as market risks”); Michael J. Kasdan, Kevin M. Smith & Benjamin Daniels, *Trade Secrets: What You Need to Know*, NAT’L L. REV. (Dec. 12, 2019), <https://www.natlawreview.com/article/trade-secrets-what-you-need-to-know> [<https://perma.cc/K3EB-22PG>] (noting that trade secret law is “on the rise” due to “the flexibility and scope of protection it offers,” protecting “a wide range of subject matter that does not fall under traditional intellectual property schemes”).

337 For examples of these more complex property claims, see sources cited *supra* note 336.

By “reasonable regulation,” another inherently uncertain term, I refer to the constraints of common law nuisance, zoning ordinances, civil rights statutes, and other valid exercises of the state’s police power that have always limited the autonomy of owners within our system of property law. This concept has been repeatedly affirmed by the Supreme Court, although it regularly entertains cases testing the limits of what level of regulation is “reasonable.”<sup>338</sup>

With all this in mind, the most “autonomous” interests in property are those in which an owner has the maximum degree of control that a private owner can hold over the sticks in the bundle of property rights associated with the property in question.<sup>339</sup> A particularly salient stick in the bundle is the right to exclude, and the strongest conventionally autonomous forms of property are those in which the owner is most empowered to exclude others, for the combined reasons of the nature of the property at issue and the use to which it is put.<sup>340</sup> For example, possessory rights in a private home generally implies the strongest such power. The owner’s right to exclude there is at its zenith, because of the nature of the property (the front door can easily be locked to bar entry by others), and because the exclusively private nature of the use is less likely to trigger, for example, nondiscrimination laws restricting an owner’s right to exclude.<sup>341</sup> Other sticks in the bundle are also important indicators of the strength of an owner’s autonomy over property, including the ability to freely use and transfer the property.<sup>342</sup>

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<sup>338</sup> See, e.g., *Hadacheck v. Sebastian*, 239 U.S. 394, 407-09 (1915) (upholding even onerous regulations of property that protect the public from noxious uses and common law nuisances); *Heart of Atlanta Motel v. United States*, 379 U.S. 241, 261 (1964) (holding that requiring hotel owners to admit racial minorities they would prefer to exclude is not a taking); *Tahoe-Sierra Pres. Council v. Tahoe Reg’l Plan. Agency*, 535 U.S. 302, 306, 343 (2002) (upholding against a takings challenge a temporary development moratorium protecting the health of water resources in Lake Tahoe).

<sup>339</sup> See Hohfeld, *supra* note 1 (identifying a property owner’s right to “possess, use, enjoy, and dispose” of their property).

<sup>340</sup> In particular, Professors Thomas Merrill and Henry Smith have sought to recenter conceptions of property around rights to exclude, which they consider the paramount value of property. See, e.g., Thomas W. Merrill, *Property and the Right To Exclude*, 77 NEB. L. REV. 730, 731 (1998) (“[T]he right to exclude others is a necessary and sufficient condition of identifying the existence of property.”); Merrill & Smith, *What Happened to Property*, *supra* note 307, at 389 (“The right to exclude allows the owner to control, plan, and invest, and permits this to happen with a minimum of information costs to others.”); Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691, 1699 (2012) (noting that the right to exclude is an integral, although not absolute, characteristic of property); Thomas W. Merrill, *Property as Modularity*, 125 HARV. L. REV. 151, 153 (2012) (arguing that the exclusion right is necessary for something to be considered property and is a right so ubiquitous that it “defies the bundle”).

<sup>341</sup> *State v. Schmid*, 423 A.2d 615, 629 (N.J. 1980) (“[T]he more private property is devoted to public use, the more it must accommodate the rights which inhere in individual members of the general public who use that property.”).

<sup>342</sup> See, e.g., Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275, 278 (2008) (critiquing the claim that rights to exclude define an owner’s special position to the

Even so, property is only excludable to “most” people and under “most” circumstances, as there will always be exceptions—if, for example, an emergency entitles someone else to access the property,<sup>343</sup> or a law officer presents a valid warrant for search.<sup>344</sup> In addition, if the same property is put to a more public use, such as a formerly private home opened to the public as an inn, then the force of excludability wanes, as the use becomes subject to public accommodation laws that require the doors be open to all comers, and health and safety laws that require public inspection and enforcement.<sup>345</sup> The same applies in the context of property transfer. For example, the transfer rights associated with even a private home become weaker if the building is put up for sale on the open market of interstate commerce, subjecting it to civil rights laws proscribing race discrimination in markets for property.<sup>346</sup>

These definitions are set in relatively wet clay, and the litany of Supreme Court litigation on these points showcase that we may only have consensus near the middle of the spectrum on what constitutes a reasonable regulation or controversial limit on exclusionary rights. But once again, for the purposes of this inquiry, the precise boundaries between the most uncontroversially autonomous forms of private property to the least are not really important. The key argument is that some private claims in exclusively controlled property are on the strongly protected end of that spectrum, and other private claims in commonly held property are on the weaker end. A single family home, absent unusual circumstances, is the paragon example of a private interest on the strong end of that spectrum. By contrast, private rights to drill for oil on public land, or to withdraw water for private use from a public waterway, are on the weaker end of that spectrum. Property claims in commons resources made on behalf of the public itself also warrant clearer recognition in the spectrum.

### 3. The Dynamic Bundle of Sticks

Defining these terms helps the conversation proceed, but we must concede that it also raises questions that require deeper contextualization in

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property and arguing instead that ownership relies on owners’ ability to set agendas for the resource).

<sup>343</sup> See *supra* note 334 and accompanying text (discussing the necessity exception to trespass doctrine when needed to save lives or property).

<sup>344</sup> *United States v. Jones*, 565 U.S. 400, 405 (2012) (discussing Fourth Amendment searches, when legally valid, as a reasonable constraint on the right to exclude from property).

<sup>345</sup> Civil Rights Act of 1964, tit. II, 42 U.S.C. §§ 2000a–2000a-6 (guaranteeing equal rights and prohibiting discrimination in places of public accommodation).

<sup>346</sup> Civil Rights Act of 1866, 42 U.S.C. § 1982 (“All citizens of the United States shall have the same right, in every State and Territory, as is enjoyed by white citizens thereof to inherit, purchase, lease, sell, hold, and convey real and personal property.”)

property theory. Property as a legal concept seems intuitive even to the lay mind; toddlers quickly learn to identify what belongs to them and what doesn't, and what objects or spaces they can control and which they cannot. But this exploration of the continuum between public and private interests in property betrays the depth of nuance that property theory must confront, and that toddlers may not yet appreciate. For not only is there a complex balance between public and private claims in property that at first seems comparatively simple—that balance is actually a dynamic interface that can shift over time.<sup>347</sup>

This Article adopts the prevailing positivist view that property rights are inherently limited by the dynamic legal context that gives them meaning,<sup>348</sup> in support of the underlying human values that the institution of property itself serves.<sup>349</sup> For that reason, all property is subject, on some level, to a blend of private and public claims.<sup>350</sup> After all, and as noted above, even conventionally autonomous property is constrained by public interests through the doctrines of common law nuisance (preventing an owner from

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<sup>347</sup> See generally Serkin, *Public Entrenchment*, *supra* note 14, at 895 (arguing that the institution of property protects reliance interests, but that these interests are inherently dynamic and subject to evolution).

<sup>348</sup> For a contrasting view, see the older “Natural Law” or “Natural Rights” theory of property, which views property not as something defined by human-made law but as something exogenous to the legal system that protects it (usually defined by a Creator). See, e.g., JOHN LOCKE, *SECOND TREATISE OF GOVERNMENT* (Peter Laslett ed., Cambridge Univ. Press 1988) (1690) (arguing that the world, and the property within it, was created by God for all of humanity to hold in common, though individuals may transform the commonly held into private property by mixing their labor with it); Eric Claeys, *Natural Property Rights: An Introduction*, 9 TEX. A&M J. PROP. L. (forthcoming 2023) (manuscript at 4-5) (on file with author) (advancing a natural rights theory of property); Eric Claeys, *Takings, Regulations, and Natural Property Rights*, 88 CORNELL L. REV. 1549, 1557-58 (2003) [hereinafter Claeys, *Takings, Regulations, and Natural Property Rights*] (contrasting positive law theory with the natural law view that property rights are not subject to the utilitarian balancing of public and private claims).

<sup>349</sup> See GREGORY S. ALEXANDER, *PROPERTY AND HUMAN FLOURISHING* 4 (2018) ([T]he moral foundation of property, both as a concept and as an institution, is human flourishing”); see also *State v. Shack*, 277 A.2d 369, 372 (N.J. 1971) (“Property rights serve human values. They are recognized to that end, and are limited by it.”).

<sup>350</sup> See Serkin, *Penn Central Take Two*, *supra* note 332, at 940-42 (2016) (contrasting positive and natural law accounts of property, in which positive law theorists see property rights as contingent on fluid legal norms, and natural rights theorists see property as a thing of stability that is defined independently of operative legal norms). As Professor Serkin explains, “[t]he rights and responsibilities attached to land are determined by complex and overlapping rules and regulations. From zoning to environmental rules to common law doctrines, the content of rights is governed by the state to an extent that becomes difficult to distinguish from regulatory property like TDRs [“transferable development rights”]. At the very least, the value of property can be affected dramatically by regulatory changes.” *Id.* at 941; see also Frederic Bloom & Christopher Serkin, *Suing Courts*, 79 U. CHI. L. REV. 553, 572 (2012) (describing positivism); Claeys, *Takings, Regulations, and Natural Property Rights*, *supra* note 348, at 1566-74 (describing natural rights theory with regard to property rights).

using it to injure a neighbor's enjoyment)<sup>351</sup> and modern civil rights law (preventing an owner from discriminating on the basis of race in seeking to transfer their private interest through sale).<sup>352</sup> If we follow the traditional conceptualization of property as a bundle of sticks,<sup>353</sup> then we see that even if most sticks are held by the private owner (for example, the rights to possess and exclude), there are always some sticks associated with the parcel of property that are held by the neighbors (e.g., the right to remedy a common law nuisance) and the larger community (e.g., the right to restrict discriminatory transfer practices, prevent nuisances, or tax it to pay for public services).

Adding to the complexity recognized by modern property theory, both the location of sticks in the bundle and who holds them at any given time are subject to change. Sticks in the bundle associated with a given item of property can shift from the bundle held by the owner to the bundle held by the community with legitimate changes in law, even when title remains intact—or they can shift in the opposite direction. For example, environmental laws that restrict owners' rights to take endangered species<sup>354</sup> or fill wetlands<sup>355</sup> shift a stick from the owner's bundle to that of the community. Meanwhile, Right to Farm laws that prevent otherwise valid nuisance lawsuits by neighboring residential owners against longstanding agricultural uses,<sup>356</sup> or California Proposition 13-modeled laws that forbid tax increases for longtime owners,<sup>357</sup> are both examples of newer regulations that shift sticks from the community's bundle to the owner's. If the shifts by environmental laws are framed as takings of private owners' rights, it begs the question whether shifts by Right to Farm and Prop-13 laws are takings of public rights—or indeed, whether this kind of “stick flux” is correctly viewed

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<sup>351</sup> See *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870, 872 (N.Y. 1970) (explaining why the common law of nuisance enabled neighboring homeowners to have a stake in how a nearby private factory could be used).

<sup>352</sup> See *supra* notes 345–346 and accompanying text (discussing civil rights laws that impact property law).

<sup>353</sup> JOHN LEWIS, A TREATISE ON THE LAW OF EMINENT DOMAIN IN THE UNITED STATES § 55 (1888) (“The dullest individual among the people knows and understands that his property in anything is a bundle of rights.”).

<sup>354</sup> See, e.g., Endangered Species Act, 16 U.S.C. § 1538 (1973) (making it illegal to take certain endangered species within the United States or on the high seas).

<sup>355</sup> See 33 U.S.C. § 1344 (1987) (establishing a permit system for the discharge of fill material).

<sup>356</sup> See, e.g., Jana Caracciolo, Raychel Thomas & Catherine Campbell, *The Florida Right to Farm Act*, U.F. IFAS EXTENSION #FCS3357, Aug. 17 2021 (“Right to farm acts were put in place to protect farmers facing private or public nuisance lawsuits. [They] limit how and when someone can bring a nuisance suit against a farm.”).

<sup>357</sup> See Noah Glyn & Scott Drenkard, *Prop 13 in California, 35 Years Later*, TAX FOUND. (June 6, 2013) (explaining that California's Proposition 13 contains a tax cap and that, following the enactment of Proposition 13, many other states passed their own tax and expenditure limits).

in takings terms at all. (Which, after all, is the central task of regulatory takings law.)

The inherently unstable relationship between public and private property rights reflects the dynamic nature of a positivist legal system of property. Yet, even acknowledging this dynamism, the relative balance of public and private interests in natural resource commons is so differentiable from the balance in conventionally autonomous property that it is disingenuous to treat them as though they are the same. In the latter case, the private owner often holds most of the sticks, and the community may hold only a few. By contrast, in public natural resource commons, the community often holds nearly all of the sticks, and the private owner may hold only a few.

For that reason, when private claims for property in public commons resources are subjected to a constitutional takings analysis, that analysis should heed the fact that those rights are themselves contingent on countervailing public rights that also deserve protection. They should not be treated as though they exist on par with a private right in fee simple to a home. The analysis must be more nuanced, and it must appreciate the independent value of public rights in property, which are typically undervalued in resource commons. Alleged takings of private rights in natural resource commons may require a balancing test that explicitly reduces the weight of the claim in proportion to the uncertainty associated with the private interest and the force of the countervailing public interest—as is proposed in Part IV.

### *C. Private Rights in Public Commons: Water and Grasslands*

The unresolved nature of private interests in public resource commons is especially apparent in the complex context of water allocation law, where disentangling overlapping private and public rights can be difficult. Similar issues arise in the context of grazing permits on Bureau of Land Management or U.S. Forest Service lands, where rights of use and access to grasslands and water resources intersect. These difficult public-private conflicts over water commons provide a paradigmatic example of our unresolved understanding of how public and private rights intersect in the natural resource commons.<sup>358</sup>

In contrast to many other areas of natural resources law, water law has long recognized that water rights cannot be treated the same as conventional real property rights, because—in contrast to land, from which an owner can exclude her competitors if she wants—water moves through multiple, competing claims of right during its cyclical journey from sky to sea. The

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<sup>358</sup> For an excellent overview of water and grazing related taking cases and why they are so difficult, see Owen, *supra* note 87, at 626-31.



same water that flows through a farm upstream may later flow through a downstream hydropower dam, may have provided critical habitat further upstream the day before, and may end up in the potable reservoir for a municipality, all before it is ultimately discharged into a large lake or ocean, where it becomes the medium for fishing, swimming, and navigation.<sup>359</sup> So, at any moment in time, who actually “owns” that water?

The impossibility of answering that question is why water rights are considered a usufruct—a right of use, rather than a right of possession<sup>360</sup>—which should rightly trigger a different quality of takings protection than the right to possess a home against random government expropriation.<sup>361</sup> Indeed, before we can meaningfully apply any takings constraints to water rights, we must establish the precise contours of the right at issue—what it is, exactly, that the claimed right entitles the holder.

Yet even that turns out to be a vexingly difficult question. Is it a right to the delivery of a set amount of water, notwithstanding drought, or any other claimed uses, or emergency conditions?<sup>362</sup> Is it an entitlement to a set percentage of available supply, in which all users share whatever shortages might arise?<sup>363</sup> To a reasonable amount, as qualified by the reasonable claims of others drawing from the same waterway?<sup>364</sup> As qualified by the reasonableness of the beneficial use to which the holder puts it?<sup>365</sup> As qualified

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<sup>359</sup> See, e.g., Joseph Sax, *Proceedings of the 2001 Symposium on Managing Hawaii's Public Trust Doctrine*, 24 U. HAW. L. REV. 21, 24 (2001) (discussing the water cycle and continuum of uses and characterizing water as “first and foremost a community resource whose fate tracks the community’s needs as time goes on”).

<sup>360</sup> *Id.*

<sup>361</sup> See *supra* notes 252–264 and accompanying text for a fuller discussion of how different courts have considered the issue of the extent of takings protection owed to different kinds of water rights.

<sup>362</sup> See, e.g., *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl 313, 314–16 (2001) (holding in favor of California irrigators who had brought a takings claim after water delivery under state and local contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act).

<sup>363</sup> See, e.g., THE AM. SOC’Y OF CIV. ENG’RS, THE REGULATORY RIPARIAN MODEL WATER CODE § 1R-1-05 (1997) (“The State, in the exercise of its sovereign police power to protect the public interest in the waters of the State, undertakes to provide, through this Code, an orderly strategy to allocate available water efficiently and equitably in times of water shortage of water emergency.”).

<sup>364</sup> See, e.g., *Mason v. Hoyle*, 56 A. 255, 788–89 (Conn. 1888) (listing factors for courts to consider in determining the correlative reasonableness of multiple uses on a stream).

<sup>365</sup> See, e.g., RESTATEMENT (SECOND) OF TORTS § 850A (AM. L. INST. 1979) (supplementing traditional factors with forth more modern, utilitarian concerns for courts to consider in determining reasonable uses of a stream).

by the background principles of law that protect underlying public interests in the waterway or in uses of water?<sup>366</sup> Or to something else entirely?

These fundamentally different ways of defining the underlying rights that private parties can hold in water send us down entirely different analytical pathways when applying takings protections under the Fifth Amendment. If you believed that your water right entitled you to a set amount regardless of the circumstances, you would be much more likely to bring a takings claim if that water were not delivered, say, because it had been left instream to preserve endangered fish habitat during a drought.<sup>367</sup> But if the right is properly understood to be at least partially contingent on exogenous factors, such as unfavorable climatic conditions, correlative rights in the same water resource, conflicting legal obligations, or background principles that assign public rights precedence in certain cases—then that takings claim is less likely to emerge—let alone to succeed—because it is less clear what you were entitled to in the first place.<sup>368</sup> Alternatively, it may be quite clear that you were entitled to less.

Further complicating the picture, some judges have encountered difficulty determining the appropriate frame of analysis for claims of water takings: whether to view them as a physical taking (of water that is not delivered) or a regulatory taking (of a private right holder's expected economic benefit when water delivery is altered by public regulation).<sup>369</sup> In the case of water takings, the regulatory taking frame can actually be more protective of countervailing public environmental interests, because virtually all established physical takings will require compensation under conventional

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<sup>366</sup> See *infra* note 411 and accompanying text; see also Ryan, *A Short History*, *supra* note 283, at 171-73 (discussing the use of the public trust doctrine as a background principle defense in takings litigation).

<sup>367</sup> This metaphor is most persuasive if imagined in a western state that assigns appropriative rights to water. These rights are generally assigned based on temporal priority and thus preempt conflicting claims materializing later. However, even appropriative rights are subject to the constraints of the beneficial use doctrine, and increasingly, to modern public interest criteria, all of which belie the assumption that water rights entitle a set amount no matter what. Cf. Christine Klein, Mary Jane Angelo & Richard Hamann, *Modernizing Water Law: The Example of Florida*, 61 FLA. L. REV. 403, 406-09 (2009) (contrasting water law in eastern versus western states and discussing prior appropriations).

<sup>368</sup> See Erin Ryan, Palazzolo, *The Public Trust, and the Property Owner's Reasonable Expectations: Takings and the South Carolina Marsh Island Bridge Debate*, 15 SE. ENV'T L.J. 121, 132-33 (2006) [hereinafter Ryan, Palazzolo, *The Public Trust*] (discussing the "no-stick-taken" theory of cabining an owner's reasonable expectations in takings litigation involving public trust commons).

<sup>369</sup> See, e.g., Patashnik, *supra* note 8, at 365-67 (noting the distinction courts have made between physical takings and regulatory takings). Compare *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 314-16 (2001) (upholding a physical takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act) with *Klamath Irrigation Dist. vs. United States*, 67 Fed. Cl. 504, 538 (2005) (rejecting the result and criticizing the logic in the *Tulare Lake Basin* case).

takings principles, regardless of the public interest served. However, if the failure to deliver water is analyzed as a regulatory taking, then the reasonableness of the owner's expectations of receiving an entitlement to water may be tempered by factors such as drought, competing water rights, and preemptive background principles—such as the law of nuisance, statutory constraints, or the public trust doctrine.<sup>370</sup> Yet which principles constitute said background remains hotly contested. As professor Nestor Davidson has aptly observed, “[t]he issue of the mechanism through which state restrictions on property become background principles essentially recapitulates the question of property as a pre- or post-political institution.”<sup>371</sup>

Of note, relevant background principles can be significant in both a physical and regulatory takings analysis, even though there are more opportunities for their engagement in the regulatory takings context. Under either analysis, delineating the underlying property right is a threshold question, and a background principle that limits the scope of claimable rights may be determinative on the front end. Still, the regulatory takings analysis offers more ways to consider these factors, which are relevant not only to the scope of the underlying property right but also to the nature of the government's action and the reasonableness of the owner's expectations of use.<sup>372</sup> The problem, as demonstrated below, is that some judges continue to adjudicate takings cases as though these background factors are *not* relevant to the scope of the underlying right, even though they should be—arguably because these judges are operating from the property theory bias critiqued here, which over-privileges private extractive rights within public commons.

On these very grounds, different jurists have come to spectacularly contradictory conclusions about how to analyze takings issues associated with water rights—even on the basis of the same facts and law. For example, in *Franco-American Charolaise, Ltd. v. Oklahoma Water Resources Board*, the justices of the Oklahoma Supreme Court famously disputed the nature of the private and public interests in water resources when assessing the constitutionality of a legislative effort to enact a more efficient water

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<sup>370</sup> See, e.g., John D. Echeverria, *The Public Trust Doctrine as a Background Principles Defense in Takings Litigation*, 45 U.C. DAVIS L. REV. 931, 934-42 (2012) (discussing the use of the public trust doctrine as a background principle in takings litigation); Ryan, Palazzolo, *The Public Trust*, *supra* note 368, at 132-34 (analyzing the use of nuisance doctrine in takings litigation).

<sup>371</sup> Nestor M. Davidson, *Standardization and Pluralism in Property Law*, 61 VAND. L. REV. 1597, 1661 (2008) [hereinafter Davidson, *Standardization*].

<sup>372</sup> See Patashnik, *supra* note 8, at 365-67 (examining the different ways that takings claims can be analyzed). Note that the physical taking must still be *established*; under any takings analysis, a threshold question is what the underlying property right is, and if background principles limit the scope of that right, that has importance for a physical takings analysis as well as a regulatory takings analysis.

allocation statute.<sup>373</sup> As the only state supreme court decision holding the legislative abolition of unexercised riparian rights a Fifth Amendment taking,<sup>374</sup> the *Franco-American* case is a notorious outlier in American water law.<sup>375</sup> After two separate hearings and tumultuous political uproar, the case's final resolution took several years and has been arguably nullified by subsequent political and judicial developments (none of which resolved the justices' core dispute).<sup>376</sup> Nevertheless, the robust colloquy between the different judges on the Oklahoma Supreme Court in discussion of the issues demonstrates both the underlying dilemma of property theory and its practical consequences for natural resources law. Although the case is not representative of how American courts have handled the issue of water takings, it is representative of the unsettled variety of viewpoints that many judges and advocates hold with regard to the nature of private rights within larger public commons.

### 1. Property Theory in Context: Water Takings in Oklahoma

In 1990, the Oklahoma Supreme Court reviewed the state legislature's attempt to more efficiently allocate scarce water resources by abolishing "unexercised riparian rights."<sup>377</sup> Roughly speaking, unexercised riparian rights are optional rights that waterfront owners hold to make new withdrawals from the adjacent stream in the future—for uses that these

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<sup>373</sup> See *Franco-American Charolaise, Ltd. v. Okla. Water Res. Bd.*, 855 P.2d 568, 574-75 (Okla. 1990) (adopting the reasonable use doctrine instead of the natural flow doctrine with regards to riparian rights).

<sup>374</sup> See *id.* at 577 ("We, therefore, hold that the 1963 water law amendments are fraught with a constitutional infirmity in that they abolish the right of riparian owners to assert their vested interest in the prospective reasonable use of the stream").

<sup>375</sup> Most other states have allowed the legislative abolition of unexercised riparian rights, concluding that doing so did not raise constitutional concerns. See JOSEPH L. SAX, BARTON H. THOMPSON JR., JOHN D. LESHY & ROBERT H. ABRAMS, *LEGAL CONTROL OF WATER RESOURCES* 401 (6th ed. 2018) (reviewing all the states who have taken this approach). The California Supreme Court's decision in *Lux v. Haggin*, 4 P. 919, 923-24 (Cal. 1886), was also an outlier in the American West, holding that riparian rights constituted protectable property rights, though not in the context of reviewing a legislative act. Still, the court's holding led to the complexity of California's hybrid water law, which incorporates both western appropriative water rights and eastern riparian rights, with an algorithm to adjudicate between them—in contrast to nearly every other western state's adoption of a more pure prior appropriations doctrine. See Ryan, *A Short History*, *supra* note 283, at 187-92 (describing the different rights regimes that states have incorporated into their water rights laws).

<sup>376</sup> Gary D. Allison, *Oklahoma Water Rights: What Good Are They?*, 64 OKLA. L. REV. 469, 489-91 (2012) (providing procedural and historical background on *Franco-American* and its consequences, and reporting that the law it held unconstitutional remained on the books afterward for an extended period of years over which the decision remained unpublished).

<sup>377</sup> See *Franco-American Charolaise*, 855 P.2d at 575-76 (holding that state statutes did not abrogate the common law right to reasonable use of the stream).

owners have, to the present time, not previously made.<sup>378</sup> Most states reviewing such statutes had approved them,<sup>379</sup> but controversially, the Oklahoma Supreme Court found that the state statute effected a taking of the waterfront owners' water rights by eliminating the potential for these future claims.<sup>380</sup> Five justices concurred in the result, but the other four issued three vigorous dissents, each maintaining that the contingent and correlative nature of riparian rights, and especially unexercised riparian rights, warranted a more nuanced takings analysis.<sup>381</sup>

In *Franco-American Charolaise, Ltd. v. Oklahoma Water Resources Board*, Justice Opala explained in his majority opinion that the issue was whether the state legislature could structure a water allocation system that, without compensation, curtailed riparian owners' rights to make new economic uses of scarce stream water.<sup>382</sup> To the majority, the simple constitutional analysis proceeded in five discrete steps: (1) the Oklahoma Constitution protects private property from being taken for public use without just compensation; (2) private property includes "every valuable interest which can be enjoyed and recognized as property;" (3) whether created by common law, statute, or contract, "a 'vested right' . . . to do certain actions or possess certain things . . . is substantially a property right;" (4) once created, that property right "becomes absolute, and is protected from legislative invasion;" ergo (5) the common law riparian right to future, unquantified use of stream water is a property right protected by the state's Takings Clause.<sup>383</sup>

Justice Opala's absolutist definition of property here highlights the failure of this strain of property theory to confront the inherent limits of private

<sup>378</sup> See *id.* at 571 (explaining the nature of the riparian right recognized by the court).

<sup>379</sup> See, e.g., *In re Hood River*, 227 P. 1065, 1071 (Or. 1924), *appeal dismissed*, 273 U.S. 647 (1926) (holding that water could be appropriate where the act is done with reasonable diligence following notice of appropriation); *Cal.-Or. Power Co. v. Beaver Portland Cement Co.*, 73 F.2d 555, 568-69 (9th Cir. 1934), *aff'd on other grounds*, 295 U.S. 142, 152-33 (1935) (holding an act allowing for appropriation of water for beneficial use constitutional); *Baumann v. Smrha*, 145 F. Supp. 617, 624-25 (D. Kan. 1956), *aff'd*, 352 U.S. 863 (1956) (limiting the scope of a vested right in waters to those appropriated and applied to beneficial use); *Belle Fourche Irrigation Dist. v. Smiley*, 176 N.W.2d 239, 246 (Idaho, 1970) ("Water flowing in definite streams of the state may be appropriated through proper administrative procedure, subject to *vested rights* and prior appropriations."); *In re Water Rts. of Guadalupe River Basin*, 642 S.W.2d 438, 444 (Tex. 1982) ("We hold that, after notice and upon reasonable terms, the termination of the riparians' continuous non-use of water is not a taking of their property.").

<sup>380</sup> See *Franco-American Charolaise*, 855 P.2d at 570 (declaring the nature of the riparian right that cannot be divested).

<sup>381</sup> See *id.* at 582-83 (Lavender, Vice C.J., concurring in part and dissenting in part) (describing the majority's takings analysis as "flawed").

<sup>382</sup> See *id.* at 576 ("The issue here is whether the legislature can validly abrogate the riparian owner's right to initiate non-domestic reasonable uses in stream water without affording compensation.").

<sup>383</sup> *Id.*

interests in public commons. Note how this broad conception of property rights—encompassing not only rights to “possess certain things” but also rights “to do certain actions”—sets the stage for the takingsification of much more than just conventionally land-rooted property. It potentially extends takings protections not only to usufructuary rights in natural resource commons, like waterways, but potentially to entitlements to participate in activities relating to property, receive certain benefits, and unimaginably more things that may be subject to vulnerable regulation. Indeed, this overbroad conceptualization inspired a pointed critique from Vice Chief Justice Lavender, who took issue with the majority’s analysis of the legislation, the legislative role in adjudicating water rights, and most significantly, its analysis of the property interest in the riparian right itself.

Writing for the other three justices, Justice Lavender maintained that the majority had fundamentally misunderstood the nature of the water rights at issue, essentially by wrongly analogizing to rights in conventionally autonomous forms of property.<sup>384</sup> He argued that the majority failed to recognize the contingent nature of private rights asserted in the public water commons.<sup>385</sup> Even if we presume them to be vested property rights, he reasoned, such rights may still be subject to reasonable limitations, and even forfeiture, when the right itself is inherently contingent on built-in structural limitations—such as the general requirement that water claimed by a private user be put to “reasonable and beneficial use.”<sup>386</sup> While these limitations may be repugnant to conventional fee simple rights in realty, he explained, they have always been familiar to usufructuary rights, like riparian rights.<sup>387</sup> On this basis, he critiqued the majority’s takings analysis, comparing the legislation limiting unexercised riparian rights to zoning regulations, which permissibly limit open-ended rights to use property however owners wish to protect public values.<sup>388</sup>

Justice Reif wrote separately to dispute the assumption that a riparian right can even be legitimately treated as a “vested” right, emphasizing that “the riparian right was as fluid as the water it represented and, indeed,

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384 *Id.* at 583 (Lavender, Vice C.J., concurring in part and dissenting in part) (“This mistake of the majority is particularly egregious because it wholly ignores the virtually admitted fact that neither riparians or appropriators *own* the water they are being allowed to use.”).

385 *Id.* at 582-83 (contending that future riparian use of an unknown quantity is not a vested right).

386 *Id.*

387 *Id.* at 584 (explaining that such riparian use was never a vested right that would warrant just compensation for an alleged taking).

388 *Id.* at 582-83 (contending the majority’s approach to its taking analysis is flawed, and that the statute at issue here is more analogous to a zoning regulation than a taking).

expanded or contracted based upon changing conditions and needs.”<sup>389</sup> He argued that “[p]rospective or future uses by riparians have not been recognized or treated as ‘vested’ any more than the riparian right itself has been treated as an absolute right of property.”<sup>390</sup> It is a serious critique, given that the defining feature of the riparian right itself is its correlative nature: in the original English common law tradition still followed in the Eastern United States, all riparian’s rights to use water are inherently limited by the rights of other riparians along the stream.<sup>391</sup> One cannot even know the extent of one’s own riparian rights to the use of a waterway without first considering all the other legitimate uses of the same waterway. The private claim is inherently uncertain, undefinable except in relation to the claims by the rest of the community.

The dissenting views in *Franco-American Charolaise* recognize the intersection between public and private interests in water resources and the resulting contingency of these rights when analyzed in the context of a takings challenge. The correlative nature of water rights and the comparatively constrained force of usufructuary rights distinguishes claims for private property in water and other public natural resource commons from more conventional claims to private property, such as residential real estate. Nevertheless, decisions that apply conventional autonomous property rights analyses to water rights, like Justice Opala’s, expand the takingsification phenomenon from property law to environmental law contexts. They weaken protection for public rights in natural resource commons by eliding their place in the balance, and by making legitimate environmental regulation more vulnerable to challenge.

*Franco-American Charolaise* may be a contender for the most banana-republic American state supreme court case of all time. In his compelling history of the case, Gary Allison reports that the 1963 statute held unconstitutional in the case nevertheless remained on the books afterward, and that the court’s decision remained unpublished and unreported for many years thereafter.<sup>392</sup> The supreme court remanded the case to the trial court for a riparian rights reasonableness determination, but the lower court was uncomfortable with the analysis, so it remanded to the state Water Resources Board—which also declined to do the analysis, on grounds that it could only

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<sup>389</sup> *Id.* at 596 (Reif, Special J., concurring in part and dissenting in part) (disagreeing with the view that a riparian has a vested right to “initiate any reasonable use at any time”).

<sup>390</sup> *Id.*

<sup>391</sup> *Cf. Movrich v. Lobermeier*, 905 N.W.2d 807, 813-14 (Wis. 2018) (summarizing the history of common law riparian rights).

<sup>392</sup> *See Allison, supra* note 376, at 490-91 (reporting that the 1963 law the court held unconstitutional remained on the books, and that the decision remained unpublished for many years thereafter).

interpret the legislative statute, which still remained on the books.<sup>393</sup> When the city whose rights were at issue resubmitted its petition after losing the case, the petition was granted, notwithstanding the supreme court's contrary decision.<sup>394</sup> Allison further reports that lower courts did not follow the supreme court's holding, but the high court declined to hear any of these conflicting cases, offering flimsy procedural reasons to avoid them.<sup>395</sup> This bizarre outcome probably reflects many factors, but a central one was the underlying difficulty the justices experienced for lack of a working legal framework to distinguish the public and private interests in the public natural resource commons of water.

*Franco-American Charolaise* also exemplifies the lasting impacts that state court natural resource commons decisions can have on the takingsification problem. Most water law litigation—and much natural resource litigation more generally—is governed by state law, so interpretations by a state's highest court will redound much farther than decisions by a federal court.<sup>396</sup> Moreover, federal law often borrows from state law concepts of property, so state law decisions interpreting property can be determinative in the development of takings doctrine in both state and federal court.<sup>397</sup> Judges, advocates, and policymakers should all appreciate the importance of their role in helping to shepherd the ongoing common law development of public commons property concepts through this kind of litigation in the state courts.

## 2. Water Takings and the Public Trust Doctrine

Related conceptual debates are playing out among federal and state courts assessing takings challenges to water regulations that implicate the public trust doctrine. In particular, the Federal Court of Claims and the Federal Circuit have applied autonomous property rights analyses in water takings cases, treating rights in water commons as tantamount to conventional private rights in real property.<sup>398</sup> Often, the issue arises when a plaintiff challenges

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<sup>393</sup> *Id.*

<sup>394</sup> *Id.* at 474 n.12 (describing the subsequent procedural history).

<sup>395</sup> *Id.* at 491-96.

<sup>396</sup> See, e.g., Werner F. Grunbaum & Lettie M. Wenner, *Comparing Environmental Litigation in State and Federal Courts*, 10 PUBLIUS 129, 131 (1980) (supposing that limited federal resources result in increased state-level enforcement of environmental laws).

<sup>397</sup> See e.g., *United States v. Causby*, 328 U.S. 256, 262-63 n.7 (1946) (citing state court decisions in deciding how government use of airspace above land affects a takings analysis).

<sup>398</sup> *Tulare Lake Basin Water Storage Dist. v. United States*, 49 Fed. Cl. 313, 324 (Fed. Cl. 2001) (upholding a takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act); *Casitas Mun. Water Dist. v. United States*, 103 Fed. Cl. 442, 477 (Fed. Cl. 2011) (dismissing a water rights takings claim by a California irrigator that was itself required to create fish passage



government action alleged to take private water rights.<sup>399</sup> Increasingly, however, the issue arises when public entities defend against private takings challenges to their regulations of waterways that implicate the public trust doctrine, which sets forth public rights in navigable waterways.

In these contexts, the water takings issue intersects with the related legal debate over whether the public trust doctrine legitimately operates as a “background principle” of state law that can provide a defense to takings liability for environmental regulations that substantially interfere with economic use.<sup>400</sup> As discussed in Part I,<sup>401</sup> environmental regulations that interfere with all economic use of property are considered per se takings—*unless* the obstructed use is one that the owner never had the right to engage in the first place, according to the background principles of state property law.<sup>402</sup> Many environmental regulations limiting development in coastal or wetland areas are vulnerable to this kind of takings challenge, and the state and local governments defending them have increasingly turned to the public trust doctrine to preserve their ability to maintain these protections.<sup>403</sup>

Inherited from the oldest common law traditions, the public trust doctrine secures public rights in certain natural resource commons—most patently navigable waterways—ranging from traditional rights of fishing and navigation to modern interests in environmental protection.<sup>404</sup> The public interests protected by the doctrine can conflict with asserted private rights either to withdraw water itself or to exclude the public from access to a waterway,<sup>405</sup> and the issue often arises in litigation over environmental

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lanes to satisfy the Endangered Species Act in an opinion by the same judge who decided Tulare Lake Basin).

<sup>399</sup> For examples, see note 398. For a discussion of the treatment of background principles in taking claims, see notes 367–371 and accompanying text.

<sup>400</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1019 (1992) (holding that a taking occurs when an owner must give up all economically beneficial uses for the sake of the “common good”).

<sup>401</sup> For a discussion of the background principle exception to the “economic wipeout” per se takings rule, see notes 89–91.

<sup>402</sup> *Lucas*, 505 U.S. at 1027–30; see also *Palazzolo v. Rhode Island*, 533 U.S. 606, 629 (describing the Court’s observation in *Lucas* that “a landowner’s ability to recover for a government deprivation of all economically beneficial use of property is not absolute but instead is confined by limitations on the use of land which ‘inhere in the title itself’” (citing *Lucas*, 505 U.S. at 1029)).

<sup>403</sup> See, e.g., *Echeverria*, *supra* note 370, at 931–34 (addressing the use of the public trust doctrine as a defense to takings claims through analysis of two cases involving federal endangered species protection regulations); Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future*, 45 U.C. DAVIS L. REV. 665, 682–84 (2012) (discussing the mostly unsuccessful efforts of private landowners “to defeat public trust-based claims advanced by government and environmental interests”).

<sup>404</sup> See Ryan, *A Short History*, *supra* note 283, at 137–140 (tracing the history of the public trust doctrine from Roman common law to modern U.S. policy).

<sup>405</sup> See, e.g., *Nat’l Audubon Soc’y v. Superior Ct.*, 658 P.2d 709, 712 (Cal. 1983) (concluding that the public trust doctrine prevented the creation of appropriative water rights in a water allocation dispute between environmental advocates and private appropriators); Ill. Cent. R.R. v.

regulations that frustrate private economic use.<sup>406</sup> An aggrieved private owner may seek relief by challenging the regulation under the per se rule that finds an automatic taking whenever a regulation obstructs all economic use.<sup>407</sup> When they do so, however, government defendants increasingly assert the public trust doctrine as a “background principle” of state law, shielding themselves under the exception to this per se rule.<sup>408</sup>

States have invoked the public trust doctrine to defend restrictions on construction in tidelands and wetlands, regulations requiring public access to waterways, and policies that interfere with private water rights, arguing that the doctrine’s longstanding protections of instream uses on navigable waterways prevent the formation of reasonable expectations that private rights may be exercised in ways that interfere with protected public uses.<sup>409</sup> These arguments pointedly reject the conventionally autonomous private rights approach in the inapposite context of public waterway commons, in which private and public rights have always been interdependent.

Indeed, in the majority of these cases, including decisions in South Carolina, New Jersey, and the Ninth Circuit, courts have affirmed the public trust doctrine as an available defense to takings liability.<sup>410</sup> The Federal Court of Claims has taken a more skeptical view, on grounds that the protected trust uses alleged by the federal government do not necessarily override competing interests in the private use of scarce water resources.<sup>411</sup> Like the dissensus on

Illinois, 146 U.S. 387, 436-37 (1892) (concluding that the doctrine prevented alienation of the public trust encumbered waterway in a dispute involving the transfer of public submerged lands to a private party).

<sup>406</sup> See e.g., Echeverria, *supra* note 370, at 931-34 (discussing two controversial cases in which the public trust doctrine was used as a defense against statutory environmental regulation).

<sup>407</sup> See *supra* notes 89-91 and accompanying text (discussing the “economic wipeout” per se takings rule).

<sup>408</sup> See *id.* (discussing the background principle exception).

<sup>409</sup> See Erin Ryan, *From Mono Lake to The Atmospheric Trust: Navigating the Public and Private Interests in Public Trust Resource Commons*, 10 GEO. WASH. J. ENERGY & ENV’T L. 39, 45 & 45 nn.75-79 (2019) (discussing *Illinois Central*, which established the public trust doctrine as a background principle of state law which could defend against takings claims).

<sup>410</sup> See e.g., *Esplanade Props. v. City of Seattle*, 307 F.3d 978, 986 (9th Cir. 2002) (affirming the city’s refusal to allow construction of residences on an elevated platform above tidelands, because the public trust doctrine vitiated the owner’s entitlement to build there); *McQueen v. S.C. Coastal Council*, 580 S.E.2d 116, 120 (S.C. 2003) (holding that the public trust doctrine properly blocked tidelands development without compensation, even when the lands at issue became submerged after the owner took title); *Nat’l Ass’n of Home Builders v. N.J. Dep’t of Env’t Prot.*, 64 F. Supp. 2d 354, 358 (D.N.J. 1999) (rejecting a takings challenge to a state agency rule requiring developers of waterfront property to provide walkways along the water because the public trust doctrine prevents owners from claiming any entitlement to exclude).

<sup>411</sup> *Casitas Mun. Water Dist. v. United States*, 102 Fed. Cl. 443, 461 (2011) (Weise, J.) (“[W]hile defendant has made a compelling case that California is concerned with the preservation of the steelhead, it has failed to show that the fish protection aspect of California’s public trust doctrine is superior to other competing interests, including Casitas’s use of the water.”); *Tulare Lake Basin*

the Oklahoma Supreme Court, these divergent cases highlight the unsettled state of property law theory regarding public and private rights in natural resource commons, especially water commons, and the appropriate relationship between them.

### 3. Grazing Takings

While the water takings cases offer the most patent examples of the problems posed by this underdeveloped aspect of property theory, the same challenges for assessing private rights in public commons arise for other natural resources, such as public grazing commons. A series of disputes over alleged takings in this context, often intertwined with water claims, demonstrates how individuals use private interests granted within a public commons to carve out protectable property rights from related natural resources. The grazing takings disputes also illustrate how adjudicators wrestle with the legitimacy of these claims on the basis of conflicting approaches to property theory.

In these cases, private plaintiffs have attempted to bring takings claims for public interference with grazing and stock watering rights that they argue should be protected by the Takings Clause as stringently as if they were rights to conventional autonomous property.<sup>412</sup> The connection between grazing rights and water rights make these cases challenging for litigants and adjudicators, but it reflects the complex web of public and private interests at stake in public lands commons, which typically involve grasslands, water, wildlife, habitat, ecosystem services, and other natural resources that serve competing values depending on whether they are extracted or left in place.<sup>413</sup>

Like the water takings cases, the grazing takings cases demonstrate that individual adjudicators are following different paths of reasoning in assessing these complex claims, implicitly relying on different theoretical frameworks. While courts have generally agreed that grazing permits (like fishing permits)

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*Water Dist. v. United States*, 49 Fed. Cl. 313, 322 (2001) (Weise, J.) (rejecting the state's public trust "background principle" defense against a takings claim by California irrigators after water delivery under a state contract was temporarily suspended while the state complied with restrictions under the Endangered Species Act). *But see* *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1297 (Fed. Cir. 2008) (Mayer, J., dissenting in part) (disagreeing with the reasoning in the majority's decision to dismiss a takings claim on grounds that the plaintiff "[did] not own the water in question because all water sources within California belong to the public" and thus "likely" had "no takings claim"). For further discussions on these cases, see *supra* note 312.

<sup>412</sup> Owen, *supra* note 87, at 627-28.

<sup>413</sup> For additional scholarly analysis of grazing claims, see generally Pappas, *Disclaiming Property*, *supra* note 240, which discusses disclaimed property interests, and Owen, *supra* note 87, which discusses grazing takings claims.

do not create property rights for takings purposes,<sup>414</sup> there has been dissensus among Federal Court of Claims judges on how they intersect with water rights that are contingent on grazing rights.<sup>415</sup> The Federal Circuit appellate judges have followed an approach that appropriately cabins the related sets of private interests, correcting lower court judges that have treated contingent private rights too much like their more autonomous counterparts.<sup>416</sup> Even so, the resulting jurisprudence highlights the confusion that can arise even among professional adjudicators on how to assess different private rights in public commons. This confusion will likely fuel future efforts by litigants to press for even stronger legal protection for even weaker forms of private rights in public commons, further facilitating privatization.

In *Estate of Hage v. United States*, for example, courts took several passes at a complex fact pattern before the Federal Circuit ultimately reversed a lower court's award of Fifth Amendment compensation to ranchers whose permits to graze livestock on federal land had been curtailed.<sup>417</sup> The plaintiffs were ranchers who held grazing permits and water rights associated with the Toiyable National Forest in Nevada, but the Forest Service eventually revoked the grazing rights after years of skirmishing over repeated trespassing violations and unauthorized grazing in protected elk habitat.<sup>418</sup> The ranchers eventually ceased cooperating with the Forest Service and no longer sought the required special use permits when they cut trees to maintain stock watering ditches, claiming they believed they no longer needed such permits.<sup>419</sup> When the Forest Service finally canceled 38% of their grazing permits and suspended access to certain lands for five years, the ranchers sued, alleging a taking.<sup>420</sup>

On four separate occasions over twenty years of litigation, the Court of Federal Claims affirmed that the revocations of grazing permits could not support this claim, because the permits granted a mere license, and not a property right protected by the Fifth Amendment. But these cases came with a series of twists and turns in legal reasoning to interpret the nature of the private rights at issue and their correlative relationships with public rights in

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<sup>414</sup> See Pappas, *Disclaiming Property*, *supra* note 240, at 402-03 ("[C]ourts have consistently held that the property disclaimers are valid and that grazing permits create no compensable property interest . . . . [G]razing permits can be revoked or modified without compensation.").

<sup>415</sup> See Owen, *supra* note 87, at 627-31 (explaining the various approaches the Court of Claims has taken to the contention that infringement upon grazing rights can effect a taking of water rights).

<sup>416</sup> See *e.g.*, *Colvin Cattle Co. v. United States*, 468 F.3d 803, 807-08 (Fed. Cir. 2006) (distinguishing the right to water from the privilege to graze).

<sup>417</sup> *Estate of Hage v. United States*, 82 Fed. Cl. 202, 216 (2008), *judgment entered*, 93 Fed. Cl. 709 (2010), *rev'd in part, vacated in part*, 687 F.3d 1281, 1292 (Fed. Cir. 2012).

<sup>418</sup> *Estate of Hage v. United States*, 687 F.3d 1281, 1283-84 (Fed. Cir. 2012).

<sup>419</sup> *Id.* at 1285.

<sup>420</sup> *Id.* at 1284-85.

the larger natural resource commons. In 1998, early in the saga, one lower court judge found that the ranchers held a protectable right-of-way over a ditch (the ground traversed by the water and extending fifty feet on either side) based on the 1866 Mining and Ditch Rights Act, together with a limited right to forage as a component of their vested water rights.<sup>421</sup> Despite this victory, and prior to later review of that decision, the ranchers recentered their claims on other legal protections for related water rights that they hoped would prove stronger.

The ranchers tapped into the legal complexities of water rights to advance their claims by alleging that the Forest Service revocation of their grazing rights had taken not only that property, but also their water rights—because losing access to the grazing lands caused them to forfeit stock watering rights that can be maintained only if consistently put to use.<sup>422</sup> The ranchers claimed state-based water rights under Nevada law for the purpose of watering their cattle, which they had appropriated based on the access they had been granted to waterways on rangelands enabled by the revoked federal grazing permits.<sup>423</sup> Under state law prior appropriations doctrine, water rights must be consistently used for the specific beneficial purpose for which they are granted—here stock watering—or the rights automatically forfeit back to the state.<sup>424</sup>

In the first iteration of this claim, the chief judge on the Federal Court of Claims upheld the takings claim against the government's motion for summary judgment.<sup>425</sup> He acknowledged prior decisions holding that grazing permits were revocable licenses that did not create Fifth Amendment property rights in rangeland, but he allowed for the possibility of a takings claim based on the relationship of these federally granted grazing rights to state-law based water rights.<sup>426</sup> Because the loss of these water rights was due to the cancellation of the grazing permits, the chief judge concluded that the Forest Service might be obligated to compensate the plaintiffs for their loss.<sup>427</sup>

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<sup>421</sup> *Hage v. United States*, 42 Fed. Cl. 249, 250-51 (Fed. Cl. 1998), *rescinded in part*, 51 Fed. Cl. 570 (Fed. Cl. 2002).

<sup>422</sup> *Hage v. United States*, 35 Fed. Cl. 147, 172 (Fed. Cl. 1996).

<sup>423</sup> *Id.* at 172-73.

<sup>424</sup> *Hage v. United States*, 51 Fed. Cl. 570, 577 (Fed. Cl. 2002).

<sup>425</sup> *Hage*, 35 Fed. Cl. at 171.

<sup>426</sup> *Id.* at 163.

<sup>427</sup> *Id.* 175-76 (1996); *see also* *United States v. Estate of Hage*, No. 07-cv-01154, 2011 WL 1882366, at \*4 (D. Nev. 2011) ("In [2003], the Court of Federal Claims denied the United States' motion for partial summary judgment as to the takings claims, noting that the water and ditch rights predated the grazing permit system, and that the lack of a grazing permit did not destroy rights attendant to those rights.").

In the next iteration of the litigation, the judge clarified that the rancher's property interests included water rights stemming from stock watering, the 1866 Act ditches, rights-of-way on either side of these ditches, and other rights associated with waters flowing from federal lands to the ranchers' patented lands—but he concluded that the rancher's grazing permits could not give rise to a taking claim.<sup>428</sup> Then in 2008, the same judge decisively found both a physical and regulatory taking of these water rights.<sup>429</sup> He accepted the ranchers' argument that the regulatory and physical closures of previously open public lands had prevented them from exercising the beneficial use required to maintain their private water rights, and that the resulting forfeiture required compensation as a taking.<sup>430</sup>

On appeal, the Federal Circuit rejected all of the takings claims associated with these facts, together with the lower court's reasoning, finding the regulatory claims unripe and the physical claims either untimely or otherwise flawed,<sup>431</sup> though it did suggest that the plaintiffs might have been able to articulate a physical taking of water rights had the facts been different.<sup>432</sup> However, the same questions over the relationship between grazing rights, water rights, and takings claims resurfaced four years later, when the same parties litigated a series of federal trespass allegations in the Ninth Circuit.<sup>433</sup> In this iteration, the Court of Appeals for the Ninth Circuit roundly rejected the ranchers' takings claims and criticized reasoning by previous courts that would have entertained them, clarifying that the termination of water rights based on the revocation of supporting grazing rights was "irrelevant"—because grazing rights on federal lands have always required a permit or other authorization that is, by its very nature, a revocable and uncertain interest (and one which cannot create stronger rights than it confers).<sup>434</sup>

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<sup>428</sup> *Hage*, 51 Fed. Cl. at 581-88.

<sup>429</sup> *Estate of Hage v. United States*, 82 Fed. Cl. 202, 210-13 (Fed. Cl. 2008), *rev'd in part, vacated in part*, 687 F.3d 1281 (Fed. Cir. 2012).

<sup>430</sup> *Id.*

<sup>431</sup> *Estate of Hage*, 687 F.3d at 1291-92 (Fed. Cir. 2012) ("The Hages have not met their burden because the evidence demonstrates only that they constructed or maintained the improvements on the federal lands, not that they owned title to those improvements. To the contrary, . . . improvements were the property of the United States government. Without evidence of ownership, the Hages cannot establish a cognizable property interest.").

<sup>432</sup> *Id.* at 1290 ("We agree with the Hages that the government could not prevent them from accessing water to which they owned rights without just compensation. . . . The government, for example, could not entirely fence off a water source, such as a lake, and prevent a water rights holder from accessing such water. . . . The Hages' claim, however, is flawed because there is no evidence that the government actually took water that they could have put to beneficial use.").

<sup>433</sup> See e.g., *United States v. Estate of Hage*, 810 F.3d 712, 718 (9th Cir. 2016).

<sup>434</sup> *Id.* at 718 ("[A]n owner of water rights has special privileges when applying for a grazing permit" and may obtain rights to access federal lands for the purpose of diverting the water, but "like all other persons," that owner may graze cattle on federal lands *only* if he or she has obtained a grazing permit or other grazing authorization).

Before the *Estate of Hage* saga reached the Ninth Circuit, similar issues were arising in other claims. In *Colvin Cattle Co. v. United States*,<sup>435</sup> a different judge on the Court of Federal Claims followed a different path of reasoning in rejecting the conclusions of the *Hage* trial court judge who had found a taking. Here, the BLM had denied a cattle company's application to graze and stock water animals on public land because—just as in *Hage*—the cattle company had repeatedly failed to pay the required annual permit fees.<sup>436</sup> The *Colvin Cattle* court unambiguously concluded that the agency had not taken the ranchers' rights, because the “case law is . . . clear that the use of public lands for grazing is not a right but a privilege.”<sup>437</sup>

On appeal, the Federal Circuit affirmed the lower court's decision.<sup>438</sup> The court explained that the Taylor Grazing Act that authorized the plaintiffs' permits could not vest property rights to graze on public lands because that would be inconsistent with Act's purpose—notably, to set aside from private disposition an enduring public commons resource.<sup>439</sup> The plaintiff had also invoked a stock watering statute as a source of protectable property rights to graze on public lands, but the panel roundly rejected this argument, because the allotment underlying the claim had always been on federal land, and “no right in it may be obtained without congressional authorization.”<sup>440</sup>

Where the early *Hage* judges analogized the ranchers' claims to stronger private rights in fee simple property, the *Colvin Cattle* courts followed a more sophisticated path of reasoning. These courts distinguished between the more autonomously held property that is the subject of an easier taking claim and the more contingent private interests in using public commons that can be modified without necessarily creating takings liability.<sup>441</sup> It explained that “[n]o property right can be acquired” by grazing livestock upon the public domain, because “[a]ll persons so using the public domain do it merely by sufferance of the federal government.”<sup>442</sup> While acknowledging that “[t]his

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<sup>435</sup> 67 Fed. Cl. 568, 575 (Fed. Cl. 2005), *aff'd*, 468 F.3d 803 (Fed. Cir. 2006).

<sup>436</sup> *Id.* at 576 (“Plaintiffs contend their water right is of little utility if their cattle have no place to graze. If true, the fault lies with plaintiffs, who were fully apprised of the consequences of failing to renew their permits.”).

<sup>437</sup> *Id.* at 573. The *Colvin Cattle* court criticized the confusion created by the lower court in *Hage* for being “the only court to find a right to graze in connection with the Mining Act,” while clarifying that the right was limited in what was protected from takings. *Id.* at 575.

<sup>438</sup> *Colvin Cattle*, 468 F.3d 803, 809 (Fed. Cir. 2006).

<sup>439</sup> See *id.* at 807-08 (explaining that the use of public lands for grazing is not a right but a privilege); see also 43 U.S.C. § 315 (“In order to promote the highest use of the public lands pending its final disposal, the Secretary of the Interior is authorized . . . to establish grazing districts . . . which in his opinion are chiefly valuable for grazing and raising forage crops.”).

<sup>440</sup> *Id.* at 808.

<sup>441</sup> *Colvin Cattle*, 468 F.3d at 808 (“[G]razing is not a stick in the bundle of rights that [the cattle company] has ever acquired.”).

<sup>442</sup> *Id.*

use is often alluded to as a right,” the court clarified that “[i]t is not a right that the government of the United States has conferred, and these public range lands may at any time be withdrawn from such use.”<sup>443</sup> Because the ranchers lacked protectable property in the revoked grazing permits, and because water rights do not create an attendant right to graze, the frustration of their ability to graze on federal land did not impact water rights in a manner cognizable under the Fifth Amendment.

*Colvin Cattle* seemed to resolve the matter, but similar issues arose once again before the same courts in *Sacramento Grazing Association vs. United States*.<sup>444</sup> This more recent takings claim was brought after the Forest Service excluded the plaintiff association’s cattle from riparian enclosures in order to protect endangered species.<sup>445</sup> The case demonstrates ongoing (or perhaps strategic) confusion among parties and adjudicators in determining the path of analysis for the interests at stake in these cases, whether any were properly the subject of a takings claim, and if so, whether they would be subject to a physical or regulatory taking analysis. In 2017, a Court of Claims judge initially ruled in favor of the grazing association’s physical taking claim, finding that its right to beneficial use of stock watering resources had been taken when its access to appurtenant rangelands was revoked.<sup>446</sup> Adopting the language of conventionally autonomous private rights, the judge concluded that the ranchers had “established prima facie ownership of vested range stock water rights in seventeen sources within the Sacramento Allotment.”<sup>447</sup>

On reconsideration of the same facts four years later, however, a different judge on the same Court of Claims reached the opposite result, concluding that the association did *not* possess a right to beneficial use of stock water sources under New Mexico law at the time of the alleged taking.<sup>448</sup> That judge dismissed the claim, which never made it to the Federal Circuit, but the lower court opinion cited a prior Federal Circuit decision, *Alves v. United States*,<sup>449</sup> which pointedly rejected the presumption of uniformly autonomous private rights in explaining that grazing permits attached to fee simple property are *not* protected by the Takings Clause.<sup>450</sup> As the court explained, “grazing preferences [or permits] that are attached to fee simple property are not compensable property interests under the Fifth Amendment . . . . What is

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<sup>443</sup> *Id.*

<sup>444</sup> 135 Fed. Cl. 168 (Fed. Cl. 2017).

<sup>445</sup> *Id.* at 175.

<sup>446</sup> *Sacramento Grazing Ass’n v. United States*, 135 Fed. Cl. 168, 207 (Fed. Cl. 2017) (Braden, J.), *modified on reconsideration*, 154 Fed. Cl. 769 (Fed. Cl. 2021) (Smith, J.).

<sup>447</sup> *Id.* at 205.

<sup>448</sup> *Sacramento Grazing Ass’n v. United States*, 154 Fed. Cl. 769, 788 (Fed. Cl. 2021). Of note, different judges wrote the 2017 and 2021 opinions in this protracted dispute.

<sup>449</sup> 133 F.3d 1454 (Fed. Cir. 1998).

<sup>450</sup> *Sacramento Grazing Ass’n v. United States*, 66 Fed. Cl. 211, 217 (Fed. Cl. 2005).



compensable is the fee interest only, divorced from other governmentally-created rights or privileges appurtenant to the fee.”<sup>451</sup>

The case was ultimately dismissed on technical grounds that did not resolve the underlying issue of whether any of the claimed private rights warranted Fifth Amendment protection, and if so, in what way.<sup>452</sup> The court decided that the alleged property rights were never formally granted by a means that would satisfy the jurisdiction’s statute of frauds, thereby evading the more difficult substantive issues under such fierce debate by the parties.<sup>453</sup> The court did not resolve whether the alleged taking should be addressed as a physical or regulatory taking, let alone whether one had occurred. In so doing, it avoided these contentious legal issues, but also failed to resolve the important questions of law raised by the parties—questions that will almost certainly rise again when similar facts unfold.

In this spectacular state of disarray, the grazing takings claims showcase the full spectrum of private rights in public commons that property theory has thus far addressed with insufficient clarity. Coming closest to the approach advanced in this Article, the *Colvin Cattle* court correctly rejected the plaintiff’s efforts to analogize private usufructuary rights to graze on public lands to more firmly Fifth Amendment-protected rights in fee-simple private property.<sup>454</sup> Instead, it treated them as contingent rights subject to revision for the legitimate protection of the public rights remaining in the commons. The analysis of related stock watering rights is more complex, but *Colvin Cattle* and the later *Estate of Hage* decisions reasoned, in essence, that while some water rights may constitute property within the meaning of the Fifth Amendment, the contingency of the underlying federal grazing permit to which those rights attach effectively operates as a background principle that can potentially limit the reach of those rights. If the underlying grazing permit is revoked, the overlying water right is limited from within (by the constraints of the background principle), rather than from without (by the extinguishment of the grazing permit). None of these decisions state this idea quite so cleanly, but it is the logical conclusion of this more sophisticated path of analysis.<sup>455</sup>

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451 *Id.* (citing *Alves v. United States*, 133 F.3d 1454, 1457 (Fed. Cir. 1998)).

452 *Sacramento Grazing Ass’n*, 154 Fed. Cl. at 788 (“[T]he Court is unpersuaded by plaintiffs’ arguments and finds that SGA did not possess a right to beneficial use of stock water sources in the Sacramento Allotment.”).

453 *Id.* at 785 (“The Court agrees with defendant’s first argument related to the statute of frauds, and as such, finds that plaintiffs did not possess a water right based on a pre-1907 right.”).

454 468 F.3d 803, 807-09 (Fed. Cir. 2006).

455 See *Owen*, *supra* note 87, at 627-31 (discussing grazing and water takings claims). I am indebted to Dave for this analysis.

These claims do more than show the takingsification phenomenon in action; they take it to an alarming extreme. Plaintiffs granted private extractive rights to use public lands under a discretionary license have used the public commons to the point of abuse, and then—when their licenses are accordingly curtailed by the public—they argue that the initially discretionary license creates constitutionally protected property interests that effectively lock in their private rights to the continue exploiting the public commons. It is as pure an example of takingsification as the statutory examples in Part II, but the judicial decisions analyzing them reveal the relationship between the political strategy itself and the supporting property theory bias that privileges privatization in public commons. That bias is often coupled with an explicit ideology that rejects the legitimacy of public regulation and landownership to begin with, at least among the litigants who bring these claims. The consistent rejection of these claims by the Federal Circuit is reassuring, but the fact that these claims have found sympathetic ears in the Court of Federal Claims signals the danger this privatization bias represents for judicial management of these disputes going forward.

The grazing-water takings cases also highlight ongoing uncertainty on the bench about how to handle contingent and correlative private and public rights in larger public commons. They reveal jurists wrestling with how to understand contingent private rights in larger public commons, sympathetically working from within a half-baked property theory framework, and adopting competing approaches going forward. Some judges on the Federal Court of Claims have based their rulings on the strain of property theory critiqued in this Article, which mistakenly treats all private interests as tantamount to a private home. Contrasting opinions from the Federal Circuit reveal higher-level adjudicators using more sophisticated legal reasoning, declining to misalign all private interests with conventionally autonomous rights.

The consistent rejection of these claims by the Federal Circuit is an affirmation of how our tiered judicial system should work, which should theoretically suffice to resolve these issues going forward. However, the persistence of these claims over time, and the receptiveness of some of the judges who hear them, give cause for concern that private advocates will continue to try to instantiate constitutionally protected property from their private uses of public commons. These efforts will simultaneously drive forward the private-rights bias in property theory and incrementally advance the privatization of public commons that environmental law seeks to protect. So long as property theory remains half-baked on these matters, these efforts—and the potential for ongoing jurisprudential disarray—will likely persist.

A clarified jurisprudential approach that properly differentiates between degrees of private rights—and considers their relationships with related public rights in natural resource commons—would alleviate public confusion, facilitate dispute resolution, and reduce costly litigation. Such an approach is proposed in Part IV, informed by the literature that has long considered opposing theoretical paradigms in environmental natural resource law.

#### D. *Takings and Natural Resource Commons Paradigms*

These examples illustrate how the present-day dilemmas of property theory arise in court, but the underlying theoretical dilemma for managing natural resource commons goes even further. Not only must we reconcile contrasting views about the nature of the rights that private parties can hold in public natural resource commons; we must also contend with contrasting views about the goals of property law in regulating those rights. These views are themselves contingent on distinct theoretical paradigms within which we understand the governing rules of property to operate. The lack of consensus on these points further drives political and legal controversy in natural resource management.

Professor Barton Thompson's scholarship helps clarify the foundations of this persistent dissensus in the natural resource law discourse. In his work, he identifies two diverging legal paradigms for understanding the nature of the rights established by natural resource laws, especially water law, and then explains how each one relates to the increasing salience of takings concerns.<sup>456</sup> For example, in the "public resource" paradigm of water law, the resource is understood as a scarce public good whose allocation requires strict regulation to be protected from monopolization, over-exploitation, or waste.<sup>457</sup> By contrast, the "market" paradigm promotes the management of scarce water resources through market mechanisms that efficiently allocate tradable rights in water to discrete individuals or communities.<sup>458</sup>

These paradigms intersect with the takingsification problem in markedly different ways. Proponents of the public use paradigm fear that strong takings protections will corrode the public regulations needed to protect scarce resources, while proponents of the market paradigm see strong takings constraints as a necessary bulwark for the protection of the tradable private rights required for a functioning market.<sup>459</sup> As Thompson describes,

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<sup>456</sup> Barton H. Thompson, Jr., *Takings and Water Rights*, in *WATER LAW: TRENDS, POLICIES, AND PRACTICE* 43, 43-44 (Kathleen Marion Carr & James D. Crammond eds., 1995).

<sup>457</sup> *Id.*

<sup>458</sup> *Id.*

<sup>459</sup> *Id.* at 49-50 (discussing cases that have illustrated these different views).

Under the public resource paradigm, the takings protections are troublesome because they can impede necessary regulatory reallocations of resources; those who strongly oppose greater constitutional protection of water rights are still wedded to this paradigm. However, the market paradigm only works with secure and definite water rights. Markets will not form if there is uncertainty about whether the government will honor the traded rights.<sup>460</sup>

Thompson is partial to the market paradigm, and there is compelling evidence to suggest that market mechanisms can play an important role in aligning incentives toward conservation and facilitating the needed shift of entrenched water rights from lower to higher value uses.<sup>461</sup>

Nevertheless, other scholars contend that the market paradigm is misguided, and potentially even dangerous, because it misunderstands the inherently contingent nature of private rights in public commons—stretching the analogy to conventionally autonomous property rights beyond tolerance, history, and utility. For example, Professor John Leshy argues that:

The argument largely rests on the perception . . . that water rights are well-defined property interests, sacred and impregnable. But the rhetoric of water “rights” far outstrips the reality . . . [R]ights to use of water are much more ill-defined, tenuous, and limited than rights to use land. A plank in the progressive water policy platform should be to speak the truth about the nature of water rights to counter this misconception.<sup>462</sup>

Leshy critiques the fallacy of treating water rights as analogous to the comparatively well-defined, autonomously wielded property rights that individuals own in land. Instead, he emphasizes the embedded and contingent nature of private rights within the larger public commons, in which the public interest has always operated as a defining constraint on some level, whether in the openly correlative nature of eastern riparian rights or the definitional requirements of beneficial use for western appropriative rights.

Meanwhile, scholars inspired by the New Property literature have pushed for progressive goals regarding public property from the opposite direction—characterizing government benefits as a vested property right that individuals should be able to protect on par with more conventional forms of property.<sup>463</sup>

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<sup>460</sup> *Id.* at 43-44.

<sup>461</sup> See SAX ET AL., *supra* note 375, at 240-45, 254-63, 331-36.

<sup>462</sup> John Leshy, *Notes on a Progressive National Water Policy*, 3 HARV. L. & POL’Y REV. 133, 158 (2009).

<sup>463</sup> See Christopher Serkin, *The New Politics of New Property and the Takings Clause*, 42 VT. L. REV. 1, 16 (2017) (discussing the progressive New Property literature following Charles Reich’s original proposal); Charles A. Reich, *The New Property*, 73 YALE L.J. 733, 736-39 (1964) (proposing that welfare benefits and other forms of public assistance should be treated as vested property rights on par with more conventional forms of autonomously held property).

Takings analyses like the Oklahoma Supreme Court's in *Franco-American*,<sup>464</sup> the Federal Court of Claims' in *Casitas* and *Tulare Lake Basin*,<sup>465</sup> and the grazing takings cases discussed above<sup>466</sup> all rest uncritically on the false perception of well-defined rights encouraged by the market paradigm, even when these are unsupported by the legal history. Yet the uncritical application of this paradigm to private rights carved out of resource commons like waterways, forests, and fisheries elides the critical ways in which these resources have always provided benefits to distinct parties simultaneously. Overlapping public and private interests have historically led us to characterize rights in water, profits à prendre in timber and wild game, and other more circumscribed interests as usufruct, rather than outright fee ownership.<sup>467</sup> Some usufructs may be protectable property interests on their own, such as a right to harvest timber from private land, but others are entangled with public interests in a larger natural resource commons, such as the biodiversity protected by environmental laws like the Endangered Species Act.<sup>468</sup> When private rights to withdraw water from a navigable waterway are pre-imprinted with the limitations of public rights under background principles of law, such as the public trust doctrine, then the situation becomes even more complicated.<sup>469</sup>

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<sup>464</sup> See *supra* note 377 and accompanying text.

<sup>465</sup> See *supra* note 411 and accompanying text.

<sup>466</sup> See *supra* subsection III.C.3.

<sup>467</sup> See Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1364-65, 1367-71 (1993) (discussing the differences between usufruct and fee simple interests in land). Similar analyses may apply to other natural resources in which public and private interests overlap, such as the atmosphere, oceans, and biodiversity. See, e.g., *Juliana vs. United States*, 217 F. Supp. 3d 1224, 1253-55 (D. Or. 2016) (applying public trust principles of public commons ownership to the atmospheric commons), *rev'd on other grounds*, *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

<sup>468</sup> The timber wars of the Pacific Northwest over the protection of the spotted owl offers an especially famous example of where these interests can come into conflict. See, e.g., Victor M. Sher, *Travels with Strix: The Spotted Owl's Journey Through the Federal Courts*, 14 PUB. LAND L. REV. 41, 41-42 (1993) ("[The] 'remarkable series of violations of the environmental laws' by the federal agencies entrusted with administering our public forests and protecting species against extinction.").

<sup>469</sup> See *Nat'l Audubon Soc'y v. Superior Ct.*, 658 P.2d 709, 712 (Cal. 1983) (requiring the reformation of prior appropriative water rights to protect public trust values of the waterway); *Env't L. Found. v. State Water Res. Control Bd.*, 237 Cal. Rep. 3d 393, 401-03 (Cal. Ct. App. 2018) (requiring the reformation of groundwater rights to protect associated public trust values); see also ERIN RYAN, *THE PUBLIC TRUST DOCTRINE, PRIVATE WATER RIGHTS, AND SAVING MONO LAKE*, CAMBRIDGE (forthcoming 2023) (defining the public trust doctrine, its legal origins, and modern applications); Erin Ryan, *The Public Trust Doctrine, Private Water Allocation, and Mono Lake: The Historic Saga of National Audubon Society v. Superior Court*, 45 ENV'T L. 561, 567-69, 572 (2015) (same). The doctrine has also been used to limit the rights of private waterfront property owners to exclude the public from beaches and other shores associated with navigable waterways. See, e.g., *Matthews v. Bay Head Improvement Ass'n*, 471 A.2d 355, 355-56 (N.J. 1984) (holding that the public trust doctrine protects public passage over private beachfront property if necessary to access the ocean); Erika Kranz, *Sand for the People: The Continuing Controversy Over Public Access to*

Thus identified, the contrast between these two models provides a compelling lens for considering which paradigm best serves our overall goals in navigating the web of public and private interests in common pool resources, such as water.<sup>470</sup> Professor Thompson makes a compelling case for the usefulness of market mechanisms for reallocating established water rights in the western states, where water rights are historically assigned by priority of claim and with scant attention to maximizing the overall utility of a multivalued common pool resource.<sup>471</sup> It is important to recognize the value of markets in protecting vulnerable commons resources, like water, that can be threatened by the tragedy of the commons or undervaluation without price signals to incentivize conservation. Still, markets cannot be the only means of protecting public values in natural resource commons—many of which resist valuation in quantifiable terms, or are not amenable to markets for other reasons, or may not even be the appropriate subject of markets.<sup>472</sup>

Moreover, the more we treat contingent private interests in resource commons as discretely tradable rights—imagining them as fully severable from overlapping public values in order to promote marketability—the more we promote the conventionally autonomous theory of property rights in public commons that is misaligned with the complex reality of interrelated public and private interests there. The accelerating privatization of natural resource commons revealed in Part II supports Professor Leshy's admonition that we be leery of reifying a property theory approach in the public commons context that was originally designed for more conventionally autonomous resources.<sup>473</sup> Unbridled, it threatens to reinforce the takingsification of environmental law. We would do well to explore an alternative approach, one that more explicitly grapples with these problems.

#### IV. A MODIFIED REGULATORY TAKINGS TEST FOR PUBLIC COMMONS

So far, this Article has identified a successful strategy to advance the creeping privatization of public natural resources, facilitated by the privatization paradox that arises from asymmetries in the interaction of public and private law norms. It has also revealed the facilitating role of a property theory paradigm that privileges private over public interests in these

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*Florida's Beaches*, 83 FLA. BAR J. 10, 13 (2009) ("[W]ithout a public right of access across private dry sand beach, the wet sand beach remains a public resource in name only.").

<sup>470</sup> Professors Thompson and Leshy helpfully highlight their contrasting views in the casebook they coauthor with Professors Robert Abrams and Sandy Zellmer. See SAX ET AL., *supra* note 375.

<sup>471</sup> *Id.*

<sup>472</sup> Ryan et al., *Environmental Rights for the 21st Century*, *supra* note 33, at 2545-46 (discussing the difficulties of quantifiably assessing the ecological values of natural systems).

<sup>473</sup> See Leshy, *supra* note 462.

commons, further fueling the takingsification phenomenon. Now, it offers one potential way to remedy these problems by reforming regulatory takings law to better account for both the public and private property interests at stake in contested natural resource commons. It is but one strategy among others, including the important roles that litigants, adjudicators, scholars, and voters can all play in calling out stealth privatization and pushing back against the strain of property theory that provides support for takingsification.

This Part offers a potential path for more nuanced takings analyses in the context of natural resource commons, designed to align the focus of adjudication on the reciprocal strengths and weaknesses of competing public and private claims. Just as the Supreme Court adjusted its nineteenth century Contract Clause jurisprudence to suit the complex relationship between private contracting and public lawmaking,<sup>474</sup> so it must now rethink its approach in this equivalently complex alloy of public and private concerns. Building from the Court's existing takings jurisprudence, the Article proposes that private claims for property in public commons be explicitly balanced against the countervailing claims for public property interests in those commons, often (though not necessarily) to protect the environmental values associated with intact ecosystems. It suggests a different kind of takings analysis for regulatory property created within public natural resource commons,<sup>475</sup> requiring a more nuanced modulation of, at a minimum, the regulatory takings ad hoc balancing test.

The following proposal shows how the accepted regulatory takings balancing test could be adapted to accomplish these goals by better accounting for public environmental values. It is an intentionally parsimonious proposal, with the nevertheless ambitious goal of actually, if incrementally, impacting the jurisprudence. It begins with an explanation of why this proposal focuses on regulatory takings rather than physical takings (notwithstanding the Court's renewed focus on physical takings<sup>476</sup>), on grounds that private claimants will generally be unable to show a physical taking from within a public natural resource commons due to the contingent nature of private interests in these resources.

Then it offers a set of narrowly tailored changes to the existing legal infrastructure, describing mostly modest adjustments to the three prongs of

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<sup>474</sup> See *supra* Section I.C.

<sup>475</sup> Cf. Christopher Serkin & Michael P. Vandenbergh, *Prospective Grandfathering: Anticipating the Energy Transition Problem*, 102 MINN. L. REV. 1019, 1076 (2018) (arguing for a new mechanism to de-privilege private property rights).

<sup>476</sup> *Cedar Point Nursery v. Hassid*, 141 S. Ct. 2063, 2073 (2021) (finding a physical taking in a fact pattern similar to those the Court previously analyzed as regulatory takings, such as *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 84-85 (1980), and *Loretto v. Teleprompter*, 458 U.S. 419, 426 (1982)). For further discussion of this case, see *infra* notes 490-497 and accompanying text.

the *Penn Central* ad hoc test<sup>477</sup> to better account for the balance between public and private interests in these commons. It compares the proposed carveout from the existing test to other carveouts that the Supreme Court has already articulated for special case takings, such as physical occupations or total interference with economic use. Finally, it considers and responds to potential objections.

### A. *A Note on Physical Takings in Natural Resource Commons*

This discussion focuses on regulatory takings jurisprudence, rather than physical takings, because the contingent nature of most private interests in natural resource commons will not be amenable to a physical takings claim. With narrow exceptions, perhaps for inholdings in a national park, mining patents, or other examples of conventionally excludable property interests embedded within natural resource commons, courts should be leery of assertions of physical takings in this context—ensuring that claimants have not confused the limited nature of a license or contingent interest with the more autonomous property interest that physical takings claims generally protect.<sup>478</sup>

A physical taking ordinarily occurs when the government takes possession or title to private property, for example, to amass the land needed to construct such public facilities as a road, school, or airport (although the Supreme Court recently expanded the concept to include appropriation of an owner's right to exclude in certain circumstances).<sup>479</sup> Physical takings may arise in relation to natural resource commons when the government acquires rights to previously owned lands to create a protected reserve, as it did for many National Parks and Wildlife Refuges in the eastern part of the country, rather than setting protected lands aside from development in the first place, as it did in the west.<sup>480</sup> In some cases, the government allows existing homes and

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<sup>477</sup> See *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (finding “[t]he economic impact of the regulation on the claimant . . . the extent to which the regulation has interfered with distinct investment-backed expectations . . . [and] the character of the governmental action” as relevant factors in this inquiry).

<sup>478</sup> See *infra* Part II for discussion on the different executive and legislative tools for carving out the commons and how those tools can create property interests in common resources.

<sup>479</sup> See, e.g., *Kelo v. City of New London*, 545 U.S. 469, 477 (2005) (describing a traditional physical taking of title); *Cedar Point Nursery v. Hassid*, 141 S. Ct. 2063, 2073 (2021) (expanding the scope of physical takings from interferences with title or possession to potentially including interference with an owner's right to exclude in a case finding a physical taking by a state labor regulation that allowed union representatives to visit private farmland).

<sup>480</sup> See, e.g., Audrey J. Horning, *When Past is Present: Archaeology of the Displaced in Shenandoah National Park*, NAT'L PARK SERV., <https://www.nps.gov/articles/the-displaced.htm> [<https://perma.cc/9MDV-WRF8>] (discussing the use of eminent domain to help create Shenandoah National Park “from over 3,000 individual tracts of land, purchased or condemned by the



businesses to remain within a public lands commons as an “inholding” that remains privately held.<sup>481</sup> There may be similar examples in which private owners may hold ongoing rights to personal property within a natural resource commons—for example, commercial recreational or extraction equipment, or farmed fish permitted to be raised in an aquaculture pen.<sup>482</sup>

If private property rights are taken in these circumstances, the takings calculus will presumptively reflect the ordinary physical takings principles associated with conventionally autonomous forms of property (although presumptions may be subject to rebuttal).<sup>483</sup> The ordinary physical taking inquiry simply assesses whether the government has exercised its power of eminent domain by taking private property for public use without just compensation.<sup>484</sup>

With these narrow exceptions, however, most private property rights within public commons are more contingent than these conventionally autonomous forms of property. Many such rights are various forms of permission for use or extraction—for example, leases to drill for oil, licenses to fish, or permits to harvest timber or graze cattle on grasslands. The conventional features of a physical taking are absent, because the public owns the underlying resource from which rights of use or extraction are granted. Until the extractable resource in question has been captured by the licensed private parties, their rights are more akin to usufruct than title or

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Commonwealth of Virginia and presented to the Federal Government.”); *United States v. 2,353.28 Acres*, 414 F.2d 965, 966-67 (5th Cir. 1969) (discussing the government’s use of eminent domain in Cape Canaveral, Florida, during the space race). Compare these eastern stories with the history of early Western national parks, Yosemite and Yellowstone, which were withdrawn from disposition to private ownership before they were formally settled by non-indigenous colonists. *See Birth of a National Park*, NAT’L PARK SERV., <https://www.nps.gov/yell/learn/historyculture/yellowstoneestablishment.htm> [<https://perma.cc/3FWH-83DL>] (describing the reservation of Yosemite Valley from settlement despite the “established policy of transferring public lands to private ownership”).

<sup>481</sup> *See, e.g.*, Randy Tanner, *Inholdings Within Wilderness: Legal Foundations, Problems, and Solutions*, 8 INT’L J. WILDERNESS 9 (2002) (“When the federal government decided to establish public lands in the eastern United States, it was difficult to do so without some private or state-owned lands being contained within them. Thus, wilderness throughout the United States were often established containing inholdings . . .”).

<sup>482</sup> *See supra* Part II for discussion on the potential for privatizing the commons through aquaculture permitting and the creation of takings protection for personality.

<sup>483</sup> *See infra* page 722 discussing the proposed rebuttable presumption; *see also* Serkin & Vandenberg, *supra* note 475, at 1076 (arguing for a new mechanism to “de-entrench” property rights).

<sup>484</sup> *See, e.g., Kelo*, 545 U.S. at 477 (discussing remedies for a traditional physical taking of title); *Cedar Point Nursery*, 141 S. Ct. at 2071-74 (discussing remedies for an appropriation of the right to exclude).

possession.<sup>485</sup> Private rights holders may not even hold rights of exclusion, and if they do, the regulatory conservation measures that could become subject to challenge are unlikely to interfere with them.<sup>486</sup> Oil and gas reserves sit beneath publicly owned lands, while timber reserves and grasslands grow on top of them. Wild fisheries in the U.S. Exclusive Economic Zone exist within ocean and seafloor territories managed by the state or federal government.

When a regulation prospectively interferes with these types of private interests, there is less likely to be interference with title or possession. What is compromised, if anything, would be the right to profit economically by extracting from the public resource. Yet interference with economically viable use is the classic example of a regulatory taking, and thus appropriately managed under the ad hoc test. For this reason, most potential claims for takings of private rights in public commons will be cognizable as regulatory takings, almost by definition.

For example, and as outlined in Parts II and III, it is well established that regulatory interference with fishing and grazing permits will not give rise to takings liability, but even if the law were not already clear, it is easy to see why this would be so. Even if the most excludable, location-bound fishing right—a stationary mariculture permit—were lost, the most its holders could claim is interference with economic expectations associated with their business operation.<sup>487</sup> They cannot claim loss of title to the ocean, which they never had, nor to the sea floor, even if they received a license to anchor their nets to the seafloor, which would also have remained in public ownership. If their ability to harvest is compromised by regulation, they can salvage the nets, together with whatever fish they have already grown, so there is no taking of personal property. They may argue that harvesting the fish at that moment interferes with their expected economic return, because the fish are not yet of marketable size, and they might even claim loss of future harvest from the lost reproductive capacity of their current fish, but again—these are losses of future economic value associated with the fish. The government

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<sup>485</sup> See, e.g., Sax, *supra* note 359, at 24 (discussing the water cycle and continuum of uses and characterizing water as “first and foremost a community resource whose fate tracks the community’s needs as time goes on”).

<sup>486</sup> One exception would be if the challenged regulatory action created an easement for a public trail or other public visitation that was not previously available, although this seems unlikely outside the special context of exactions that is specifically dealt with by other takings law doctrines. See *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 837 (1987); *Dolan v. City of Tigard*, 512 U.S. 374, 391 (1994) (discussing the jurisprudential requirements of “essential nexus” and “rough proportionality” that constrain regulatory exactions).

<sup>487</sup> Cf. Eagle, *supra* note 94, at 635-41 (discussing *American Pelagic* and the inapplicability of takings claims in most regulated fisheries contexts); Blumm & Ritchie, *supra* note 96, at 363-64 (discussing takings for “less-than-fee-simple” rights in resource commons).

doesn't actually take their fish, which they are free to harvest now, or place elsewhere to continue growing if they can find a suitable replacement habitat. These kinds of losses are well established within the regulatory takings context.<sup>488</sup>

One can potentially imagine a physical takings claim for the loss of personal property that cannot be moved from a newly regulated public commons—e.g., oil and gas drilling apparatus fixed to the sea floor—although one would also imagine that good government lawyering would preempt such a claim (by specifying in the underlying license that personalty affixed to public land must be yielded if extraction rights are duly terminated). And as shown in Part III, regulatory interference with water rights has occasionally been challenged as a physical taking, though as suggested there, such claims should probably be analyzed as regulatory takings (at best), because water rights are so circumscribed by the other regulatory features of state allocation law.<sup>489</sup>

The Court's newest takings decision, *Cedar Point Nursery v. Hassid*, held in 2021 that a labor law enabling union representatives to regularly visit private farmland was a physical taking, extending the physical takings doctrine to instances in which a regulation authorizes repeated physical invasions of private property that are not justified by the relevant "background principle[s]" of property law.<sup>490</sup> The *Cedar Point Nursery* doctrine is still poorly understood, and already controversial for blurring the boundary between physical and regulatory takings.<sup>491</sup> Even so, it appears to protect an owner's right to exclude others from property owned in fee simple that is not open to the public—a fact pattern that will almost never apply in the context of public natural resource commons (other than the aforementioned potential exceptions for inholdings, mining patents, and trail exactions).<sup>492</sup>

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<sup>488</sup> See Eagle, *supra* note 94, at 622-46 & n.14 (explaining the developments of regulatory takings in public commons, specifically in the commercial fishing industry, using *American Pelagic* to illustrate the apparent inability for fishermen to use the Fifth Amendment to protect their investment in fishing vessels and gear).

<sup>489</sup> This is overtly demonstrated by the correlative nature of riparian rights, and evident even in appropriative rights requirements for beneficial use and modern public interest review. It is why we have never understood water allocation rights as an interest in an absolute thing, and more as a right to draw from a common pool when certain circumstances are met.

<sup>490</sup> 141 S. Ct. 2063, 2080 (2021).

<sup>491</sup> See, e.g., Jessica L. Asbridge, *Redefining the Boundary Between Appropriation and Regulation*, 47 *BYU L. REV.* 809, 812 (2022) (observing that the decision fails to clearly explain the new rule or reconcile it with prior precedent, leaving the boundary between regulatory and physical takings "murky").

<sup>492</sup> See *supra* notes 478, 481 and accompanying text (discussing potential physical takings exceptions for inholdings, mining patents, and public trails).

With regard to potential takings claims against public natural resource regulation, the more pertinent precedent is the Court's 2002 reasoning distinguishing land use regulations from physical appropriations in *Tahoe-Sierra Preservation Council v. Tahoe Regional Planning Agency*, which articulated the "longstanding distinction between acquisitions of property for public use, on the one hand, and regulations prohibiting private uses, on the other."<sup>493</sup> The Court explained why it would be "inappropriate to treat cases involving physical takings as controlling precedents for the evaluation of a claim that there has been a 'regulatory taking,' and vice versa":<sup>494</sup>

For the same reason that we do not ask whether a physical appropriation advances a substantial government interest or whether it deprives the owner of all economically valuable use, we do not apply our precedent from the physical takings context to regulatory takings claims. Land-use regulations are ubiquitous and most of them impact property values in some tangential way—often in completely unanticipated ways. Treating them all as per se takings would transform government regulation into a luxury few governments could afford. By contrast, physical appropriations are relatively rare, easily identified, and usually represent a greater affront to individual property rights.<sup>495</sup>

Public natural resource regulations are almost always, either by definition or close analogy, land use regulations of the sort that *Tahoe-Sierra* identifies. Even if a plaintiff could somehow frame a *Cedar Point Nursery* challenge in this context, the public interests burdening private rights may prove to be the very background principles that both *Cedar Point Nursery* and *Lucas* recognize as creating exceptions to their rules.<sup>496</sup> The Supreme Court has emphasized that there can be no taking, even under the new *Cedar Point Nursery* rule, where a restriction on property rights has always existed.<sup>497</sup>

For all these reasons, claims for physical takings in public commons will be exceedingly unusual. Properly understood, private rights in public commons are only rarely autonomously excludable property. They are more likely to be contingent on regulatory constraints—such as an appropriative water right bound by "beneficial use" requirements or a revocable permit to graze or fish—and granted subject to countervailing public interests in a resource shared by other members of the community. Accordingly, this paper

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<sup>493</sup> *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 323–24 (2002).

<sup>494</sup> *Id.* at 323.

<sup>495</sup> *Id.* at 323–24.

<sup>496</sup> See *Cedar Point Nursery v. Hassid*, 141 S. Ct. 2063, 2079 (2021) ("[T]he government does not take a property interest when it merely asserts a 'pre-existing limitation upon the land owner's title.'" (quoting *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1028–29 (1992))).

<sup>497</sup> *Id.*

adopts the rebuttable presumption that courts should almost never apply a physical takings analysis to a private claim in a public commons resource, except in those narrow exceptional cases.

When they do, the ordinary physical taking inquiry should presumptively apply—but even this presumption could be rebutted if the inquiry fails to consider the balance of public and private ownership interests in a specific regulatory context. For example, some scholars have proposed that regulatory “givings”—enhancement of private values from public regulatory activity—be considered in calculating takings damages,<sup>498</sup> and some courts have shown interest in this theory (perhaps even the Supreme Court, in its 2017 decision in *Murr v. Wisconsin*).<sup>499</sup> In these contexts, the ordinary physical takings inquiry may apply, but nuance is required in the interpretation of what constitutes *just* compensation. Rather than simply asking whether the government’s displacement of a private owner’s possessory rights requires market value compensation, a court might consider whether the market value of the private right has also been enhanced by the regulatory protection of related public values—like the preservation of adjacent open space, or the creation of a new school, public highway, or railroad—or whether private rights were displaced because they posed an undue burden on public rights that also warrant protection.

### B. *Reimagining Regulatory Takings Balancing in Commons*

Nevertheless, most conflicts between public and private rights in natural resource commons will sound in the law of regulatory takings, rather than physical takings. Here, the context in which these claims arise should be better acknowledged by the test applied to discern whether a taking has occurred. Rather than applying the standard physical or ad hoc regulatory takings balancing test for conventionally autonomous interests, the Supreme Court should adapt the test to consider the factors that distinguish the conflict between public and private interests in public commons.

The conventional *Penn Central* regulatory takings balancing test, recently affirmed by the Court in its 2017 *Murr v. Wisconsin* decision,<sup>500</sup> considers: (1) the economic impact of the regulation on the owner, (2) the scope of

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<sup>498</sup> See Christopher Serkin, *The Meaning of Value: Assessing Just Compensation for Regulatory Takings*, 99 NW. U. L. REV. 677, 705 n.129 (2005) (noting that the “‘make whole’ principle in just compensation is based primarily upon the traditional economic goal of forcing the government to internalize the costs of its actions,” and suggesting that it may also require consideration of externalized benefits).

<sup>499</sup> See *Murr v. Wisconsin*, 137 S. Ct. 1933, 1945–46 (2017) (suggesting that courts may consider how regulations burdening land may also increase its value for the purposes of assessing economic harm).

<sup>500</sup> *Id.* at 1949.

interference with investment-backed expectations of the owner, and (3) the character of the government action.<sup>501</sup> Preserving most of that basic infrastructure, courts should add consideration of the underlying public interests in these commons by assessing: (1) the economic impact of the regulation on the owner *and the public, if any*, (2) the scope of interference with investment-backed expectations of the owner *and the public, if any*, and (3) it should unpack the Character of the Government Action prong of the test to explicitly consider the scope of governmental responsibility to prevent harm to the sustainability of the public natural resource commons from the private exploitation at issue.

In assessing these factors, courts should consider the conventional features of the test as we have understood it since it was articulated in *Penn Central*, building on a jurisprudence that has evolved over the last half century to reflect deepening judicial appreciation for the nuances of the regulatory takings inquiry,<sup>502</sup> and continues to in such recent cases as *Koontz*,<sup>503</sup> *Murr v. Wisconsin*,<sup>504</sup> and *Stop the Beach Renourishment*.<sup>505</sup> There are reasons to be dissatisfied with the ad hoc test,<sup>506</sup> and some commentators have suggested

<sup>501</sup> See *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (“[T]he Court’s decisions have identified several factors that have particular significance. The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment backed expectations are, of course, relevant considerations . . . . So, too, is the character of the governmental action.”).

<sup>502</sup> See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) (establishing the per se rule recognizing takings liability for permanent physical occupations); *First Eng. Evangelical Lutheran Church v. County of Los Angeles*, 482 U.S. 304, 306-07 (1987) (recognizing the potential for temporary takings liability); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1019 (1992) (establishing the per se rule recognizing takings liability for interference with all economic use); *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Plan. Agency*, 535 U.S. 302, 331 (2002) (limiting the scope of temporary takings liability by rejecting efforts to engage in “conceptual severance” over time, and reemphasizing “*Penn Central*’s admonition that in regulatory takings cases we must focus on ‘the parcel as a whole’”).

<sup>503</sup> *Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595, 599 (2013) (holding that government demands in exchange for a land use permit, or exactions, must have an essential nexus and rough proportionality to the anticipated impacts, even when the demand is for money).

<sup>504</sup> 137 S. Ct. 1933, 1950 (2017) (holding that, when having to determine whether two parcels should be considered as one single parcel, a regulatory takings case cannot be solved by a simple test).

<sup>505</sup> *Stop the Beach Renourishment, Inc. v. Fla. Dep’t of Env’t Prot.*, 560 U.S. 702, 716, 722 (2010) (failing to achieve consensus on the potential for judicial takings).

<sup>506</sup> See Steven J. Eagle, *The Four-Factor Penn Central Regulatory Takings Test*, 118 PENN ST. L. REV. 601, 644-45 (2014) (critiquing the test’s lack of clarity); Andrea L. Peterson, *The Takings Clause: In Search of Underlying Principles Part I-A Critique of Current Takings Clause Doctrine*, 77 CALIF. L. REV. 1299, 1303-04, 1316 (1989) (critiquing the lack of clarity in regulatory takings law and the tests specifically); James R. Gordley, *Takings: What Does Matter? A Response to Professor Peñalver*, 31 ECOLOGY L.Q. 291, 291 (2004) (writing that the ad hoc test “may be meaningless”).

that it would be better to just start over than fix it,<sup>507</sup> but this proposal begins with the existing law in recognition of the inevitable (and even purposeful) path dependence that a precedential common law system takes. To reimagine our way out of the takingsification of environmental law, we begin with as incremental a set of changes as possible to the existing doctrine, imagining a proposed regulatory takings carveout test for claims involving public natural resource commons.

### 1. Economic Impact Prong

The prongs that consider the economic impact on a private owner and the scope of interference with that owner's investment-backed expectations will be familiar, adding only the same consideration for the related interests held by the public. The symmetrical approach is easy to apply to the first prong of the test, which would require that the economic impacts analysis merely consider public interests as well as private. Essentially, the test asks the decisionmaker to consider whether the regulatory action diminishes the economic value of an owner's property too much—balancing how much value is taken, how much value is left, and whether an owner receives a reasonable return on investment. The test also considers whether a large economic impact is justified by preventing a toxic use the owner never had the right to engage in the first place, such as a common law nuisance.

In the conventional test, only the economic impacts of state action on the owner are considered, but when evaluating a regulatory takings claim against state action to protect public commons resources, this proposal would also require a symmetrical consideration of the impacts of private activity on the public commons. Considering the economic impacts of private activity on public interests should be part of the overall calculus, especially if state regulation of those impacts were to be disallowed. This follows logically from the intuition underlying the balancing rule that allows a large economic impact if the state action prevents activity that interferes with others' legitimate rights, such as a common law nuisance. To take a simple case, if a hydraulic mining company challenged a regulation prohibiting coal mining in a national forest, the court would assess not only the economic losses to the industry that can no longer mine, but also the losses of overlying forest resources that would be displaced by the mining activity if allowed.

In a more complex (and perhaps more likely) example, the economic impact to the state of Florida associated with the loss of coral reefs or coastal wetlands that support fisheries and mitigate storm surge should count in the

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<sup>507</sup> See, e.g., Gordley, *supra* note 506 (arguing that the Thomistic-Aristotelian natural law theory may be more useful than the takings test).

balance of a takings claim against environmental regulations designed to protect them. In adjudicating a case like this, the court would consider not only the private economic losses associated with regulations preventing real estate development near important coastal wetlands, but also the public losses associated with the destruction of those wetlands if development is allowed. Public economic losses might include the valuable and hard-to-replace ecosystem services that wetlands provide, such as flood control, storm surge protection, fish nursery for the commercial and recreational fishing industry, and the recreational and scenic values that support the state's tourist based economy. Courts should also consider the biocentric public values associated with habitat, wildlife, and intact natural ecosystems.

It is perhaps noteworthy that similar facts appear in several important Supreme Court regulatory takings cases. They are reminiscent of the facts underlying the Supreme Court's decision in *Palazzolo v. Rhode Island*,<sup>508</sup> in which the Court preserved a claim against wetlands regulations that predated the plaintiff's title, overturning the Rhode Island Supreme Court's contrary conclusion that preexisting regulations do not necessarily prevent the formation of investment-backed expectations.<sup>509</sup> However, in an unpublished decision on remand, the Rhode Island Superior Court rendered a final decision more consistent with the approach advocated here. The state court dismissed the claim once again, this time on grounds that the common law public nuisance and public trust doctrines were indisputably background principles that prevented the formation of reasonable expectations for private development.<sup>510</sup>

The *Lucas* case also involved a takings challenge to a state law that caused private economic loss while protecting the public benefits of coastal wetlands.<sup>511</sup> There, the Supreme Court overturned the South Carolina high court's decision to uphold legislative protections for coastal wetlands and the public environmental values they provide.<sup>512</sup> The Supreme Court took that opportunity to issue the categorical rule that regulations interfering with all economic use will be considered per se takings, without regard to competing public values.<sup>513</sup> Under the approach advocated here, the public's interest in

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<sup>508</sup> *Palazzolo v. Rhode Island*, 533 U.S. 606, 611 (2001). See also *infra* notes 509–510 and accompanying text (discussing the case).

<sup>509</sup> *Palazzolo*, 533 U.S. at 616.

<sup>510</sup> *Palazzolo v. State*, No. 88-0297, 2005 R.I. Super LEXIS 108, at \*57 (R.I. Super. Ct. July 5, 2005), *remanded from*, *Palazzolo v. State ex rel. Tavares*, 785 A.2d 561 (R.I. 2001), *remanded from* *Palazzolo v. Rhode Island*, 533 U.S. 606 (2001), *aff'g in part and rev'g in part* *Palazzolo v. State ex rel. Tavares*, 746 A.2d 707, (R.I. 2000).

<sup>511</sup> *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1019 (1992). See also *infra* notes 531–536 and accompanying text (discussing the case).

<sup>512</sup> *Lucas*, 505 U.S. at 1022–23.

<sup>513</sup> *Id.* at 1031.



those wetlands should also receive formal attention during the takings analysis, but that consideration is currently foreclosed, or forced sub rosa into the murky “character of the government action” test. Revising the balancing test to account for these interests would bring them out of the shadows and properly into the official judicial calculus.

## 2. Investment-Backed Expectations Prong

Applying the same symmetry to the second prong of the regulatory takings balancing test is also corrective of its underlying imbalance. The second prong of the test asks whether the government activity unduly interferes with the private owners’ reasonable, investment-backed expectations of use. Historically, this inquiry considers whether the regulation interferes with vested rights of use—an existing use or a primary expectation of use—or merely an inchoate opportunity for future use. The court also asks whether the owner’s reliance on previous law was reasonable, or whether the investment was made on notice of the change, or whether the change in law was foreseeable. In this proposal, when evaluating a claim against state action to protect public commons resources, the reviewing court should not only consider the investment-backed expectations of the owner in planning for commercial activity impacting the commons. It should also consider the investment-backed expectations of the public in protecting the public commons values threatened by private activity or exploitation, as well as how foreseeable those new regulations should have been to everyone involved.

For example, the state of Florida has invested heavily in the protection of water resources in central parts of the state near Lake Okeechobee, attempting to limit pollution from improperly maintained sewer systems and agricultural runoff through a series of canals, treatment facilities, and other expensive means.<sup>514</sup> Moreover, the state invests in carefully designed regulation, monitoring, and enforcement to protect the health of waterways.<sup>515</sup> When these sources of water pollution are not handled properly,

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<sup>514</sup> See OFF. OF INSPECTOR GEN. OF S. FLA., AUDIT OF COMPLIANCE WITH LAKE OKEECHOBEE PROTECTION ACT REPORT # 09-02 1-3 (Feb. 10, 2010), <https://www.sfwmd.gov/sites/default/files/documents/lake%20okeechobee%20-%20final%20report.pdf> [<https://perma.cc/SA95-PDZM>] (“[A]pproximately \$220 million has been appropriated to the Lake Okeechobee Protection Program and approximately \$149 million has been expended in connection with its implementation.”).

<sup>515</sup> See, e.g., Press Release, Governor Ron DeSantis, Governor Ron DeSantis Announces More Than \$481 Million in Awards to Improve Water Quality (Nov. 9, 2021), <https://www.flgov.com/2021/11/09/governor-ron-desantis-announces-more-than-481-million-in-awards-to-improve-water-quality-across-the-state> [<https://perma.cc/2D77-VTZP>] (announcing a major investment into a wastewater grant program aimed at reducing nitrogen inputs into Florida waterbodies pursuant to the passage of The Clean Waterways Act in 2020).

they can lead to massive algal blooms in coastal waters that foul beaches and beach communities that are a mainstay for the state's tourism economy, not to mention the environmental costs to lost ecosystem services, habitat, and residential quality of life.<sup>516</sup> The significant state investment to avoid these public losses, as well as the further investment that will be required if targeted environmental regulations are weakened, should count in the balance of a takings claim against them.

When the state of Florida engages in beach renourishment efforts to prevent coastal erosion from storms and rising sea levels,<sup>517</sup> or protects coral reef systems by creating artificial reefs,<sup>518</sup> these investment-backed expectations should similarly count in the balance when analyzing a takings claim against the regulation of fisheries equipment or navigational interests, or to prevent beach renourishment itself.

### 3. The Character of the Government Action

In this proposal, the first two prongs of the test are left essentially intact, modified only to include symmetrical consideration of public and private values associated with impacted public commons. However, the third prong, assessing the character of the government action, adds something doctrinally new: in the overall assessment of whether the regulation is more of an invasion of private interests or a legitimate restriction on harmful uses, it adds consideration of the state's duty to protect the public interests in state-owned natural resource commons, including noneconomic public environmental values.

As modified here, the third prong of the carveout requires explicit consideration of the government's responsibility to prevent harm to public resource commons and protect environmental values that may not register in the economic terms that are the focus of the prior two prongs. It would not replace the other inquiries traditionally associated with the Character of the Government Action prong, including the reciprocity of advantage inquiry, which assesses the fairness of the overall allocation of burdens and benefits associated with the regulation,<sup>519</sup> and whether it effects a permanent physical

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<sup>516</sup> See generally Cynthia Ann Heil & Amanda Lorraine Muni-Morgan, *Florida's Harmful Algal Bloom (HAB) Problem: Escalating Risks to Human, Environmental and Economic Health with Climate Change*, 9 FRONTIERS IN ECOLOGY & EVOLUTION 1 (2021).

<sup>517</sup> See, e.g., *Stop the Beach Renourishment, Inc. v. Fla. Dep't of Env't Prot.*, 560 U.S. 702, 707 (2010) (considering a takings challenge to state regulatory efforts to mitigate coastal erosion).

<sup>518</sup> See generally L.E. Harris, *Artificial Reefs for Ecosystem Restoration and Coastal Erosion Protection with Aquaculture and Recreational Amenities*, 1 REEF J. 235 (2009).

<sup>519</sup> *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 140 (1978) (Rehnquist, J., dissenting) ("All property owners in a designated area are placed under the same restrictions, not only for the benefit of the municipality as a whole but also for the common benefit of one another.

occupation of private property or legitimately restricts impermissibly harmful uses.<sup>520</sup> However, requiring explicit consideration of the state's duty to protect public interests in the commons forces consideration of noneconomic factors that would otherwise be invisible to the economic interest and investment-backed expectations prongs of the test.

Consideration of these factors is arguably allowed by the existing test and frequently engaged in by acting agencies and reviewing courts, though without explicit doctrinal support. Accounting for the state's police power obligations to protect the public in the takings inquiry may seem evocative of the due process analysis that the Supreme Court separated from the regulatory takings balancing test in the 2005 case of *Lingle v. Chevron*, which retired the "substantially advances a legitimate state interest" test that had previously been used to distinguish government actions that required compensation from those that did not.<sup>521</sup> There, the Court formally consolidated regulatory takings analysis within the *Penn Central* three-factor framework, leaving considerations of the legitimacy of the state's regulatory interest to a constitutionally separate due process analysis.<sup>522</sup>

Yet even in *Lingle* itself, the Court emphasized the necessity of considering more than just the economic impacts of a regulatory burden when assessing the balance of public and private interests in conflict. In the *Lingle* decision, the Court reasoned that the "substantially advances" inquiry it was rejecting "reveals nothing about the *magnitude or character of the burden*" a particular regulation imposes upon private property rights, underscoring the importance of continuing to assess the character of the challenged regulation in this prong of the takings analysis. The Court's language acknowledged the need for considering (and perhaps seeded the ongoing consideration of) the state's police power obligation to protect public interest as a factor in the balance, at least in evaluating the public commons takings conflicts that are the subject of this Article. Discussed further below, the Court's newer

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In the words of Mr. Justice Holmes, . . . there is 'an average reciprocity of advantage.'" (quoting *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1992)); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1017-18 (1992) ("[I]n the extraordinary circumstance when no productive or economically beneficial use of land is permitted, it is less realistic to indulge our usual assumption that the legislature is simply 'adjusting the benefits and burdens of economic life' . . . in a manner that secures an 'average reciprocity of advantage' to everyone concerned . . . ." (quoting *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978))).

<sup>520</sup> See *Penn Cent. Transp. Co.*, 438 U.S. at 124 ("A 'taking' may more readily be found when the interference with property can be characterized as a physical invasion by government . . . than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good."); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) ("We conclude that a permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve.").

<sup>521</sup> *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 545 (2005).

<sup>522</sup> *Id.* at 538, 542.

regulatory takings decisions, such as *Murr v. Wisconsin*<sup>523</sup> and *Arkansas Game & Fish Commission v. United States*,<sup>524</sup> support the quality of analysis advanced here, which considers the state's regulatory burden in protecting the commons property rights retained by the public when evaluating whether the regulation "goes too far."<sup>525</sup>

This proposal does not reject the insights of *Lingle* (nor its welcome jurisprudential housekeeping) in distinguishing the due process analysis and consolidating regulatory takings analysis within the *Penn Central* framework. However, it picks up where *Lingle* left off in providing additional tools within that framework to account for the regulatory obligations of the state to protect public commons property as part of the character of the government action inquiry. To the extent this proposal pushes beyond what *Lingle* imagined in 2005, then it can be distinguished and considered a novel element.

Alternatively, some might cast the proposal as a revival of the Court's pre-*Penn Central* tradition of centering the importance of the state's regulatory objective in assessing takings claims.<sup>526</sup> Yet in these older cases, assessment of the legitimacy of the state's interest supplanted the consideration of private harm, constituting the entirety of the takings inquiry.<sup>527</sup> The Court has correctly rejected that approach in its newer takings jurisprudence, and this proposal does not seek to supplant that model; it merely gives express consideration to the unique role of the state as a protector of both private *and* public property within contested natural resource commons.

#### 4. The Proposal and Precedent: It Was There All Along

In contrast to the first two factors of the modified test, then, the proposed change to the Character of the Government Action assessment goes beyond imposing mere private–public symmetry to requiring something apparently

<sup>523</sup> 137 S. Ct. 1933 (2017).

<sup>524</sup> 568 U.S. 23 (2012).

<sup>525</sup> *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

<sup>526</sup> *See, e.g., Hadacheck v. Sebastian*, 239 U.S. 394 (1915). In *Hadacheck*, the Court acknowledged that "the police power of a state cannot be arbitrarily exercised," but went on to uphold public nuisance regulations against a taking claim because the police power is

one of the most essential powers of government—one that is the least limitable. It may, indeed, seem harsh in its exercise, usually is on some individual, but the imperative necessity for its existence precludes any limitation upon it when not exerted arbitrarily. A vested interest cannot be asserted against it because of conditions once obtaining . . . . There must be progress, and if in its march private interests are in the way they must yield to the good of the community.

*Id.* at 410.

<sup>527</sup> *See generally Mugler v. Kansas*, 123 U.S. 623 (1887).

new. Even so, the change is more moderate than it might at first appear. Arguably, it simply requires explicit consideration of regulatory features that are already implied by the existing character of the government action prong, which already considers whether the government action is more of an invasion of a private interest or a legitimate restriction on impermissibly harmful activity.

In this respect, the character inquiry intersects with the economic impact prong, which requires consideration of whether a large economic loss is justified by a legitimate restriction on harmful uses, such as a common law nuisance, notwithstanding its substantial interference with private economic enjoyment.<sup>528</sup> Taken together, these prongs recognize the legitimacy of regulations that protect the public, and they prevent owners from alleging takings based on harm to property interests that they never really had in the first place. They foreclose claims to compensation for sticks taken from their bundle of property rights that were never in their possession to begin with, having been allocated elsewhere by the background principles of state law.<sup>529</sup> For example, as discussed in Part III, the stick that prevents an owner from engaging in a nuisance is already held by the community, and so the government may legitimately prevent it without incurring takings liability.<sup>530</sup>

In *Penn Central* and its progeny, the Supreme Court explicitly recognized the nuisance or “noxious use” exception, acknowledging that there are instances in which the character of the government action is one that legitimately prevents undue private harm.<sup>531</sup> However, the intra-court colloquy in *Lucas* revealed that there are harms the government might

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<sup>528</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1027 (1992) (“[Even a regulation] that deprives land of all economically beneficial use . . . may resist compensation [] if the logically antecedent inquiry into the nature of the owner’s estate shows that the proscribed use interests were not part of his title to begin with.”). See also *Penn Cent. Transp. Co.*, 438 U.S. 104, 144-145 (1978) (Rehnquist, J., dissenting) (discussing the “nuisance exception to the takings guarantee,” which extinguishes any compensation requirement “where the government is merely prohibiting a noxious use of property”). Justice Rehnquist quoted *Mugler* and other early takings cases when he explained, “A prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be injurious to the health, morals, or safety of the community, cannot, in any just sense, be deemed a taking or an appropriation of property for the public benefit. Thus, there is no ‘taking’ where a city prohibits the operation of a brickyard within a residential area, or forbids excavation for sand and gravel below the water line.” *Id.* (internal citations omitted).

<sup>529</sup> See Ryan, Palazzolo, *The Public Trust*, *supra* note 368 at 132-38 (discussing the “No Stick Taken” defense to takings claims); Echeverria, *supra* note 370, at 931-34 (2012) (analyzing use of the public trust doctrine as a takings defense); J. Peter Byrne, *The Public Trust Doctrine, Legislation, and Green Property: A Future Convergence?*, 45 U.C. DAVIS L. REV. 915, 916 (2012) (suggesting use of the doctrine as a takings defense). But see Barton H. Thompson, Jr., *Judicial Takings*, 76 VA. L. REV. 1449, 1532-33 (1990) (criticizing background principles defenses).

<sup>530</sup> See *supra* note 521 and accompanying text (citing Supreme Court assertions of this principle); *supra* notes 347-357 and accompanying text (“The Dynamic Bundle of Sticks”).

<sup>531</sup> *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 129 (1978); *Lucas*, 505 U.S. at 1022-23.

legitimately seek to prevent that do not fit within the narrow confines of the common law of nuisance—such as the cumulative impacts associated with incremental private withdrawals from a public commons.<sup>532</sup> It is for these cases that the proposed change is important.

*Lucas* considered shoreline stabilization regulations limiting cumulatively harmful incursions by private beachfront developers into the coastal wetlands commons that provide ecosystem service buffers against the relentless forces of erosion.<sup>533</sup> The majority concluded that the statute effected a taking when it prevented all economic use of a developer's lands, noting that his intended use, on its own, would not have constituted a common law nuisance and thus did not qualify for the exception to its new per se rule.<sup>534</sup> Justice Kennedy concurred separately to emphasize that preventing a nuisance could not be the only legitimate basis for regulations curtailing all economic use, or else the Takings Clause would require the public to pay off owners to prevent them from causing novel forms of harm not cognizable under nuisance law.<sup>535</sup> On this point, he joined critical aspects of the dissenting justices' reasoning, probably commanding a majority view at the time.<sup>536</sup>

Later, in *Palazzolo*, the Court further narrowed the circumstances in which the *Lucas* nuisance exception could shield harm-preventing regulations from takings liability, holding that an owner's investment-backed expectations are not necessarily defeated by statutorily designated nuisances.<sup>537</sup> Justice O'Connor concurred separately to emphasize her understanding that the Court's decision did not mean that pre-title statutory nuisances were irrelevant to the owner's reasonable expectations, only that they were not dispositive,<sup>538</sup> as Justice Scalia had reasoned in his majority opinion.<sup>539</sup> In each of these decisions, the dialogue among the justices reveals the difficulty of balancing the public and private interests in property, especially where they intersect in natural resource commons. Like cumulative development impacts, the privatization of vulnerable public commons may not sound within traditional common law nuisance, but it can harm public property interests that the state should be entitled to protect.

The government's obligation to protect the public interest are heightened in commons contexts, thus warranting explicit consideration in a balancing

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<sup>532</sup> *Lucas*, 505 U.S. at 1031-32.

<sup>533</sup> *Id.* at 1007, 1022.

<sup>534</sup> *Id.* at 1019.

<sup>535</sup> *Id.* at 1035 (Kennedy, J., concurring).

<sup>536</sup> *Id.* at 1054-55 (Blackmun, J., dissenting).

<sup>537</sup> See *Palazzolo v. Rhode Island*, 533 U.S. 606, 627 (2001) (explaining that property owners can challenge state enactments that unreasonably restrict land use).

<sup>538</sup> *Id.* at 632-36 (2001) (O'Connor, J., concurring).

<sup>539</sup> *Id.* at 636-37 (Scalia, J., concurring).

test designed specifically for takings conflicts involving natural resource commons. Yet the suggestion that courts consider these obligations in the takings balance is not really new—it simply requires explicit deliberation of factors already available under the current character of the government inquiry prong. Indeed, several of the Court’s newest regulatory takings decisions demonstrate that the jurisprudence has already moved in this direction, giving direct consideration to the character of the impacted land<sup>540</sup> and the character of the government’s obligations to protect public environmental values.<sup>541</sup>

In 2012, in *Arkansas Game & Fish Commission v. United States*, the Supreme Court ruled in favor of a state land management agency that had challenged a federal flood control project for recurrent floodings of protected state lands—open space that had originally been set aside as a forest and wildlife preserve but had been gradually transformed into undesirable swamplands.<sup>542</sup> In a dispute pitting one government agency against another over the use of a protected commons, the Court concluded that the floodings authorized by the Army Corps could be considered temporary government invasions that could support a takings claim.<sup>543</sup> In so holding, the Court explained the need to consider “the character of the land at issue” and to weigh the impacts to that character, noting that the state public had been denied their customary use of the flooded land as the bottomland hardwood forest gradually turned into a swamp.<sup>544</sup> The Court gave great deference to the state’s obligation to protect the natural resource commons values of the forest and wildlife preserve intended for public use—considering them sufficiently important to outweigh the countervailing values of another important public good, flood control.<sup>545</sup>

Five years later, in *Murr v. Wisconsin*, the Court affirmed that the government’s objective in protecting the environmental values of a public commons matters to the regulatory takings analysis.<sup>546</sup> In ruling against private owners challenging zoning regulations that treated two adjacent

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<sup>540</sup> *Ark. Game & Fish Comm’n v. United States*, 568 U.S. 23, 38-40 (2012).

<sup>541</sup> *Murr v. Wisconsin*, 137 S. Ct. 1933, 1944-45, (2017). *Cf.* *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 539, 542 (2005) (emphasizing the importance of assessing the character of the regulatory burden in noting that the “substantially advances” inquiry rejected by its holding “reveals nothing about the magnitude or character of the burden a particular regulation imposes upon private property rights”).

<sup>542</sup> *Ark. Game & Fish Comm’n*, 568 U.S. at 38-40.

<sup>543</sup> *Id.* at 38.

<sup>544</sup> *Id.* at 39-40.

<sup>545</sup> *Id.*

<sup>546</sup> *Murr*, 137 S. Ct. at 1945-46 (articulating an additional balancing test within the standard regulatory balancing test for establishing the proper denominator for assessing an alleged total economic wipeout).

substandard properties as one for development purposes, the Court observed that the municipality's legitimate objective—protecting the environmental values of the local river—mattered to its analysis.<sup>547</sup> Its assessment of the character of the land and the regulatory burden included an evaluation of the parcel's surrounding human and ecological environment.<sup>548</sup> The Court found it relevant that the property was in an area that was either already subject to environmental regulation or likely to be soon, given that the area had been specially regulated for conservation long before the plaintiffs took title.<sup>549</sup> The decision even referenced Justice Kennedy's concurrence in *Lucas*, which noted that “[c]oastal property may present such unique concerns for a fragile land system that the State can go further in regulating its development and use than the common law of nuisance might otherwise permit.”<sup>550</sup>

Cases like *Murr* and *Arkansas Game & Fish* reveal that the “character of the government action” prong of the current test already invites consideration of the government's responsibility, acting on behalf of public, to protect the public interests in natural resource commons—including noneconomic interests invisible under the economic impacts and reasonable expectations prongs of the test.<sup>551</sup> Indeed, in balancing public against private interests in natural resource commons, private economic interests in exploitation must be properly weighed against the values of leaving the commons undivided. This balancing process may be facilitated by efforts to assign monetary figures to environmental values, perhaps using economic tools to assign replacement values, existence values, or bequest values,<sup>552</sup> but it may require the more

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<sup>547</sup> *Id.* at 1947-48.

<sup>548</sup> *Id.* at 1945.

<sup>549</sup> *Id.* at 1948.

<sup>550</sup> *Id.* at 1946 (citing *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1035 (1992) (Kennedy, J., concurring)).

<sup>551</sup> Some courts have interpreted the Supreme Court's holding in *Lingle* separating out the due process and takings analyses as limiting the “character of the government action” prong to consider only whether an invasion or occupation has taken place. *See, e.g., City of Coeur D'Alene v. Simpson*, 136 P.3d 310, 318 n.5 (Idaho 2006) (explaining that *Lingle* sought to correct “inquiry into the relative goodness of the action”). Others have retained consideration of the state's obligation to protect the public interests that are in competition with private interests. *See, e.g., ConocoPhillips Co. v. Henry*, 520 F. Supp. 2d 1282, 1312 (N.D. Okla. 2007), *rev'd sub nom.*, *Ramsey Winch Inc. v. Henry*, 555 F.3d 1199 (10th Cir. 2009) (articulating a test that includes consideration of the public interest); *Wal-Mart Stores v. City of Turlock*, 138 Cal. App. 4th 273, 279 (Cal. Ct. App. 2006) (concluding that a city can limit development to serve the general welfare). However, the Supreme Court's more recent rationale in *Murr v. Wisconsin* suggests that today, the criterion is broad enough to take account of these aspects of the state's responsibility. *See* 137 S. Ct. 1933 (2017) (factoring the benefits of environmental conservation into its takings analysis to hold, in part, that a land use regulation limiting development and preventing separate parcel sales was not a regulatory taking).

<sup>552</sup> *See, e.g., Ryan et al., Environmental Rights for the 21st Century*, *supra* note 33, at 2545-46 (discussing the difficulty of assigning monetary values to natural resources); David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 *ECOLOGICAL* L.Q. 545, 587-600 (1997) (questioning the use of cost-benefit analysis in setting environmental



difficult project of balancing quantitatively discrete economic values against qualitatively significant values that are inherently difficult to quantify.<sup>553</sup>

Again, it may initially seem like formally *requiring* attention to the government's obligation to protect the environmental values of resource commons is the biggest change urged here—because the other two prongs merely extend to the public interest fair consideration of the same factors we already give private interests under the test, while the third prong formalizes new criteria. But the cases discussed above reveal that this part of the proposal simply recognizes overtly what is already implied by the test and is already being put into practice.<sup>554</sup> In this respect, the proposal should neither destabilize settled expectations nor demoralize the legal order, both hazards of legal innovation that property scholars caution against.<sup>555</sup> Instead, it follows other scholarly insights toward a more holistic and dynamic conception of property law that can respond to unforeseen challenges and advance the goals of human flourishing.<sup>556</sup>

In *Property's Morale*, Professor Nestor Davidson responded to a famous conversation within the property theory discourse that Professor Frank Michelman had initiated years earlier, in which Michelman heralded the value of stability in property law to avoid the demoralization costs that the frustration of settled expectations could portend for adherence to property

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regulations, partly because regulators undervalue environmental benefits). *But see* Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 HARV. ENV'T L. REV. 433, 449 (2008) (discussing the advantages of cost-benefit analysis in environmental contexts); Keske, *supra* note 33, at 427-28 (2011) (explaining how to value environmental goods through nonuse values); Salzman et al., *supra* note 32, at 310-12 (2001) (arguing for the valuation of environmental services); MICHAEL A. LIVERMORE & RICHARD L. REVESZ, REVIVING RATIONALITY: SAVING COST-BENEFIT ANALYSIS FOR THE SAKE OF THE ENVIRONMENT AND OUR HEALTH 191-209 (2020) (suggesting cost-benefit analysis reforms).

<sup>553</sup> See *supra* note 552 and accompanying text (describing the advantages of prior cost-benefit analyses in environmental and health contexts).

<sup>554</sup> Cf. Timothy M. Mulvaney, *Property-as-Society*, 2018 WIS. L. REV. 911, 953-68 (2018) (advancing a more holistic conception of property suggested by the Supreme Court's newer takings jurisprudence, especially in the justices' colloquy in *Lucas*, and the observations by both the majority and dissenting opinions in *Murr* that courts must assess differences between property and the different kinds of nuisances that might arise).

<sup>555</sup> See Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165, 1213 (1967) ("Security of expectation is cherished, not for its own sake, but only as a shield for morale.").

<sup>556</sup> See, e.g., ALEXANDER, *supra* note 349, at 3 (focusing on how the moral foundations in property encourage human flourishing by protecting their assets and livelihoods); Mulvaney, *supra* note 554, at 953-68 (discussing the goals of the new Supreme Court takings jurisprudence); Nestor M. Davidson, *Property's Morale*, 110 MICH. L. REV. 437, 441-42 (2011) [hereinafter Davidson, *Property's Morale*] (discussing the implications of the behavioral and psychological literature for decision making in the face of risk, instability, and majoritarianism).

law (and perhaps the rule of law more generally).<sup>557</sup> Without disputing this important observation, Davidson pointed to an overlooked benefit performed by the seemingly opposite feature of property law—its dynamism, or its ability (by virtue of the precedential processes of common law evolution) to change in response to changing societal circumstances.<sup>558</sup>

While Davidson agrees with Michelman that the stability of property law in the face of changing circumstances protects us against demoralization costs, he adds that the ability of property law to evolve—to adapt appropriately to serve the human values that undergird the institution of property—also *protects* morale, endowing citizens with confidence in the integrity and durability of the overall system.<sup>559</sup> The public can feel confident that “when problems emerge, the system they are contemplating entering will not grind its inexorable way forward unmindful of change,” because “for some people, what they need to know ahead of time is not that the system is constant but that it will work.”<sup>560</sup> This proposal provides an opportunity to ensure that the system works, for both the private and public owners of interests within these commons.

### C. *The Next Purposeful Step in Takings Evolution*

Regardless of how these aspects of the test are reconfigured, we can conceptualize it as the next purposeful evolution of a jurisprudence the Supreme Court has been willing, and at times even eager, to develop. The public commons rule would become the next exception carved out of the general regulatory takings test, following several others that the Court has already established. Just as the Court carved out *per se* exceptions to the *ad hoc* test for permanent physical occupations<sup>561</sup> and total economic wipeouts,<sup>562</sup> and as it more recently elaborated a special balancing test for

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<sup>557</sup> See Michelman, *supra* note 555, at 1213 (“In sum, we must remember that the utilitarian’s solicitude for security is instrumental and subordinate to his goal of maximizing the output of satisfactions.”).

<sup>558</sup> See generally Davidson, *Property’s Morale*, *supra* note 556 (describing how legal institutions are confronted with changed circumstances over time, arising from new understandings of harm or new opportunities).

<sup>559</sup> *Id.* at 488 (arguing that the security of expectations protected by property theory operates as a shield for morale).

<sup>560</sup> *Id.*

<sup>561</sup> See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) (holding that any permanent physical occupation of property authorized by government is deemed a compensable taking).

<sup>562</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1018 (1992) (holding that instead of performing a balancing test, a taking will always be found if regulation completely eliminates economically beneficial or productive use of land).

assessing takings challenges to the regulation of contiguous parcels,<sup>563</sup> so too should it create a special exception for claims involving natural resource commons.

It is even possible to imagine stacked circumstances triggering both a previous per se rule and the new public commons rule—for example, a claim for total deprivation of use by a regulation protecting public commons values on protected public lands. In such cases, and in light of the mixture of public and private ownership interests at issue, courts should apply the public commons rule before the others, requiring explicit balancing of public and private interests that the older per se rules preempt. This ordering will likely prompt opposition from private property advocates, as it has the potential to undo the results of cases with facts similar to those setting forth these rules, such as *Lucas* and *Palazzolo*. However, if the conflict is between legitimate private interests that threaten equally legitimate public interests in the context of a true public commons, then the reasoning offered here should be dispositive. In a true public commons, the public interests at stake warrant just as much consideration as the private interests in the takings calculus—no more, and certainly no less.

To that end, a lot of weight hangs on the applicable definition of a public natural resource commons. There is potential for disagreement on just how broadly we should be willing to expand that definition, from the uncontroversial examples of Yosemite National Park or the Ogallala Aquifer, to larger and more diffuse public commons, such as the atmospheric commons in which we all live and breathe. This is a subject of an enormous literature that precedes this work,<sup>564</sup> and which warrants far more consideration than I can offer in this initial foray.

Indeed, legal scholarship has long grappled with even more basic distinctions between private and public forms of property. To take just a few examples, Professor Carol Rose joined the Ostrom-Harding commons colloquy<sup>565</sup> in 1986 with an exploration of the inherent characteristics of public property that make it presumptively withdrawn from private appropriation, thus distinguishing public commons specifically from common pools more generally.<sup>566</sup>

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<sup>563</sup> See *Murr v. Wisconsin*, 137 S. Ct. 1933, 1945-46 (2017).

<sup>564</sup> See OSTROM, *supra* note 19; AMY R. POTEETE, MARCO A. JANSSEN & ELINOR OSTROM, *WORKING TOGETHER: COLLECTIVE ACTION, THE COMMONS, AND MULTIPLE METHODS IN PRACTICE* (2010); John Krinsky & Paula Z. Segal, *Stewarding the City as Commons: Parks Conservancies and Community Land Trusts*, 22 CUNY L. REV. 270 (2019).

<sup>565</sup> See *supra* notes 19–21 and accompanying text (discussing commons and collective action scholarship by Harding and Ostrom).

<sup>566</sup> See, e.g., Rose, *supra* note 20, at 717 (“Why, in short, is any property inherently or even presumptively withdrawn from exclusive private appropriation? What characteristics of the property

Twenty years earlier, in 1964, Professor Charles Reich argued that the expectations that individuals may accrue in government benefits, services, and contracts should be recognized as a new form of public property and protected on par with more traditionally owned property.<sup>567</sup> Reich's conception of "new property" differs from that engaged here and in Rose's work, because its benefits accrue to individuals, rather than the public in the aggregate (and Reich himself distinguishes interests in land and natural resources as the traditional forms of property he contrasts), but it raises important questions about the nature of public property and its rightful protection.<sup>568</sup>

In 2000, Professor Thomas Merrill offered a theory of constitutional property that defines a "floor" for private rights beyond which public interference must not extend.<sup>569</sup> The core features of private property that his work addresses include economic value, rights to exclude, and irrevocability,<sup>570</sup> whereas the public commons engaged here are valued less for monetary and exclusion purposes than for benefits that accrue to the public as a whole, such as recreational use, flood protection, and carbon sequestration.<sup>571</sup> Where Merrill defines a protected threshold for private property against public interference, this account invites consideration of, perhaps, a protected threshold for public property against private encroachment.

For present purposes, and as noted in Part III, I leave questions about the outer boundaries of the doctrine proposed here to future debate, asserting that it should at least apply in the uncontroversial public commons that are already recognized by natural resource laws, such as public forests, fisheries, waterways, coasts, oil and gas reserves, and protected lands. Future work is needed to further define the scope of public commons that should trigger this inquiry, and the scope of the public interests that warrant consideration under this test. At a minimum, they should include the environmental values most vulnerable to degradation by private claims—especially those that erode the

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require it to be open to the public at large, and exempt from the classical economic presumption favoring exclusive control?").

<sup>567</sup> Reich, *supra* note 463, at 736-39 (advocating that welfare benefits and other forms of public assistance be considered vested property rights similar to traditional forms of autonomously held property).

<sup>568</sup> *Id.* at 733 (noting that government protection of property has led to the emergence of government as a significant source of wealth).

<sup>569</sup> See Thomas W. Merrill, *The Landscape of Constitutional Property*, 86 VA. L. REV. 885, 969, 998 (2000) (describing the limits of the right to exclude and proposing that courts "derive a federal patterning definition for takings purposes that would ask whether nonconstitutional sources of law confer an irrevocable right on the claimant to exclude others from specific assets.").

<sup>570</sup> *Id.* at 998.

<sup>571</sup> For an in-depth discussion of the values and benefits derived from different public commons resources, see *supra* notes 32-34 and accompanying text.

integrity of an intact resource system until it breaks down, and the ecosystem services on which the public and biotic community depend are lost.

While this proposal is designed to address natural resource commons specifically, it may ultimately have implications for other contested public commons that are conceptually related, including the spectral bandwidth and broadband commons,<sup>572</sup> the genetic commons involving human and other species' DNA,<sup>573</sup> airspace commons that will become ever more congested as technology presses forward,<sup>574</sup> and even weather systems. Perhaps transferable development rights within systems of zoning, or even zoned communities themselves, or other forms of regulatory property share elements with public commons property.<sup>575</sup> Some property theorists would argue that similar principles govern all regulatory takings assessments, given that all property is immersed in varying webs of tension between public and private interests, and not just public commons<sup>576</sup>—a concern I engage below in the final section of responses to objections.

And since there are likely to be many, I end the inquiry by addressing some of them directly.

#### D. Objections: Private Rights, Limiting Principles, and Stewardship

Before concluding the proposal, it is important to concede the danger of the project in several different directions: (1) potentially underprotecting private property rights in public commons, and the related call (2) to “just pay for it”; (3) potentially overprotecting diffuse public commons from cumulative private impacts for lack of a limiting principle; (4) reinforcing the use of property law for environmental protection instead of a stewardship-based approach; and finally, (5) failing to aim high enough.

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<sup>572</sup> Cf. Brent Skorup, *Reclaiming Federal Spectrum: Proposals and Recommendations*, 15 COLUM. SCI. & TECH. L. REV. 90, 100 (2013) (noting that the rising demand for bandwidth is using up the available supply of spectrum); Jerry Brito, *The Spectrum Commons in Theory and Practice*, 2007 STAN. TECH. L. REV. 1, 1-4 (2007) (describing radio spectrum as a scarce resource that warrants more efficient management and regulation).

<sup>573</sup> See Jorge L. Contreras & Bartha M. Knoppers, *The Genomic Commons*, 19 ANN. REV. OF GENOMICS & HUM. GENETICS 429, 430 (2018) (arguing that the genomic commons is a global public resource); see also *Moore v. Regents of Univ. of Cal.*, 793 P.2d 479 (Cal. 1990) (noting different judicial responses to the question whether a person's cells and DNA are protectable property rights).

<sup>574</sup> See SUSAN J. BUCK, *THE GLOBAL COMMONS* 111-14 (1998) (describing the history of airspace regulatory regimes to the present norms of national sovereignty).

<sup>575</sup> Cf. Serkin, *Penn Central Take Two*, *supra* note 332, at 940-42 (discussing regulatory property in TDRs); Pappas, *A Right to Be Regulated*, *supra* note 332, at 120-22 (discussing other forms of regulatory property, such as fishing and grazing permits that have been disclaimed as constitutional property but would otherwise be seen as property).

<sup>576</sup> Cf. Serkin, *Penn Central Take Two*, *supra* note 332, at 940-42 (“If owners should expect changes to regulatory property over time, they should perhaps also expect changes to the regulatory restrictions that apply to more traditional private property, as well.”).

### 1. The Underprotection of Private Rights

An initial objection that warrants consideration is one that might be made by the holders of private interests in public commons (and those who aspire to hold them). These owners might look at the revised balancing test, requiring more explicit consideration of public values than even the original, and ask if they could ever win a case. This is a legitimate question, given concerns raised by property rights advocates that private owners rarely win regulatory takings claims under the standing *Penn Central* ad hoc test.<sup>577</sup> It is on this basis that such advocates have called for the replacement of the original test altogether,<sup>578</sup> and it is arguably part of the impetus behind the Supreme Court's efforts to weaken it through the creation of the per se exceptions for permanent physical occupations and total economic wipeouts in the 1980s and 1990s.<sup>579</sup>

It may be a legitimate question, although given the existing complaint, the revised test may prove no more or less advantageous for private interest holders. If the critique is that they are already condemned to lose under the *Penn Central* balancing test, then there may be no real difference in outcome for these owners, and at least the public commons test is more up-front about the relevant considerations in this context. Moreover, if these explicitly balanced interests really do yield in favor of the public interests in natural resource commons, then perhaps that is simply the correct answer. After all, allowing private interests to erode an otherwise sustainable public commons, as the tragedy of the commons parable warns, may portend failure for all stakeholders.<sup>580</sup>

The private plaintiffs' likely counter argument is that instead of acknowledging their bad odds more openly through a forthright standard, better to simply reject the balancing test outright for a clearer rule with stronger protections for private property. Yet even after the 1980s and 1990s "takings revolution" galvanized private rights in the regulatory takings

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<sup>577</sup> See Lynn E. Blais, *The Total Takings Myth*, 86 FORDHAM L. REV. 47, 50 (2017) (noting that landowners rarely win regulatory takings claims under the *Penn Central* test). But see Rick E. Rayle, *Regulatory Takings Claims: A Rare Win for Property Owners*, NOSSAMAN LLP (2012) <https://www.nossaman.com/newsroom-insights-regulatory-takings-claim-a-rare-win-for-property-owners> [<https://perma.cc/8VA4-CG8N>] (affirming the trend but discussing a contrary example in which a California property owner prevailed in a regulatory takings claim: *Avenida San Juan Partnership v. City of San Clemente*, 2011 DJDAR 17887 (4th Dist. Dec. 14, 2011)).

<sup>578</sup> See *supra* note 506 and accompanying text (discussing critiques of the *Penn Central* test).

<sup>579</sup> See *supra* notes 88–92 and accompanying text (discussing *Loretto* and *Lucas* exceptions).

<sup>580</sup> See Gary D. Libecap, *The Tragedy of the Commons: Property Rights and Markets as Solutions to Resource and Environmental Problems*, 53 AUSTL. J. OF AGRIC. & RES. ECON. 129, 130 (2007) (discussing the potential damages associated with the tragedy of the commons).

context, the Supreme Court has continuously fallen back to the *Penn Central* balancing test for lack of a workable alternative.<sup>581</sup>

As the Court has repeatedly stated, the objectives of balancing public and private interests in property cannot be reduced to a formulaic standard; instead, it requires a nuanced balancing of multiple interdependent factors.<sup>582</sup> In assessing an owners' reasonable expectations, for example, the court looks at the current use of the property, the purchase price, the use of adjacent properties, the appropriateness of the property for the proposed use, the time of purchase relevant to the contested regulation, and the prior existence of similar or related regulations<sup>583</sup>—and that is just one prong of the original three-pronged test. Takings claims are inherently complicated, and those involving natural resource commons are even more so. Since there are no easy short-cuts for balancing, we might as well acknowledge exactly what it is that we must balance.

## 2. “Just Pay for It”

From the same perspective of private property advocacy, a related objection may be to the framing of the privatization paradox as a one-way ratchet to begin with. Since the government can always reclaim private property for public use through the power of eminent domain by paying just compensation, it should theoretically be just as easy for the public to recover lost interests in commons as for private parties to acquire them from the public. As this argument goes, the public can always take the property it needs from private owners—“just pay for it.”

The reality of the limited public fisc (and the limited public tolerance for tax increases ) admittedly pose pragmatic problems for this approach. Even more important, and as detailed in Part II, sometimes the environmental damage of privatization cannot be unwound by simply repurchasing former public commons property. For example, if the forest has already been logged, the wilderness mined, or the habitat fragmented, then the public

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<sup>581</sup> See e.g., *Tahoe-Sierra Pres. Council v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 321 (2002) (“[W]e conclude that the circumstances in this case are best analyzed within the *Penn Central* framework.”); *Murr v. Wisconsin*, 137 S. Ct. 1933, 1949 (2017) (finding that the petitioners did not suffer a taking under the “more general test of *Penn Central*”).

<sup>582</sup> *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (“[The Court] has been unable to develop any ‘set formula’ for determining when ‘justice and fairness’ require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons.”); see also Thomas Ruppert, *Reasonable Investment-Backed Expectations: Should Notice of Rising Seas Lead to Falling Expectations for Coastal Property Purchasers*, 26 J. LAND USE 239, 253-54 (2011) (“[The *Penn Central* analysis] defies set rules and instead is an *ad hoc*, case-specific inquiry—which has been defended as the appropriate, albeit difficult, approach for regulatory takings.”).

<sup>583</sup> *Penn Cent. Transp. Co.*, 438 U.S. at 124.

environmental values cannot be restored through an exercise of eminent domain. Setting aside these practical concerns, however, the suggestion also suffers from more serious principled flaws.

Part I of the Article detailed how government actors, at the behest of private interests, have deployed the takingsification strategy to overcome the limited duration of sovereign policymaking—using private law tools to entrench preferred privatization policies beyond their terms in office and evading basic good governance constraints of public accountability. To reward the beneficiaries of that privatization strategy with compensation to recover lost public interests would exacerbate these problems of accountability. The moral hazard it creates threatens to encourage collusion and even corruption between deregulators and the private beneficiaries they serve, potentially incentivizing even more of this troubling pattern.

The suggestion also threatens to unfairly enrich private claimants who received their share of the public commons as a windfall or a sweetheart deal. The remedy for a successful takings suit is just compensation, which is normally defined as fair market value.<sup>584</sup> But it would be galling to reward private plaintiffs with fair market value when recovering public commons resources that had been freely granted (as is frequent in the mining context)<sup>585</sup> or granted below market rates (as frequently occurs in the contexts of water and grazing permits).<sup>586</sup> If the initial conveyances were made as a result of questionable tactics or collusion, then such a result would constitute unjust enrichment at public expense, shifting the extortion of commons value from public to private by monetary means.

From the property theory perspective identified in Part III, this suggestion also implicates the troubling privatization bias that tends to overvalue private interests in public commons while undervaluing the corresponding public interests. This bias could taint the valuation process that determines just compensation. If the public is asked to compensate private owners for the return of commons rights, the awarded compensation may overvalue the private right by comparing it with more valuable conventionally autonomous property, failing to recognizing the inherent limitations or uncertainties that should curtail its market value.

That said, if this theoretical bias is corrected, if claims can be scrutinized for collusion or corruption, and if courts better heed the correlative values of private and public rights in natural resource commons, then paying just compensation provides a potential means by which the public could recover

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<sup>584</sup> See *Kimball Laundry Co. v. United States*, 338 U.S. 1, 5 (1949) (affirming fair market value as the measure of just compensation, because it can be determined relatively objectively).

<sup>585</sup> See *supra* Section III.C.

<sup>586</sup> See *supra* Section III.D.



some commons resources lost to privatization. Just compensation calculated on this reformed basis will likely prove more limited than an award based on the analysis critiqued in this Article, but if judicial and political decisionmakers apply the principles advocated here, then the “just pay for it” solution acquires more legitimacy.

### 3. Cumulative Impacts and Limiting Principles

A separate concern arises as to the scope of application for the test. How broadly should we extend the test, and to what potentially impacted public commons? If virtually every act we take on earth, including breathing, theoretically makes a potential contribution to the greenhouse gases causing climate change, is every assertion of any private right subject to the proposed test for impacting the public atmospheric commons?

This concern is also legitimate, because it probably *is* possible to connect many assertions of private property interests—even those in conventionally autonomous forms of property—to larger public commons, such as the atmosphere, hydrosphere, and biosphere of biodiversity. For a test as potentially broad as this to be workable, there must be a limiting principle.

Fortunately, there are several in operation. First, this test only applies when a private owner asserts a takings claim, so it would be unlikely to be implicated by the majority of private actions, like breathing, that may be connected to vast public commons but are unrelated to the government-regulated circumstances in which takings claims could arise.

Second, as American courts have long recognized in cases that cope with extenuated causation, the common law already provides us with tools for cabining the application of potentially limitless rules—such as negligence liability—through the principles of proximate causation and foreseeability. As Justice O'Connor recognized in a famous interpretation of Endangered Species Act protections for the biodiversity commons, the boundaries of liability for harming protected species are already constrained by these conventional tort law devices.<sup>587</sup>

Finally, the test proposed here can also be limited by existing legal tools to assign liability for cumulative activities that, alone, would not create a negative impact, but taken together, cause cumulative harm. A large body of law already requires consideration of cumulative impacts through sophisticated legal means, including the look-before-you-leap regimes of the National Environmental Policy Act (NEPA) <sup>588</sup> and its progeny, which

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<sup>587</sup> See *Babbitt v. Sweet Home Chapter of Cmty. for a Great Oregon*, 515 U.S. 687, 709 (1995) (O'Connor, J., concurring) (noting that the ESA's proscription of “harm” to vulnerable species is constrained by conventional principles of proximate causation and foreseeability).

<sup>588</sup> 32 C.F.R. § 651.16 (1994).

require cumulative impact assessments whenever a government action could cause cumulative environmental harm.

Regulations interpreting NEPA have defined a “cumulative impact” as the “impact on the environment which results from the incremental impact of the actions when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . or person undertakes such other actions.”<sup>589</sup> These regulations consider cumulative impacts that “result from individually minor but collectively significant actions taking place over a period of time.”<sup>590</sup> Such vague definitions could reinforce fears among opponents that the test could have limitless boundaries, but courts applying these standards have deployed helpful standards to contain them that could provide a model limiting principle for the proposed natural resource commons regulatory takings test.

For example, in *Wilderness Workshop v. United States Bureau of Land Management*, a case assessing the cumulative impacts of oil and gas leasing on climate change, the BLM had argued that it couldn’t speculate about the potential contribution of the natural gas leases in question to climate change because it couldn’t know much gas would ultimately be produced and what impacts that could have.<sup>591</sup> However, the Colorado federal district court crafted a helpful strategy for assessing the potential contributors that should be aggregated in the required cumulative impact analysis, which could serve as a model for a limiting principle for the test proposed in this Article.

The Colorado court held that “the significance of an impact is determined by the action’s context and its intensity.”<sup>592</sup> It further specified that:

a meaningful cumulative impact analysis must identify five things: (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.<sup>593</sup>

Applying that test to its facts, the court concluded that the agency had already speculated about how much gas was expected under the lease in negotiating

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<sup>589</sup> 40 C.F.R. § 1508.7 (1987).

<sup>590</sup> *Id.*

<sup>591</sup> See *Wilderness Workshop v. U.S. Bureau of Land Mgmt.*, 342 F. Supp. 3d 1145, 1154-55 (D. Colo. 2018) (“BLM responds that it provided sufficient information on the indirect effects ‘while candidly discussing the limitations in BLM’s ability to assess such impacts based on the information available at the planning stage.’” (citation omitted)).

<sup>592</sup> *Id.* at 1154.

<sup>593</sup> *Id.* at 1157.

its terms, and that the court could use the same projected data for the purposes of the required cumulative impacts analysis. In other words, it didn't need to consider all methane gas released everywhere, but it could estimate the potential contribution of the net output it expected here, as previously calculated for the economic valuation of the lease.<sup>594</sup>

The issue of how far to extend the proposal is not an easy one to resolve, and it will presumably require the same iterated consideration through common law processes from which the other cumulative impacts requirements have benefitted. Even so, it is a problem worth taking on. Concerns that the current takings calculus misses cumulative impacts problems have inspired some of the most prominent critiques of the existing per se exceptions to the ad hoc test, prompting even Justice Kennedy, a supporter of the takings revolution, to concede that the Court's takings jurisprudence had yet to effectively cope with it.<sup>595</sup>

Getting it right will require focused consideration over time, with the benefit of the specific facts in controversy within different cases. Yet decisions like *Wilderness Workshop* offer hope that it can be effectively managed. In protecting vulnerable commons, we must find a way to protect the private rights that inspired the Takings Clause without condemning the resources that nourish us all—such as the atmosphere and hydrosphere—just because doing so requires work. We must not allow legal perfectionism to become the enemy of legal innovation.

#### 4. Property Rights vs. Stewardship

Some environmentalists may worry about an approach that reinforces the use of property law to accomplish the goals of environmental protection, when many environmental values resist propertization in the first place. They may argue that casting property law as the defender of these values may erode possibilities for an alternative approach based on stewardship. As suggested previously, using property rights to protect public environmental values threatens to overvalue propertizable environmental interests and undervalue those that are harder to possess, less economically beneficial (and thus harder to quantitatively value in a takings assessment), and of greater biocentric than anthropocentric value.<sup>596</sup> If we internalize the vocabulary of property to

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<sup>594</sup> See *id.* at 1158 (“BLM took an appropriately hard look at the cumulative climate change impacts.”).

<sup>595</sup> See *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1035 (1992) (Kennedy, J., concurring) (“The common law of nuisance is too narrow a confine for the exercise of regulatory power in a complex and interdependent society.”).

<sup>596</sup> See *supra* note 552 and accompanying text (discussing the challenges of cost–benefit analysis in environmental contexts).

protect the environment, that could erode recognition for these ill-fitting values. Worse, it could potentially crowd out alternative approaches for environmental protection that are less bound up with problems of quantification, anthropocentrism, takingsification, and the fickleness with which human owners may treat property.<sup>597</sup>

The tools and vocabulary of property, which can help assign value to scarce natural resources and incentivize their sustainable use, are not necessarily antithetical to environmental protection. There have been noted successes, for example, in use of the property-based public trust doctrine to protect public environmental rights—such as the California Supreme Court’s 1983 decision requiring that private rights to divert water from Mono Lake be balanced against the protection of public environmental, scientific, scenic, and recreational values.<sup>598</sup> Yet even then, environmental scholars worried that this may not be the best way to proceed.

As Professor Richard Lazarus warned soon after the Mono Lake case was decided, using the vocabulary of property to protect environmental values can be dangerous, and a second-best approach compared with the stewardship ethic promised by the new federal environmental statutes of the 1970s.<sup>599</sup> That ethic requires the government to protect the resource as a steward, whereas property simply entitles the owner to do with it as the owner will. From the perspective of environmental protection, the property formula works if the public owner is interested in environmental stewardship, but dangerous if the public owner loses interest—especially during times of economic hardship or opportunity.

Professor Lazarus was wise to be concerned. The property-based approach can be a risky strategy. Nevertheless, the stewardship promised by the big environmental statutes of the 1970s have also proved vulnerable to shifting public preferences over time. Especially in recent years, deregulation has progressively weakened them, and the privatization of natural resource commons has been accelerated by the takingsification phenomenon described

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<sup>597</sup> See Ryan et al., *Environmental Rights for the 21st Century*, *supra* note 33, at 2571-72 (discussing the problem of human owners who could, at any time, choose instead to “pave paradise and put up a parking lot”).

<sup>598</sup> See *Nat’l Audubon Soc’y v. Superior Ct.*, 658 P.2d 709, 728-29 (Cal. 1983) (recognizing the “substantial concerns voiced by Los Angeles” and holding there must be a “reconsideration and reallocation which also takes into account the impact of the water diversion on the Mono Lake environment”).

<sup>599</sup> See Richard Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources Law: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 633 (1986) (“[M]odern trends in natural resources law increasingly have eroded traditional concepts of private property rights in natural resources and substituted new notions of sovereign power over those resources”); Richard J. Lazarus, *Judicial Missteps, Legislative Dysfunction, and the Public Trust Doctrine: Can Two Wrongs Make it Right?*, 45 ENV’T L. REV. 1139, 1141 (2015) (discussing the potential for the public trust doctrine to be counterproductive).

in this Article. Like it or not, advocates for environmental protection must contend with the takingsification of environmental law.

Regardless of whether it is the first best strategy that scholars like Lazarus would choose, environmental protection is already inextricably, perhaps inexorably bound up with property law and property theory. Those who would exploit private interests in public natural resource commons are likely to embrace the vocabulary of property and takings in their claims. Those protecting public interests in the same commons must be prepared to defend those interests with property theory that better accounts for the contestation. Protecting public property rights in natural resource commons will sometimes be the best bet, especially when private property rights are being wielded as a weapon against them.

### 5. A Too-Modest Proposal?

Finally, it is worth considering an objection raising the opposite concern: that the proposal here is not too radical, but too modest. Some scholars engaging with the argument have contended that the changes advocated here aren't ambitious enough—that the proposal should encompass a larger variety of commons than the public natural resources discussed here, or that the proposal should depart even further from the existing outlines of the Court's regulatory takings jurisprudence. Some have suggested that by tailoring the carveout so narrowly to natural resource commons only, the change could harm the evolving legal treatment of other property interests that warrant similar regard but don't fit my parameters. Others have protested that the test hews so closely to the existing law that the changes proposed here are dishearteningly underwhelming.

Moreover, the proposal focuses on a judicial remedy, when more urgent political action may be what is needed. To this point, I note simply that the majority of the article focuses on actions by the political branches and what advocates and policymakers can do to interrupt the privatization paradox and forestall further takingsification. The jurisprudential proposal dovetails with the political analysis by offering an application of the broader shift I am advocating for property theory and practice at its intersection with environmental and constitutional law. The concerns about the jurisprudential proposal also deserve a response, however, and mine is both principled and pragmatic. The principled response is that I am a believer in the common law process of incremental legal development. Some of these concerns raise questions of scope—asking whether the proposal should extend more widely or include more considerations. Theoretically, perhaps it should—but as a matter of principle, I subscribe to the wisdom of conventional common law process. By this wisdom, jurisprudential change emerges incrementally

within the sphere where it is least controversial. There, the idea is tested against the facts of different cases and controversies to see if the principle should be expanded or distinguished over time, until we converge on clarity as to how the law should or should not change.

But my response is also pragmatic. To that end, I have labored to create a potentially “doable” proposal, one that could both meaningfully impact the discourse and conceivably further the development of the jurisprudence. As I noted in introducing this Article, my primary objective here is to start the conversation, but I welcome others to contribute in the next round with whatever refinements and comparatively ambitious proposals they see fit to offer.

The key recognition for all of us in this conversation is that property law is not *done* (and it likely never will be).

The law, especially in a common law system like ours, is ever dynamic, always changing. The core argument of this Article is that these aspects of property theory—the regulatory takings doctrine, and managing the competition between public and private interests in valuable resources generally—are just not fully baked. Goodness knows, the law is still working out how to cope with conventionally autonomous property, and all the hidden ways in which it is more complicated than it seems on the surface. Yet it is high time to begin addressing the limits of even that model for forms of property interests that just don’t fit, such as the natural resource commons that are the subject of this Article. Especially in a common law tradition like ours, this is how the law grows.

## CONCLUSION

This Article has demonstrated how property law biases favoring private rights in public natural resource commons may shape the future of environmental protection, at a time when environmental law has been under sustained fire. The legal moves and countermoves between the proponents of environmental protection and deregulation evoke a game of multidimensional chess, but the rules of play—in this case, set largely by property law and its underlying theory—are subtly shifting the game in favor of privatization.

The takingsification analysis reveals how the strategic deployment of private rights in public commons during periods of environmental deregulation can be used as a foil against later environmental conservation—a tool for “salting the land” against new or resumed legal protections in the future—by creating a variety of legal hurdles, including the threat of takings litigation. Binding sovereign discretion through the creation of private property is itself a powerful strategy for eroding public commons—a feature of the “privatization paradox” that facilitates the one-way conversion of

public interests into private hands. Yet the strategy is especially potent when buttressed by an ascending property theory paradigm that fails to properly balance the competing private and public interests within natural resource commons themselves.

This project has explored the potential impact of this paradigm on environmental and property law and how it is already undermining public interests in critical natural resources.<sup>600</sup> After explaining the mechanics of the takingsification phenomenon and demonstrating the privatization paradox in multiple environmental venues, it offers a proposal to modify regulatory takings law to better account for public rights in natural resource commons—just as the Supreme Court was once forced to reconsider its overly simple view of public lawmaking vis-à-vis the Contract Clause.<sup>601</sup> More research is needed to wrestle with limiting principles and other potential objections, but I share this exposition as an open invitation for scholars and advocates to continue reckoning with these problems in the wider legal discourse.

This proposal specifically addresses natural resource commons, though it may well have implications for other contested public commons, including spectral bandwidth, genetic commons, or even some forms of intellectual property. Indeed, all property occupies a spectrum between the purely public and private, because all interests are contingent on the legal context that gives them meaning. The ongoing debate over the background principles problem in takings law further attests to the interconnectedness of public and private interests in property and the fluidity with which the sticks in the associated bundle of rights shift back and forth between owners and the community over time.<sup>602</sup> Yet public natural resource commons, particularly those from which private rights can be easily withdrawn, showcase an unusually heightened site of contest.

For this reason, advocates must push back against the strategic use of property rights to perpetuate environmental deregulation, and policymakers should scrutinize efforts to create private entitlements in natural resource commons that could obstruct conservation or threaten public environmental values vulnerable to loss by privatization. At the same time, property theory must do better to inform lawmaking, jurisprudence, and legal practice about

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<sup>600</sup> See, e.g., Nicole Gentile, *Multinational Mining Corporations Are Exploiting U.S. Taxpayers: Outdated Mining Laws Allow Foreign Companies to Mine U.S. Public Lands for Free*, CTR. FOR AM. PROGRESS (Nov. 21, 2019), <https://www.americanprogress.org/article/multinational-mining-corporations-exploiting-u-s-taxpayers> [<https://perma.cc/P9NW-M6U7>] (describing the consequences of, and opposition to, leaving public lands open to new mining claims); see also *supra* Part II.

<sup>601</sup> Ely, *Still in Exile*, *supra* note 11, at 95-98.

<sup>602</sup> See *supra* notes 310-315, 358 and accompanying text; see also Davidson, *Standardization*, *supra* note 371, at 1661.

the distinctions between different kinds of property interests, especially between the private rights held in conventionally autonomous property and the more circumscribed private interests held in so many public resource commons. By correcting the misguided paradigm that conflates these distinct forms of property, we can craft more appropriate legal protection for both our treasured shared resources and our more truly private treasures.

The issues raised at the intersection of property theory, constitutional law, and environmental governance are daunting, but the good stewardship of our increasingly scarce public natural resources hinges on their resolution. For that reason, they should command serious attention from advocates, adjudicators, lawmakers, and scholars. To be sure, this initial foray leaves much unresolved, but it begins an overdue conversation about how best to approach the task, setting the stage for ongoing inquiry in future work. There is much to do, and as is so often the case in legal matters—and ever more so the case in matters of environmental protection—time is of the essence.