WHAT THE PUBLIC TRUST DOCTRINE CAN TEACH US ABOUT THE POLICE POWER, PENN CENTRAL, AND THE PUBLIC INTEREST IN NATURAL RESOURCE REGULATION

A TRIBUTE TO JOE SAX*

BY
ROBIN KUNDIS CRAIG*

One of Joseph Sax’s recurring scholarly concerns was how to effectuate and preserve the substantial and long-term public interest in natural resources, and he was drawn to the public trust doctrine in part because that doctrine explicitly recognizes that public rights in those resources, particularly water, do exist. Following in Sax’s tradition, this Article argues that the public trust doctrine can serve to illuminate structural and analytical problems with regulatory takings doctrine, which has had a much more difficult time acknowledging the role of public rights. In particular, while governments do sometimes directly represent the rights of the public—under the public trust doctrine, for example, as the trustee of submerged lands and as protector of the public’s right of navigation—the Penn Central takings analysis both overdeterminedly conflates government action with the public interest, eliding the fact that the private property owner is also a member of the public who benefits from government action, and denies the public its full independent status as a third interest holder in any property rights analysis. Using examples from water law, coastal land use regulation, and fisheries management, this Article argues that regulatory takings doctrine unnecessarily impedes the urgent need for property law to evolve to meet the demands of a post-exploitation United States and that the public and communitarian approach to property rights that the public trust doctrine offers presents a much more useful perspective on property rights for our changing future.

+ Although I was never Joseph Sax’s student or colleague, in March 2010, I had the great pleasure of enjoying an early morning breakfast conservation with him about the public trust doctrine and its role in preserving communities. Duties for the conference we were both attending suspended that discussion, but this Article is very much a continuation of the conversation we had.

* William H. Leary Professor of Law, University of Utah S.J. Quinney College of Law. My thanks to Professor Erin Ryan for inviting me to participate in Lewis & Clark Law School’s conference on the public trust doctrine. I may be reached at: robin.craig@law.utah.edu.
I. INTRODUCTION

The Utah courts recognize two sets of public rights in waters: a standard public trust doctrine that limits the state’s ability to dispose of trust lands, including the submerged lands beneath navigable waters, and that protects the public’s rights of navigation, commerce, fishing, and recreation and, somewhat unusually, ecological integrity; and a “public easement” to float on all waters of the state, regardless of bed ownership. Faced in 2013 with the issue of whether legislative regulation of this public easement, taken too far, could amount to an unconstitutional disposal of public rights, the Fourth Judicial District Court for Wasatch County, Utah, applied an inverted version of regulatory takings doctrine, examining “the character of the government action and whether it is so onerous as to be tantamount to a disposal of the public’s easement.”

In so doing, the Utah district court did something fairly remarkable: It recognized, in a regulatory takings-like context, that the interests and rights of the State of Utah are not coequal with the interests and rights of the Utah public. Indeed, by de-conflating those interests, it could impose limits both on the Utah legislature’s authority to limit public use of waters within the state and on the public’s recently expanding demands to use those waters.

This, as Joseph Sax recognized, is one of the great values of the public trust doctrine: it forces courts and legislatures to recognize the public as an independent rights holder. Indeed, one of Sax’s recurring scholarly concerns was how to effectuate and preserve the substantial and long-term public interest, even public rights, in natural resources. Like many of us who have

been drawn to this problem, Sax recognized that property law provided the most immediate nexus for examining this public–private balance of rights.\(^5\) However, whereas proponents of increased protections for private property are drawn to constitutional takings doctrine,\(^6\) Sax and those of us who follow in his footsteps are drawn to those property law doctrines that explicitly recognize that public rights and interests in resources do exist: the navigation servitude, public necessity, and—most crucially in Sax’s case—the public trust doctrine.

Specific emphasis in legal policies wax and wane over time in response to the pendulum swings of public values and to the emergence of new legal and policy issues. Nevertheless, it is fair to say that, from the time that Sax began writing his crucial articles on property and the public trust doctrine, the courts’ emphasis on private property rights has been more or less continually waxing, while judicial and legislative recognition of public rights has generally been waning. One consequence has been a drive to formalize and freeze property rights as of the moment of creation into particular parcels. For example, in the U.S. Supreme Court’s 1992 decision, Lucas v. South Carolina Coastal Council (Lucas),\(^7\) the Court quite famously eliminated the police power defense to regulatory takings claims, stating instead that “[w]here the State seeks to sustain regulation that deprives land of all economically beneficial use, we think it may resist compensation only 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.”\(^8\) While this sentence can be interpreted in many ways,\(^9\) it very clearly conveys a vision of private property rights as relatively unmalleable, creating a regulatory takings doctrine that is designed to inhibit government innovation to address new problems, such as coastal inundation. Sax had essentially the same reaction to the case, albeit from the perspective of a different kind of innovation, and concluded that Justice Scalia was sending a “clear message” that “States may not regulate land use solely by requiring landowners to maintain their property in its natural state as part of a functioning ecosystem, even though those natural functions may be

\(^{5}\) See Sax, Takings, supra note 4, at 149–51 (asserting that a new view of property rights which comprehends property as an “interdependent network of competing uses, rather than as a number of independent and isolated entities” allows for vindication of public rights).

\(^{6}\) See generally, e.g., Toni Kong, Case Note, The Art of Stripping: How the Government Applies the Takings Clause to Strip You of Your Property, 30 TOURO L. REV. 479 (2014) (focusing on regulatory takings and evaluation of both federal and state courts’ approaches to those takings); Christopher Serkin, Passive Takings: The State’s Affirmative Duty to Protect Property, 113 MICH. L. REV. 345 (2014) (arguing that an unconstitutional taking can result from the government’s failure to regulate or protect private property).


\(^{8}\) Id. at 1027.

\(^{9}\) For one such debate, see generally Michael C. Blumm & J.B. Ruhl, Background Principles, Takings, and Libertarian Property: A Reply to Professor Huffman, 37 ECOLOGY L.Q. 805 (2010) (describing in detail narrower and more liberal interpretations of Lucas).
important to the ecosystem." The goal, Sax concluded, was to "limit the legal foundation" for any emerging conception that "land [is] a part of an ecosystem, rather than . . . purely private property"—i.e., that private property partakes in uber-qualities that extend beyond the definitions of private property itself.

As such, regulatory takings doctrine elides increasingly important public aspects of private property. As Sax himself noted in 1971, " takings doctrine is tied to an assumption that the right to compensation, and the amount to be paid, can be determined by examining the economic effects that occur solely within the physical boundaries of one's property." Part of Sax's enduring contribution to legal scholarship was to recognize the naivety of this perspective, particularly when it comes to natural resources: "Property does not exist in isolation."

Notably, a variety of property doctrines do acknowledge this relational aspect of property rights. A chart of those doctrines appears in Table 1, which is purposely organized for structural suggestiveness.

Table 1: Relational Doctrines in Property Law

<table>
<thead>
<tr>
<th>DOCTRINE</th>
<th>ACTOR</th>
<th>BENEFICIARY</th>
<th>OTHER PARTY AFFECTED</th>
<th>LEGAL REMEDY FOR AFFECTED PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condemnation or inverse condemnation (title or possession)</td>
<td>Government or general public, usually</td>
<td>Private property owner</td>
<td>Constitutional just compensation</td>
<td></td>
</tr>
<tr>
<td>Trespass</td>
<td>Usually private citizen</td>
<td>Actor</td>
<td>Landowner</td>
<td>Ejectment; injunction; damages (nominal, compensatory, punitive)</td>
</tr>
</tbody>
</table>

11 Id.
12 Sax, *Takings, supra* note 4, at 152.
13 Id.
15 *RESTATEMENT (SECOND) OF TORTS* § 158, 163 cmt. e (1965); *see also RESTATEMENT (SECOND) OF TORTS* § 929 (1979).
<table>
<thead>
<tr>
<th>DOCTRINE</th>
<th>ACTOR</th>
<th>BENEFICIARY</th>
<th>OTHER PARTY AFFECTED</th>
<th>LEGAL REMEDY FOR AFFECTED PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Nuisance</td>
<td>Private citizen (usually landowner)</td>
<td>Actor</td>
<td>Another private landowner</td>
<td>Damages or injunction</td>
</tr>
<tr>
<td>Private Necessity</td>
<td>Private citizen under necessity</td>
<td>Actor</td>
<td>Another private citizen or landowner</td>
<td>Damages</td>
</tr>
<tr>
<td>Public Nuisance</td>
<td>Private citizen</td>
<td>Actor</td>
<td>Public</td>
<td>Traditional: injunction; modern: damages</td>
</tr>
<tr>
<td>Navigation servitude</td>
<td>Government (almost always federal)</td>
<td>Public (right of navigation)</td>
<td>Private property owner</td>
<td>NONE if damage is below high-tide line/high water mark</td>
</tr>
<tr>
<td>Public necessity</td>
<td>Government or government-directed private actor, acting under necessity</td>
<td>Public (right of survival/self-protection)</td>
<td>Private property owner</td>
<td>NONE</td>
</tr>
</tbody>
</table>

16 Restatement (Second) of Torts §§ 821D, 821F cmt. b (1979).
17 Restatement (Second) of Torts § 197 (1965).
18 See Restatement (Second) of Torts §§ 821B, 821B cmt. i (1979).
19 See, e.g., United States v. Chandler-Dunbar Water Power Co., 229 U.S. 53, 62 (1913) (recognizing that Congress’ constitutional power to regulate commerce includes the power to control all navigable waterways).
20 See generally Robin Kundis Craig, Public Trust and Public Necessity Defenses to Takings Liability for Sea Level Rise Responses on the Gulf Coast, 26 J. Land Use & Envtl. L. 305, 410 (2011) (“[P]ublic necessity has long operated as a defense to takings claims because courts recognize that in times of true emergency or public necessity, private rights fall to public need.”).
<table>
<thead>
<tr>
<th>DOCTRINE</th>
<th>ACTOR</th>
<th>BENEFICIARY</th>
<th>OTHER PARTY AFFECTED</th>
<th>LEGAL REMEDY FOR AFFECTED PARTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Trust Doctrine</td>
<td>Private citizen violating trust</td>
<td>Actor (rights to use aquatic or other natural resources)</td>
<td>Public interests</td>
<td>Injunction or damages</td>
</tr>
<tr>
<td></td>
<td>Government promoting trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Power (state) or Commerce Clause (federal)</td>
<td>Government</td>
<td>Public (rights to health, safety, welfare)</td>
<td>Private interests</td>
<td>Penn Central or Lucas regulatory takings analysis</td>
</tr>
</tbody>
</table>

21 See, e.g., Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 464 (1892) (enjoining private party from maintaining piers that interfered with navigability on Lake Michigan because navigable waters are held in trust for the benefit and use of the public); State, Dep’t of Fisheries v. Gillette, 621 P.2d 764, 767 (Wash. Ct. App. 1980) (“[T]he state, through the Department, has the fiduciary obligation of any trustee to seek damages for injury to the object of its trust.”).

22 See, e.g., McQueen v. S.C. Coastal Council, 580 S.E.2d 116, 120 (S.C. 2003) (holding that the state was not required to compensate a private landowner for denial of permits to modify his lot which had reverted to tidelands because tidelands are held in public trust).

23 See, e.g., Palazzolo v. Rhode Island, 533 U.S. 606, 615, 619, 629–30 (2001) (applying the analysis laid out in Lucas v. S.C. Coastal Council (Lucas), 505 U.S. 1003 (1992) and reminding for the Rhode Island Supreme Court to apply the Penn Central balancing test laid out in Penn Cent. Transp. Co. v. New York City (Penn Central), 438 U.S. 104 (1978) to determine whether the state caused a regulatory taking by denying a landowner a permit to develop his property under a regulation that prohibited filling and development on marshland); Lewis Blue Point Oyster Cultivation Co. v. Briggs, 229 U.S. 82, 87–88 (1913) (explaining that Congress’s “right to control, improve and regulate” the navigable waters pursuant to the Commerce Clause defeats a private property right in submerged lands, and thus defeats takings claims); Zealy v. City of Waukesha, 548 N.W.2d 528, 531–32 (Wis. 1996) (explaining that the U.S. Supreme Court has developed a framework that applies the Lucas and Penn Central analyses in determining whether a state, regulating land use under its police powers, has caused a taking that requires compensation); see also Kong, supra note 6, at 486, 488–89 (explaining that the U.S. Supreme Court mandated an ad hoc approach to regulatory takings in Penn Central and a per se approach to regulatory takings under particular circumstances in Lucas); id. at 483 (discussing that Penn Central “established that the [federal] Fifth Amendment Takings Clause” applied to the states through the Fourteenth Amendment); Sax, Takings, supra note 4, at 151 (“Much of what was formerly deemed a taking is better seen as an exercise of the police power in vindication of what shall be called public rights.”).

Table 1 reveals, among other things, that property law has a recurring interest in the third-party impacts of property-related actions. As such, it is instructive to identify when the law will provide a remedy for such third-party impacts—and when it will not. Thus, ignoring for the moment the two constitutional takings at each end of the table, Table 1 suggests an important structural consistency among these property doctrines: When the actor acts to his, her, or its own benefit and impacts a third party, regardless of whether the third party is public or private, that third party can invoke a legal doctrine to provide the third party with a remedy, namely trespass, private nuisance, private necessity, or public nuisance.

Conversely, and again leaving aside for the moment constitutional takings, when a government acts to protect the rights and interests of the “public”—that nongovernmental assemblage of individuals that represents the collective interests and rights of the citizenry and residents of the United States—impacted private interests generally have no remedy, as demonstrated by the doctrines of navigation servitude, public necessity, and public trust. Instead, the private conduct is deemed at best subordinate to public rights and interests and at worst simply illegal.

So far, so good. Constitutional takings analyses, however, appear—at least at first blush—to complicate the structural simplicity of this typology. What I would like to suggest as a starting point for this Article is that takings doctrine has conflated the identities of the government and the public in ways that frustrate the structural archetypes that otherwise underlie property law. This conflation undermines proper recognition of public rights and interests in the takings analysis. Moreover, this Article suggests that the public trust doctrine can help to illuminate why this conflation is important. Specifically, when courts conflate the government with the public in regulatory takings analyses, they both ignore the fact that there are many times when private property owners benefit from being members of the public and elide the independent and long-term importance of protecting public rights in natural resources.

---

25 Lucas v. S.C. Coastal Council (Lucas), 505 U.S. 1003, 1031 (1992) (requiring the state to “identify background principles of nuisance and property law that prohibit[ed]” an intended use in order to avoid a taking).

26 See supra Table 1 (showing how the doctrines of trespass, private nuisance, private necessity, and public nuisance provide remedies when private citizens benefit at the expense of another landowner or the public).

27 See supra Table 1 (showing how the doctrines of navigation servitude, public necessity, and public trust provide remedies when government actions promoting public interests affect private property interests).

28 See Sax, Takings, supra note 4, at 155–56 (discussing how “public rights can prevail over private property rights [under the . . . navigation servitude, public nuisance and the public trust doctrines”); Sax, Effective Judicial Intervention, supra note 4, at 529 n.177 (quoting SAN FRANCISCO BAY CONSERVATION AND DEV. COMM’N, SAN FRANCISCO BAY PLAN SUPPLEMENT 441 (1969)) (discussing how private property may be “subject to the power of the State” and how violations of such restraints from the State may be illegal).
True, there are many times and instances where the relevant government is in fact a stand-in—or, in the language of the public trust doctrine, the trustee—for the public as a whole. Perhaps the most important instance of government-as-public-trustee for this Article is state ownership of the beds and banks of navigable waters, which the state holds in trust for the people of that state—i.e., for the public. Part II will further examine this relationship, arguing that, under the public trust doctrine, it becomes important to recognize that when the government is in fact acting as the trustee for the public, it represents a set of enforceable legal rights and interests that can be in direct competition with private rights and interests. As such, property rights analyses are best served by treating the government–public as a legitimate second property owner, not as an interfering regulator. The federal navigation servitude underscores this point by protecting the public’s right of navigation as a dominant property interest that both limits and helps to define the scope of riparian private property.

Parts III and IV of this Article, in contrast, examine contexts in which the government truly is a regulator. In this capacity, governments do not act in a direct trustee relationship with the public, and both governments and the people who make up governments can have interests and goals contrary to—or at least different from—those of the public they supposedly serve. The federal government’s constitutional right to suspend habeas corpus under certain circumstances and its denial of basic due process rights to Guantanamo Bay detainees both evidence this potential separation of interests between the government and the public.

Acknowledging this separation between government and public interests can make structural sense of constitutional takings law as it originally existed in the United States. In the classic view of the Fifth and Fourteenth Amendments’ prohibitions on taking private property without just compensation, the federal, state, and local governments owed

---

29 Under a constitutional "equal-footing doctrine," the states hold title to the beds and banks underneath navigable waters, including waters subject to the ebb and flow of the tide. PPL Mont., LLC v. Montana, 132 S. Ct. 1215, 1226–28 (2012). “[T]he State takes title to the navigable waters and their beds in trust for the public . . . .” Id. at 1235.

30 See U.S. Const. art. I, § 9, cl. 2 (“The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.”).

31 Hamdi v. Rumsfeld, 542 U.S. 507, 532–34 (2004) (holding that "a citizen-detainee seeking to challenge his classification as an enemy combatant must receive notice of the factual basis for his classification, and a fair opportunity to rebut the Government’s factual assertions before a neutral decisionmaker[,]" but that “the exigencies of the circumstances may demand that, aside from these core elements, enemy-combatant proceedings may be tailored to alleviate their uncommon potential to burden the Executive at a time of ongoing military conflict").

32 U.S. Const. amend. V. (“No person shall be . . . deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.”). "Id. amend. XIV, § 1 (“No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.”). Under the U.S. Supreme Court’s decisions, the Fourteenth Amendment, which applies to states, incorporates the Fifth Amendment’s compensation requirement, which most directly applies to the federal
compensation only when they actually occupied—took title to, used, or in some cases opened to public use—private property, a government action now known as a physical taking. Structurally, physical takings and conscious exercises of eminent domain authority are quite analogous to the first structural archetype of property law doctrines: Impacted third parties will have a cause of action when entities acting to benefit themselves harm those third parties. Many condemnation actions originally were for the direct benefit of the acting government—military bases, government buildings, other government facilities—or to provide the physical infrastructure, such as roads or railroads, necessary to effectuate governmental policies. While the fit is of course not perfect, physical takings doctrine, as originally conceived, is at least broadly consistent with the primary structural archetypes of property law identified above.

Regulatory takings doctrine, in contrast, bucks those archetypes. Before 1922, so long as the government did not effectuate a physical taking of private property, otherwise-legal government exercises of regulatory authority for the benefit of the public, particularly under states’ police powers, constituted a complete defense to constitutional takings claims. As such, the flip side of takings doctrine originally did fit the structural archetypes of property law because government actions that promoted public rights or interests left affected third parties with no legal remedy. In contrast, regulatory takings doctrine in its contemporary form leaves almost any government regulation that affects private property vulnerable to a lawsuit—a potentially expensive proposition for regulators even if a court is unlikely to find that a compensable taking has actually occurred.

See supra Table 1.

See generally Mugler v. Kansas, 123 U.S. 623 (1887) (discussing at length the police power defense to Fourteenth Amendment-based takings claims in connection with alcohol regulation and mentioning also the power of the federal government to regulate alcohol without violating the Fifth Amendment’s takings provision).

See id. at 661, 663 (discussing lack of legal injury where laws passed for the public good affect individual property rights).

Pa. Coal Co. v. Mahon, 260 U.S. 303, 415 (1922) (“The general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a
Again, public trust doctrine and related litigation offer some valuable insights that should be applied more broadly in takings litigation. Part III examines the potential legal ramifications of the fact that third-party private citizens affected by government regulation are also members of the public who benefit from that regulation. Specifically, by separating the government from the public, the three sets of interests—government, public, and private—that are often at play in regulation and in takings claims can be identified, allowing courts to recognize that private citizen plaintiffs in takings litigation are also often beneficiaries of the regulation at issue, ameliorating some, if not all, of the alleged harm that they have suffered.

Part IV, in turn, examines the fact that public rights and interests are broader in concept and in temporal duration than the rights and interests of particular individuals, or even governments. In public trust litigation related to fishing, for example, recognition of the longer temporal scale of public rights justified imposing economic harm—or at least limitations on economic exploitation—on particular individuals in the name of longer-term and sustainable resource protection.41 This Part argues that the same kind of analysis should be carried over into other kinds of resource-based takings litigation.

All of this discussion, however, raises an important initial question: What exactly do I mean by the “public” throughout this Article? “Public interest” is a highly malleable and situational term, raising recurring and important questions about what counts as the “public interest” and who gets to decide. The “public” at issue in this Article, however, is the community, however large or small, that depends upon specific natural resources that, in turn, the appropriate regulators recognize are under damaging stress from human use or exploitation, threatening or at least potentially threatening that relevant community’s continued reliance on the resource.

Of course, if the threat to the community is immediate and severe enough, the regulatory takings analysis will become subject to the Lucas background principles of public nuisance and public necessity, eliminating the taking claim.42 Indeed, a state’s public trust doctrine also can be a relevant background principle of state property law that eliminates or undermines a particular property owner’s regulatory taking claim.43 Thus, for example, when Anthony Palazzolo tried to fill about eighteen acres of salt marsh on his coastal property and the Rhode Island Coastal Resources Management Council denied him the required state permit, the Rhode Island Superior Court dismissed his regulatory taking claim both because his...
proposed filling would be a public nuisance and because the state public trust doctrine undermined his taking claim.

What this Article is more concerned with, however, are cases on the margin, as defined by two factors. First, in the cases of interest here, damage to important natural resources is clearly occurring but the factual situation does not—or does not yet—trigger background principles of state property law that can eliminate a takings claim. For example, in most prior appropriation states—California and Hawai‘i being famous exceptions—exercise of water rights will not trigger either public nuisance or public trust concerns even if such exercises collectively degrade water quality, dry up streams, destroy aquatic ecosystems, or imperil species. Second, the cases that pose special challenges for the regulatory takings doctrine for purposes of this Article are cases in which the regulation of the natural resource in question imposes actual—if perhaps only limited or short-term—economic or other harm on individuals while clearly enhancing the overall survival and well-being of a community, including the ecosystems on which it directly depends.

These on-the-margin cases thus tend to pit real harm to shorter-term private interests and property rights against the longer-term public interest in adjusting an existing natural resource use that threatens a community’s well-being or survival. While government action in these situations clearly falls within the police power, it is nevertheless vulnerable to regulatory takings claims, particularly when the private property rights at issue are

---

44 Id. at *5 ("Palazzolo’s proposed development has been shown to have significant and predictable negative effects on Winnapaug Pond and the adjacent salt water marsh. The State has presented evidence as to various effects that the development will have including increasing nitrogen levels in the pond, both by reason of the nitrogen produced by the attendant residential septic systems, and the reduced marsh area which actually filters and cleans runoff. This Court finds that the effects of increased nitrogen levels constitute a predictable (anticipatory) nuisance which would almost certainly result in an ecological disaster to the pond. Both water quality and wildlife habitat would be substantially harmed. Nor is the proposed high density subdivision suitable for the salt marsh environs presented here.").

45 First, the court found that, "as a result of Rhode Island’s Public Trust Doctrine, neither Plaintiff nor SGI has ever had a right to fill or develop that portion of the site which is below mean high water. Thus, as against the State, Palazzolo has gained title and the corresponding property rights to only one-half of the parcel in question." Id. at *7. As for the rest of the parcel, the court noted that the character of the government action—the coastal protection laws—militated against finding a regulatory taking. Id. at *9. However, the court also found that Palazzolo suffered no real economic loss and did not have reasonable expectations for developing the property. Id. at *11–12. Thus, the case—at least as the court analyzed it—did not present the court with a hard choice between individual economic harm and serving the public interest, as defined by state law, in preserving coastal salt marshes.


47 See In re Water Use Permit Applications, 9 P.3d 409, 443 (Haw. 2000) (concluding that the public trust doctrine is interwoven throughout Hawai‘i’s constitution and that water resources are held in trust).

48 See infra notes 158–160 and accompanying text.

rights to the natural resource itself—for example, water rights. This Article argues that the Penn Central Transportation, Co. v. City of New York (Penn Central) regulatory takings analysis is particularly ill-equipped to evaluate the public interest at stake in these types of cases specifically because it conflates government action with the public interest.

Cases on the margin are, to be sure, a relatively small subset of regulatory takings cases. However, in several contexts relevant to the public trust doctrine—ocean and coastal law, water law, and, increasingly, climate change adaptation—humans’ ability to continue to depend on the relevant natural resources at stake is in fact often a contested issue, suggesting that these cases on the margin may increase in the future. Nevertheless, even if they do not, the articulation of a separate public perspective on private property rights and government regulation can more clearly reveal when and how regulatory takings claims force courts to choose between private harm and community well-being. This distinction would also allow for the articulation of, and public debate regarding, the desired scope of regulatory takings doctrine—most basically, the propriety of demanding that a community pay private rights holders in order to ensure its own survival (as well as a discussion on what counts as “survival”). This Article ends by concluding that on a crowded and changing planet, society as a whole needs to become more cognizant—both in politics and in law—of the broader community dependence on natural resources. Indeed, recognizing this particular public interest undermines the over-simplistic dichotomy between the government and individuals that takings litigation creates. Moreover, incorporating such a public perspective could lead courts and legislatures to increase the legal space available for protecting and enhancing the socioecological resilience of increasingly stressed communities by adjusting property rights, by more clearly defining background principles of property law like the public trust doctrine, or both.

---

50 See, e.g., Edwards Aquifer Auth. v. Day, 369 S.W.3d 814, 831 (Tex. 2012) (holding that a landowner has absolute title to oil, gas, and groundwater on his or her land, subject only to police regulations).
52 See, e.g., Esplanade Properties, LLC v. City of Seattle, 307 F.3d 978, 985, 987 (9th Cir. 2002) (“Esplanade’s proposal to construct concrete pilings, driveways and houses in the navigable tidelands of Elliot Bay, an area regularly used by the public for various recreational and other activities, was inconsistent with the public trust that the State of Washington is obligated to protect.”); In re Water Use Permit Applications, 9 P.3d at 454 (noting that in times of water scarcity the Hawai’i Commission on Water Resource Management “inevitably must weigh competing public and private water uses on a case-by-case basis”); see also Alec L. v. Jackson, 863 F. Supp. 2d 11, 12 (D.D.C. 2012) (“Five young citizens and two organizations . . . bring this action seeking declaratory and injunctive relief for Defendants’ alleged failure to reduce greenhouse gas emissions. The Plaintiffs allege that Defendants have violated their fiduciary duties to preserve and protect the atmosphere as a commonly shared public trust resource under the public trust doctrine.”).
II. THE PUBLIC AS THE OTHER OWNER OR OTHER RIGHTS HOLDER

The frequent temptation in property law is to treat the public in general, the public interest, public rights, or even public property as more vaporous legal interests than private rights and private property. As Sax noted in 1971, “[a]t present the idea that public rights can prevail over private property rights appears in the law only sporadically, as in navigation servitude, public nuisance and the public trust doctrines.”

This tendency to ignore the public side of property rights evaluations also tends to elide, as Sax emphasized, “the interconnectedness of property uses”—i.e., the fact “that in many circumstances a particular private property use generates far-reaching effects for other property users.”

Nevertheless, when the public has rights, those rights often act as enforceable limitations on private property owners’ uses of their private property. Two aspects of public trust-related principles illustrate the potential importance of acknowledging the public as the “other owner” or “other rights holder”: 1) public ownership of submerged lands in conjunction with the doctrine of accretion; and 2) the federal navigation servitude, which protects the public right of navigation. This Part examines each legal doctrine in turn.

A. The Public as “Other Owner”: Public Ownership of Submerged Lands and the Doctrine of Accretion

The public trust doctrine provides a particularly instructive context for challenging the assumption that public rights are vaporous as compared to private rights because a government—state, federal, or occasionally tribal—is the actual title owner of the beds and banks of navigable waterways, including the submerged lands beneath the oceans and tidally influenced internal waters. Both the U.S. Supreme Court and most state legislatures and courts have declared that state governments hold these lands in trust for the people of that state—the source, from many perspectives, of the public trust doctrine in the United States. In this context, therefore, the

---

53 Sax, Takings, supra note 4, at 155.
54 Id.
56 Under the constitutional equal footing doctrine, the states hold title to the beds and banks underneath navigable waters. PPL Mont., LLC v. Montana, 132 S. Ct. 1215, 1227–28 (2012) (citations omitted). “[T]he State takes title to the navigable waters and their beds in trust for the public . . . .” Id. at 1235.
57 See id. at 1227–28; see also Submerged Lands Act, 43 U.S.C. §§ 1311(a), 1312 (2012) (confirming title in states to the submerged lands beneath navigable waters, extending seaward out to three miles from the coast).
58 See PPL Mont., 132 S. Ct. at 1234–35. For summaries of 19 western states’ views of their public trust responsibilities, see generally Robin Kundis Craig, A Comparative Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust, 37 ECOLOGY L.Q. 53, 93–197 (2010) [hereinafter Craig, Western States’ Public Trust Doctrines]. For summaries of 31 eastern states’ public trust doctrines, see
government acts directly in the public’s interest to effectuate public rights,\textsuperscript{59} traditionally denominated as the public’s rights of navigation, commerce, and fishing in these waters—\textsuperscript{60} not as a mere regulator.

Unusually, but importantly, properties in and next to waterbodies have ambulatory boundaries.\textsuperscript{61} From an upland private landowner’s perspective, ambulatory boundaries are bundled into a set of doctrines known collectively either as riparian rights, for properties bordering rivers or streams, or littoral rights, for properties bordering lakes or the ocean.\textsuperscript{62} Specifically, under the doctrine of accretion, as the shoreline gradually changes, the extent of the upland property owner’s real property also moves with that shoreline.\textsuperscript{63} In most states, the border between private upland property and state or public submerged lands is the high-tide line or high water mark; minority rules place the border at the low-tide line, or low water mark, or the highest high-tide line.\textsuperscript{64} Regardless of which line a state uses, however, the property line moves with the gradual changes in the water boundary, increasing the upland private landowner’s property while shrinking the submerged state property or vice versa.

An important aspect of the doctrine of accretion’s operation is that it usually works on two landowners simultaneously: The owner of the uplands and the owner of the submerged lands.\textsuperscript{65} It is thus a classic example of a property rule that governs relations among landowners rather than just dictating the boundaries of private ownership. Nevertheless, private riparian or littoral landowners have substantial motivations both to insist on their rights to increased land and to resist the encroachment of publicly owned submerged lands.

When there are owners on both sides of a river, even if the riverbed is publicly owned, courts generally recognize that the rights of multiple owners are at issue. For example, in \textit{Dartmouth College v. Rose},\textsuperscript{66} the Iowa Supreme
Court acknowledged: 1) the state's title to the high-water mark of the navigable Missouri River;\(^\text{67}\) 2) the state right through the doctrine of accretion to islands formed in the middle of navigable waters;\(^\text{68}\) and 3) Dartmouth College's claim to title through the doctrine of accretion to lands accreted to its property on the west, or Nebraska, bank of the Missouri River.\(^\text{69}\) In addition, the same rules apply to river boundaries between states, and the U.S. Supreme Court is similarly mindful of both states' rights when it decides this level of ambulatory boundary case.\(^\text{70}\)

Moreover, courts and legislatures have been sensitive to private landowners' attempts to build up their own riparian or littoral properties through artificial means at the expense of other private owners or the public. In response to such attempts, several courts and legislatures have disallowed private landowners from taking title to any artificially induced accretions that they themselves caused.\(^\text{71}\)

However, courts have been more solicitous of landowners' attempts to resist erosion—that is, the active loss of private property to the public. In particular, in coastal states, courts have regularly given the upland private landowners rights to fortify the coastline,\(^\text{72}\) even when state statutes would otherwise appear to prohibit riprap, groins, and other erosion-control structures.\(^\text{73}\) In so doing, courts have tended to ignore the impact on state-owned submerged lands and the public rights regarding them that arise from these land use decisions to benefit the upland private landowners. In a very

\(^{67}\) Id. at 689 ("[T]he state owns the bed to the ordinary high-water mark . . . .").

\(^{68}\) Id. at 690 ("In Iowa, an island which forms in a navigable river upon and over state owned river bed is considered accretion to the bed and is owned by the state . . . .").

\(^{69}\) Id. at 689, 692.

\(^{70}\) See, e.g., Nebraska v. Iowa, 143 U.S. 359, 360–61, 369–70 (1892) (explaining that a river between two states creates a fluid boundary that changes with accretion).

\(^{71}\) See, e.g., CAL. CIV. CODE § 1014 (West 2007); OKLA. STAT. ANN. tit. 60, § 335 (West 2010); State v. Sause, 342 P.2d 803, 826 (Or. 1959) ("[A] riparian owner cannot add to his property against the state by filling in the area adjacent to his property . . . ."); Maunalua Bay Beach Ohana v. State, 222 P.3d 441, 461 (Haw. Ct. App. 2009) (explaining that Hawaiian constitutional provisions provide state ownership of future accretions to oceanfront property); Carpenter v. City of Santa Monica, 147 P.2d 944, 972 (Cal. Dist. Ct. App. 1944) ("Artificial accretions belong to the state, or its grantees, as the owner of the tide lands."); Del. Ave., LLC v. Dep’t of Conservation & Natural Res., 997 A.2d 1231, 1235 (Pa. Commw. Ct. 2010) ("Pennsylvania courts have continuously held that changes in the low water line associated with artificial filling do not modify the boundaries of navigable waterways . . . ."); cf. Bd. of Trs. of the Internal Improvement Trust Fund v. Sand Key Assocs. Ltd., 512 So. 2d 934, 938 (Fla. 1987) (holding that landowners do take title to artificial accretions if they did not cause the accretion).

\(^{72}\) See, e.g., United States v. Milner, 583 F.3d 1174, 1186 (9th Cir. 2009) ("[T]he common law also supports the owner’s right to build structures upon the land to protect against erosion."); S.C. Coastal Conservation League v. S.C. Dep’t of Health & Envtl. Control, 582 S.E.2d 410, 413 (S.C. 2003) (authorizing the issuance of permits to prevent erosion).

\(^{73}\) See, e.g., Berkley v. State Dep’t of Envtl. Regulation, 358 So. 2d 552, 555–56 (Fla. Dist. Ct. App. 1977) (allowing the bulk heading and filling of two acres of coastal property despite the Biscayne Bay Aquatic Preserve Act, Fla. STAT. ANN. § 258.307 (West 2009), that established an aquatic preserve); S.C. Coastal Conservation League, 582 S.E.2d at 412–13 (holding that the South Carolina legislature did not intend to ban groins in the Beachfront Management Act, S.C. CODE ANN. §§ 48-39-10 to 48-39-360 (2008)).
real and tangible sense, the state’s actual property rights and the public’s public trust rights have simply not counted in many courts when pitted against private landowners who are trying to save their property from an encroaching sea.

The legal analysis becomes much different, however, when courts take the submerged lands owner’s rights as seriously as the upland owner’s rights. In United States v. Milner (Milner), 74 for example, the United States sued waterfront landowners along the Gulf of Georgia, off the coast of the State of Washington, to defend the submerged lands rights of the Lummi Nation. 75 As a result of President Ulysses Grant’s orders in 1873, the tribe’s reservation extended to the shores of the Gulf of Georgia. 76 The problem arose because the private landowners had erected “shore defense structures” to prevent the erosion of their coastal properties, and, by 2002, the shoreline had changed enough that the structures lay below the mean high-tide line. 77 The federal government claimed, on behalf of the Lummi Nation, that the private landowners were thus committing a trespass. 78

The U.S. Court of Appeals for the Ninth Circuit agreed. First, it concluded that, as a result of President Grant’s order, the federal government retained title to the submerged lands in trust for the tribes despite the equal footing doctrine. 79 Second, it emphasized that two potentially competing common law principles were at play:

On the one hand, courts have long recognized that an owner of riparian or littoral property must accept that the property boundary is ambulatory, subject to gradual loss or gain depending on the whims of the sea. On the other hand, the common law also supports the owner’s right to build structures upon the land to protect against erosion. 80

Importantly, however, the Ninth Circuit also recognized and emphasized that the uplands landowner and the submerged lands owner have “reciprocal” rights:

The uplands owner loses title in favor of the tideland owner—often the state—when land is lost to the sea by erosion or submergence. The converse of this proposition is that the littoral property owner gains when land is gradually added through accretion, the accumulation of deposits, or reliction, the exposure of previously submerged land. 81

As a result, the Ninth Circuit rejected the private landowners’ argument that the private uplands are inherently more valuable and more important than

74 583 F.3d 1174 (9th Cir. 2009).
75 Id. at 1180.
76 Id.
77 Id. at 1181.
78 Id.
79 Id. at 1184–85.
80 Id. at 1186 (citations omitted).
81 Id. at 1187.
the submerged lands and tidelands, explicitly citing the public trust doctrine as a reason for upholding the submerged lands owner’s rights.\textsuperscript{82} 

Third, the Ninth Circuit rejected the private landowners’ claims that the normally ambulatory boundary became fixed when the landowners built their erosion control structures.\textsuperscript{83} Again, the upland and submerged lands owners’ rights were reciprocal:

Given that the Lummi have a vested right to the ambulatory boundary and to the tidelands they would gain if the boundary were allowed to ambulate, the Homeowners do not have the right to permanently fix the property boundary absent consent from the United States or the Lummi Nation. The Lummi similarly could not erect structures on the tidelands that would permanently fix the boundary and prevent accretion benefitting the Homeowners.\textsuperscript{84}

As a result, the private landowners’ attempts to prevent the erosion of their properties did not provide a defense to the federal government’s trespass claim.\textsuperscript{85} 

\textit{Milner} demonstrates the instructional power of recognizing that when a government holds title to submerged lands, the government is an actual property owner entitled to have its rights preserved and protected just like private property rights. However, \textit{Milner} also underscores the additional impetus for protecting the government’s property when the government holds that property in trust for someone else—the Lummi Nation in \textit{Milner}, or the public more generally in the more typical submerged lands case. As the Ninth Circuit explicitly recognized, “in most other areas, the tidelands are held by the state in trust for the public,” which is an important reason for \textit{not} considering private uplands to be more important or more valuable than tidelands and submerged lands.\textsuperscript{86}

\textbf{B. The Public as “Other Rights Holder”: The Federal Navigation Servitude}

As Joseph Sax recognized in 1971, “[t]he rights of each user can only be defined with reference to the claims of other users, and there may be incompatibilities not subject to solution by simply parceling out the resource in equal shares.”\textsuperscript{87} If government ownership of submerged lands demonstrates the importance of competing claims, then the federal navigation servitude protects a public right that the law has deemed unparcelable—the right of navigation.

\textsuperscript{82} \textit{Id.} at 1188 (“[W]e decline to hold that the use of uplands is inherently more valuable than the use to which tidelands can be put. As was already noted, the tidelands have played an important role in the Lummi’s traditional way of life, and in most other areas, the tidelands are held by the state in trust for the public.”).
\textsuperscript{83} \textit{Id.} at 1188–89.
\textsuperscript{84} \textit{Id.} at 1189–90.
\textsuperscript{85} \textit{Id.} at 1190.
\textsuperscript{86} \textit{Id.} at 1188.
\textsuperscript{87} Sax, \textit{Takings, supra} note 4, at 154.
As noted in Part II.A, one of the three quintessential public rights protected through the public trust doctrine is the right to navigate on navigable waters—that is, all waters that are navigable for commerce purposes, even if they are not navigable for purposes of state title. The public’s right of navigation is so important, in fact, that all property rights in the submerged lands of navigable waters below the high water mark are subject to the federal government’s paramount right to protect and preserve navigation, a doctrine known as the navigation (or navigational) servitude. The navigation servitude burdens all entities that hold title to submerged lands, including states and tribes as well as private titleholders.

As Sax noted, the federal navigation servitude speaks directly to the constitutional takings doctrine. Specifically, the federal navigation servitude is a limitation on title—a reservation of sorts in favor of the public—that eliminates the government’s duty to pay compensation for damaging private property. For example, in Lewis Blue Point Oyster Cultivation Co. v. Briggs, the plaintiff Lewis Blue Point Oyster Cultivation Company held a lease of submerged lands in Great South Bay off the coast of New York, which it used to cultivate Blue Point oysters. The defendant, J. Marvin Briggs, had a contract with the United States to dredge a channel through the bay, which Congress authorized. The dredging, however, would destroy some of Lewis Blue Point’s oysters and impair the value of the leasehold, and so the company sued to enjoin the dredging, arguing that it would amount to an unconstitutional taking of private property.

The U.S. Supreme Court, however, affirmed the New York Court of Appeals in dismissing the claim. In so doing, it upheld as paramount the public’s right to navigate the navigable waters as superior to private property rights, emphasizing that the importance of that right of navigation underscored:

---

88 See supra notes 55–56 and accompanying text. Although “navigable water” is a term of art in federal law, it is a term of art with many definitions, depending on context. Robin Kundis Craig, Navigability and its Consequences: State Title, Mineral Rights, and the Public Trust Doctrine, 60 ROCKY MTN. MIN. L. INST. 7-1, § 7.01 (2015). The definition of navigable waters for purposes of state title is the narrowest of those definitions and hence applies to the fewest waters. See id. § 7.03(2) (discussing the state title test for navigability). The Commerce Clause definition, on which the navigation servitude depends, is one of the broadest. See id. § 7.02(2) (discussing the Commerce Clause test of navigability and the federal navigation servitude). Thus, it is quite possible for the federal navigation servitude to apply to a waterway for which the state does not own the beds and banks, and hence title to the submerged lands is with the private riparian landowners.


91 See Lewis Blue Point Oyster Cultivation Co. v. Briggs, 229 U.S. 82, 87–88 (1913).

92 Sax, Takings, supra note 4, at 155.

93 Lewis Blue Point Oyster Cultivation Co., 229 U.S. at 87–88.

94 Id. at 85.

95 Id.

96 Id.

97 Id. at 90.
the qualified nature of the title which a private owner may have in the lands lying under navigable waters. If the public right of navigation is the dominant right and if, as must be the case, the title of the owner of the bed of navigable waters holds subject absolutely to the public right of navigation, this dominant right must include the right to use the bed of the water for every purpose which is in aid of navigation. This right to control, improve and regulate the navigation of such waters is one of the greatest of the powers delegated to the United States by the power to regulate commerce.

By necessary implication from the dominant right of navigation, title to such submerged lands is acquired and held subject to the power of Congress to deepen the water over such lands or to use them for any structure which the interest of navigation, in its judgment, may require. [Lewis Blue Point Oyster Cultivation Co.] has, therefore, no such private property right which, when taken, or incidentally destroyed by the dredging of a deep water channel across it, entitles him to demand compensation as a condition. 98

As with the trust protections recognized in Milner in Part II.A., therefore, protection of navigation requires recognition that the rights and interests of the public limit private property rights in very direct and consequential ways. These public rights are rights—not vaporous interests to be ceded to the desires of private landowners and lessees.

Importantly, both government ownership of submerged lands and the federal navigation servitude help to define the bundle of rights that the riparian or littoral private property at issue actually encompasses. Whether one views these limitations as part of the basic definition of waterfront property rights or, in Sax’s terminology, as a recognition that private waterfront property is part of a larger system, the underlying point is largely the same: These properties are always subject to enforceable public rights that protect public interests, including those interests in navigation, commerce, and fishing, on a broader and longer-term scale than private property owners typically consider. The goal for the rest of this Article is to find ways to articulate the workings of these interests in other contexts so that the public interests at stake in regulatory takings litigation can find an equally effective legal voice.

III. MEASURES TAKEN TO BENEFIT THE PUBLIC ALSO BENEFIT PRIVATE CITIZENS AND PRIVATE PROPERTY

Regulatory constitutional takings cases by definition pit private property owners against a government. The public interest that the government’s action actually serves is effectively relegated to the third, and least well-defined, prong of the Penn Central balancing test for regulatory takings analyses—the “character of the governmental action.” 99 Thus, the

---

98 Id. at 87–88 (emphasis added).
99 The evaluation of a regulatory taking claim is essentially an ad hoc balancing of the three factors in the Penn Central test: 1) “The economic impact of the regulation on the claimant . . . ,” 2) “the extent to which the regulation has interfered with distinct investment-
Penn Central analysis for regulatory takings claims inherently conflates the public as beneficiary with government as actor while positioning the private property owner as “other” to the transaction—the otherwise uninvolved innocent bystander, as it were.

As one of many examples, consider the U.S. Court of Federal Claims’s treatment of a Penn Central takings analysis in Resource Investments, Inc. v. United States (Resource Investments). In that case, private landowners sued for an unconstitutional temporary taking of their landfill because, pursuant to the Clean Water Act (CWA), the U.S. Army Corps of Engineers (Corps) asserted jurisdiction over the site and required the landowners to get a permit. When the court got to the third prong of the Penn Central test, it acknowledged that:

> It is beyond cavil that a purpose for and an effect of Section 404 of the CWA is to protect navigable waters by preserving wetlands hydrologically linked to those navigable waters. . . . Conserving wetlands, pursuant to the CWA and its implementing regulations, helps to preserve a public good and prevent degradation of navigable waters.

Moreover, according to the court, “there always remains some finite probability, however small, that a complication from a landfill may develop into a nuisance.” In other words, important public interests potentially backed expectations...，“ and 3) “the character of the governmental action.” Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978).

---

100 See infra Figure 1.
103 Resource Investments, 85 Fed. Cl. at 456–57.
104 Id. at 518 (citations omitted).
105 Id.
As is typical in *Penn Central* analyses, however, this broader interest of the public was deemed less weighty than the immediate impacts to private property. The court emphasized repeatedly that the “plaintiffs suffered substantial economic harm” and that there was some evidence that the Corps treated them unusually:

Certainly, there is a valid public interest in clean water and healthy wetlands that is protected by the CWA. . . . However, plaintiffs certainly suffered a severe economic impact, one that left them without economically viable use of their land when the Corps did not have jurisdiction in the first place. Nor can we conclude that the Corps reviewed plaintiffs’ 404 permit application with the same standards as other applications, or that plaintiffs were not singled out when improperly subjected to the Corps’ jurisdiction.  

As a result, although the court could not evaluate the third *Penn Central* factor as a matter of law on summary judgment, it certainly indicated a strong sympathy for the private property owners. What the Court of Federal Claims—and the *Penn Central* analysis in general—failed to recognize, however, is that the relationship between the government, public, and private property owner is not a duality but a trinity. The government’s overlap with the public, while generally valid, is not the only overlap of interests at stake. Importantly, the private landowner is also a member of the public who benefits from the government’s action. In *Resource Investments*, for example, the landowner benefitted from the protection of navigable waters and the public goods and ecosystem services that come from that protection. The *Penn Central* test neither requires nor encourages courts to evaluate how complaining plaintiffs have also benefitted from the government’s action. Instead, the fact that the complaining plaintiff probably also benefits from the government’s action as a member of the public—and has been benefitting from myriad such actions since birth—is generally irrelevant to the regulatory takings analysis.  

Nevertheless, the public trust doctrine, in contrast, teaches that the public rights the trust creates simultaneously: 1) can be exercised only by individual members of the public—the public as a whole cannot go fishing—but 2) are broader than privatized rights or the demands of individuals. In

---

106 See id. (characterizing the potential for the landfill to develop into a nuisance as “vanishingly small, albeit theoretically possible”).

107 Id.

108 Id. at 519.

109 Id. (“[T]his court cannot assess the character of the government action . . . .”).

110 See infra Figure 2.

111 See supra text accompanying notes 101–106.

112 There are some parallels between my argument here and Reza Dibadj’s and other scholars’ expositions on regulatory “givings.” See generally Reza Dibadj, *Regulatory Givings and the Anticommons*, 64 Ohio St. L.J. 1041 (2003) (explaining the various ways in which government distribution of resources can create problems).
other words, because public trust rights such as commerce, fishing, and navigation can only be exercised by individuals, while the public trust doctrine protects those rights for the public at large (including subsequent generations), the public trust doctrine simultaneously benefits and limits individual members of the public. As a result, courts and legislatures must keep both sides of that tension in mind when deciding how to implement the doctrine.

Public trust doctrine litigation provides numerous examples of this individual–public tension, particularly in cases where individuals try to assert an unfettered public trust right to navigate and fish. For example, when Minnesota and Wisconsin enacted speed regulations for motorboats, groups of individual motorboaters challenged those regulations on grounds that they interfered with the boaters’ public trust right—as members of the public—to navigate and use the navigable waters within each state. As such, the plaintiffs in the case were claiming individual use rights derived

---

113 See, e.g., St. Croix Waterway Ass'n v. Meyer, 178 F.3d 515, 521 (8th Cir. 1999) (holding that the States of Minnesota and Wisconsin could enact “slow—no wake” speed regulations for motorboats despite the claims of individual motorboaters that the regulations violated their public trust rights by impinging on their use and enjoyment of the navigable waters).

114 DAVID C. SLADE ET AL., COASTAL STATES ORG., INC., PUTTING THE PUBLIC TRUST DOCTRINE TO WORK 3 (2d ed. 1997), available at http://www.shoreline.noaa.gov/docs/8d5885.pdf (describing how the public trust doctrine “establishes the right of the public to fully enjoy public trust lands, waters and living resources for a wide variety of recognized public uses” to benefit present and future generations).

115 St. Croix Waterway, 178 F.3d at 517–18.
from the public's right to navigate. Nevertheless, the U.S. Court of Appeals for the Eighth Circuit recognized that larger and more general interests were at play, and it upheld the states' regulations, concluding that "the public trust doctrine supports the states' authority to regulate navigation and to protect and preserve the public waters." In other words, while the public trust doctrine gives individuals, as members of the public, rights to use natural resources like the navigable waterways, it simultaneously encourages a broader perspective on those resources to prevent their destruction and to prevent small groups of individuals from injuring the rights of the public as a whole.

This Part examines private individuals' status as members of the public by focusing on two recent water-related takings cases where the private landowners simultaneously benefitted from and were limited by government action. Part IV, in turn, examines the larger perspective on individual rights that the public trust doctrine provides by emphasizing the need to preserve natural resources over the long term.

The first case in this Part involves groundwater. In many parts of the United States, groundwater is an extremely valuable natural resource, used for both irrigation and drinking water. However, groundwater is also often a finite resource, subject to overuse from human mining, which in turn causes land subsidence and the drying up of surface waters. As such, overuse of groundwater can become an existential threat to both humans and the other species that depend on those water supplies.

One of the many aquatic systems in the United States damaged by groundwater pumping is the Edwards Aquifer in Texas. Indeed, overpumping of water from the aquifer led to the listing of several species that inhabit the Comal and San Marcos Springs—both fed by the aquifer—as threatened and endangered species under the federal Endangered Species Act and to litigation against the State of Texas for failure to protect those species. To deal with the problem, the Texas Legislature enacted the Edwards Aquifer Authority Act, which created both the Edwards Aquifer Authority (EAA) and a permitting regime for groundwater withdrawals from

---

116 See id. at 521 ("The Association argues that the regulations . . . impinge upon the public's use and enjoyment of the public waters.").
117 Id.
118 Id.
119 See ROBERT GLENNON, WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS 31 (2002) (noting that "groundwater has become a critical source of water throughout the nation" both for drinking and irrigation).
120 Id. at 32–38.
121 E.g., id. at 32–34 (citing the human consequences of groundwater pumping as poor water quality, depletion of water reserves, land subsidence, and susceptibility to flooding); id. at 114–16, 121 (explaining the sharp decline in Chinook salmon runs in California's Cosumnes River due to groundwater mining and flood control in the central valley).
123 Sierra Club v. City of San Antonio, 115 F.3d 311, 313 (5th Cir. 1997).
124 TEX. WATER CODE ANN. § 27.0516 (West 2014).
the aquifer.\textsuperscript{125} The Texas Supreme Court succinctly explained the complex workings of the capped permit program as follows:

In the Act, the Legislature established an aquifer-wide cap on water withdrawals by nonexempt wells of 450,000 acre-feet of water per year through 2007 and 400,000 acre-feet per year thereafter. It authorized the Authority to review and increase the cap if after appropriate study, implementation of water management and drought planning strategies, and consultation with state and federal agencies, the Authority determines that additional water is safely available from the aquifer. The permit system established by the Legislature gives preference to “existing users,” which the Act defines as people who have withdrawn and beneficially used underground water from the aquifer on or before June 1, 1993. Under the Act, the Authority may grant initial regular permits only to existing users who properly file a “declaration of historical use,” and who can establish, by “convincing evidence,” beneficial use of underground water withdrawn between June 1, 1972, and May 31, 1993.

The Act entitles an existing user to a permit allowing the user to withdraw an amount of water equal to the user’s maximum beneficial use of water without waste during any one calendar year of the historical period, unless the aggregate total of such use throughout the aquifer exceeds the 450,000 acre-foot cap. If this occurs, the Legislature has directed that the Authority proportionately adjust the amount of water authorized for withdrawal under the permits to meet the cap. This downward adjustment is limited in two circumstances . . . : (1) an existing irrigation user must receive a permit of not less than two acre-feet a year for each acre of land the user actually irrigated in any one calendar year during the historical period; and (2) an existing user who operated a well for three or more years during the historical period must receive a permit for at least the average amount of water withdrawn annually during the historical period. Subject to certain restrictions, permitted water rights may also be sold or leased.\textsuperscript{126}

Because, as intended, the cap on pumping can limit both existing pumpers’ use of aquifer water and prevent other landowners from pumping water at all, private landowners have repeatedly challenged the permitting program as an unconstitutional taking of private property rights.\textsuperscript{127}

The Texas courts have so far issued two decisions analyzing the Edwards Aquifer permitting program as a regulatory taking. In the first, \textit{Edwards Aquifer Authority v. Day (Day)},\textsuperscript{128} the Texas Supreme Court in 2012 essentially defined private landowners’ property rights in groundwater. The EAA denied Day’s application for a permit to pump water from the Edwards Aquifer, which Day challenged as an unconstitutional taking of his property

\begin{footnotes}
\item[125] Bragg v. Edwards Aquifer Auth., 71 S.W.3d 729, 731 (Tex. 2002).
\item[126] \textit{Id.} at 731–32 (citations omitted).
\item[128] 369 S.W.3d 814.
\end{footnotes}
rights in violation of the Texas Constitution. The Texas Supreme Court concluded that Day was asserting a regulatory taking claim and used the federal Penn Central test for its analysis. The first step, however, was to assess whether Day had a property interest in groundwater as it sat in the aquifer; under Texas’s rule of capture for groundwater, the issue had never been squarely decided.

Texas adopted the rule of capture in 1904. Under this groundwater doctrine, “a pumper owns (has title to) all the groundwater that he or she pumps out of the ground, with the pumping constituting the legal act of capture.” In addition, the pumper will ordinarily not be liable for any damage caused to other pumpers from drawing down the aquifer. However, because the pumping is usually deemed the necessary act of capture, landowners generally have not been deemed to own groundwater in situ in those jurisdictions where the rule of capture has applied. In Day, however, the Texas Supreme Court ignored this general rule, instead analogizing groundwater to oil and gas resources and holding that “[i]n our state the landowner is regarded as having absolute title in severalty to the [water] in place beneath his land. . . . The [water] beneath the soil [is] considered a part of the realty.”

As such, Day had a property interest sufficient to support a Penn Central taking analysis. Reviewing the case on summary judgment, the Texas Supreme Court ultimately remanded for further factual development. Nevertheless, regarding the first factor of Penn Central, the economic impact to Day, the court noted that “[b]y making it much more expensive, if not impossible, to raise crops and graze cattle, the denial of Day’s application certainly appears to have had a significant, negative economic impact on him, though it may be doubted whether it has denied him all economically beneficial use of his property.” The second factor—the reasonableness of Day’s investment-backed expectations—was complicated by the fact that the Texas Legislature had enacted the Edwards Aquifer Authority Act the year before Day purchased his property. Nevertheless, according to the court, “[w]hile Day should certainly have understood that the Edwards Aquifer could not supply landowners’

129 Id. at 820–21.
130 Id. at 838–40.
131 Id. at 823.
133 ADLER, CRAIG & HALL, supra note 61, at 179.
134 Id.
135 Id. at 183–84.
136 Day, 369 S.W.3d at 828–32.
137 Id. at 831–32 (quoting Elliff v. Texon Drilling, 210 S.W.2d 558, 561 (Tex. 1948)).
138 Id. at 843.
139 See id.
140 Id. at 840.
141 Id.
unlimited demands for water, we cannot say that he should necessarily have expected that his access to groundwater would be severely restricted."\textsuperscript{142}

As for the third \textit{Penn Central} factor, the Texas Supreme Court acknowledged: "Unquestionably, the State is empowered to regulate groundwater production. . . . Groundwater provides 60\% of the 16.1 million acre-feet of water used in Texas each year. In many areas of the state, and certainly in the Edwards Aquifer, demand exceeds supply. Regulation is essential to its conservation and use."\textsuperscript{143} Nevertheless, unlike oil and gas, the court considered groundwater to be a renewable resource that landowners could both use on the overlying land or sell for use elsewhere.\textsuperscript{144} "Consequently, regulation that affords an owner a fair share of subsurface water must take into account factors other than surface area."\textsuperscript{145} Moreover, "a landowner cannot be deprived of all beneficial use of the groundwater below his property merely because he did not use it during an historical period and supply is limited."\textsuperscript{146}

Thus, while the Texas Supreme Court merely reversed the summary judgment against Day, it strongly suggested that a constitutional taking had occurred.\textsuperscript{147} As in \textit{Resource Investments}, the strong—and, in the Edwards Aquifer region, potentially critical—public interest in limiting the private use of water resources simply could not stand up to the immediate economic impacts that Day was experiencing. The court never considered the future impact of Day’s potential loss of all groundwater resources as a result of a combination of aquifer overuse and drought or the potential economic impact the complete loss of groundwater would have on the value of Day’s property or his ability to raise crops and ranch cattle.\textsuperscript{148}

A little more than a year later, in \textit{Edwards Aquifer Authority v. Bragg (Bragg)},\textsuperscript{149} the Texas Court of Appeals relied on Day to find that EAA owed compensation to other Edwards Aquifer landowners. The Braggs owned two pecan orchards on land overlying the Edwards Aquifer, which they purchased before the Texas Legislature created the EAA in 1993.\textsuperscript{150} The Braggs received an EAA permit for one property, but for less water than they requested, and were denied a pumping permit for the other.\textsuperscript{151} The Texas Court of Appeals concluded that a regulatory taking had occurred.\textsuperscript{152}

Under the first \textit{Penn Central} factor, the court concluded that "[t]he result of the regulation forces the Braggs to purchase or lease what they had prior to the regulation—an unrestricted right to the use of the water beneath their land. Thus . . . this factor weighs heavily in favor of a finding of a

\textsuperscript{142} Id.
\textsuperscript{143} Id.
\textsuperscript{144} Id.
\textsuperscript{145} Id. at 841.
\textsuperscript{146} Id. at 843.
\textsuperscript{147} Id.
\textsuperscript{148} See id.
\textsuperscript{149} 421 S.W.3d 118 (Tex. App. 2013).
\textsuperscript{150} Id. at 124.
\textsuperscript{151} Id. at 126.
\textsuperscript{152} Id. at 146.
compensable taking of both orchards.”\(^{153}\) The court also concluded that, under the second *Penn Central* factor, the Braggs’ investment-backed expectations for both properties were reasonable, because they bought the properties before the pumping regulations were in place and reasonably expected to be able to pump unlimited quantities of Edwards Aquifer water to support their pecan orchards.\(^{154}\)

Notably, however, the Texas Court of Appeals found that the third *Penn Central* factor weighed “heavily” against finding a taking.\(^{155}\) “Given the importance of ‘protect[ing] terrestrial and aquatic life, domestic and municipal water supplies, the operation of existing industries, and the economic development of the state,’” the court concluded that the government action served an important public purpose.\(^{156}\) Nevertheless, this important public purpose lost out to the Braggs’ private enterprise in the court’s final balancing of factors. As the Texas Court of Appeals pointed out:

> In this case, the Braggs’ business is agricultural and therefore heavily dependent on water. The particular crop cultivated by the Braggs, pecans, needs water year-round. The Braggs’ source of water is either sub-surface or rain. Rain, at least in drought-ridden Texas, is inconsistent and unpredictable. This is especially so in semi-arid Medina County, Texas. Mr. Bragg’s testimony established that a lack of sufficient water not only affects [sic] the yield of the current crop but also the quality and size of the pecans in a future crop. No expert disputed that rain alone could not provide a sufficient source of water. Therefore, we conclude the Act’s restrictions on the amount of water the Braggs could draw from their own wells weighs in favor of a compensable taking.\(^{157}\)

Thus, the immediate losses to the pecan orchards justified an award of compensation, to be recalculated on remand.\(^{158}\)

Remarkably, both the Texas Supreme Court and the Texas Court of Appeals supported takings claims as a result of the EAA’s permitting despite acknowledging that the Edwards Aquifer was being overused—i.e., that the entire system was at risk.\(^{159}\) In addition, the same droughts that make surface water supplies unreliable can also dry up the aquifer.\(^{160}\) Indeed, the EAA’s Habitat Conservation Plan—created to allow EAA to comply with the Endangered Species Act\(^{161}\) and to protect those species already endangered by reduced aquifer flows—recognizes explicitly that drought is directly

---

\(^{153}\) *Id.* at 141 (citation omitted).

\(^{154}\) *Id.* at 142, 144.

\(^{155}\) *Id.* at 145.

\(^{156}\) *Id.*

\(^{157}\) *Id.* at 145–46 (citation omitted).

\(^{158}\) *Id.* at 153.


related to flow in the aquifer and requires cutbacks in pumping during drought years.\textsuperscript{162}

One function of the EAA’s groundwater permitting program, therefore, is to extend the useful life of the aquifer and to limit its use to relatively sustainable amounts, \textit{to the long-term benefit of the landowners who rely on that groundwater}.\textsuperscript{163} To reframe the takings issue, overpumping of the aquifer in conjunction with an inevitable bad drought would destroy both the value of the groundwater-dependent overlying properties and the ecosystems supported by the aquifer.\textsuperscript{164} Inflicting immediate pain on Day and the Braggs protects against, in a very real sense, future disaster for the entire community.

The broader public perspective on Edwards Aquifer regulation thus counsels that courts engaged in regulatory takings analyses in situations where natural resources are being overexploited should reframe the focus of their questions. Must the government \textit{really} pay landowners for short-term adjustments to protect them from longer-term destruction? Do we \textit{really} want to require governments to pay to avoid a tragedy of the commons, effectively encouraging governments to allow private parties to destroy common-pool resources, to their own economic downfall and widespread public harm?

Of course, part of the problem lies in how states define property rights to begin with. Texas groundwater law and the prior appropriation doctrine that western states apply to both surface water and groundwater rights complicate the regulatory takings analysis because they define, or appear to define, these water rights as absolute property rights.\textsuperscript{165} As the Texas Court of Appeals phrased it, the Braggs’ had an “unrestricted right to the use of the water beneath their land.”\textsuperscript{166} Sax noted the problems that prior appropriation potentially poses for a nation trying to move from a “cowboy economy” to a “spaceship economy,”\textsuperscript{167} although he rather optimistically concluded that water law’s “tradition of change” would derail most takings claims.\textsuperscript{168} More

\textsuperscript{162} \textit{Edwards Aquifer Habitat Conservation Plan}, supra note 160, at 1-1, 1-6.

\textsuperscript{163} See \textit{Bragg}, 421 S.W.3d at 145 (noting the EAA’s purpose is, in part, to sustain the Edwards Aquifer as a natural resource).

\textsuperscript{164} This potential dual effect is evident in the major functions of the EAA, which not only protects “aquatic and wildlife habitat” through its managed and controlled withdrawals but also “the operation of existing industries” and “economic development.” \textit{Edwards Aquifer Habitat Conservation Plan}, supra note 160, at 1-3.

\textsuperscript{165} For an extended discussion of this issue, see Robin Kundis Craig, \textit{Defining Riparian Rights as “Property” Through Takings Litigation: Is There a Property Right to Environmental Quality?}, 42 \textit{Envtl. L.} 115, 125–44 (2012) (discussing the effect of states’ prior appropriation doctrine in various regulatory takings cases).

\textsuperscript{166} \textit{Bragg}, 421 S.W.3d at 141.

\textsuperscript{167} \textit{Sax, Future of Water Law}, supra note 49, at 257–59. In a “cowboy economy,” according to economist Kenneth Boulding, achievement is measured by growth in production and consumption, whereas in a “spaceship economy,” achievement is measured by the ability to maintain a stock of resources. \textit{Id} at 257.

\textsuperscript{168} See \textit{id.} at 267–69 (“New needs have always generated new doctrines and, thereby, new property rights. . . . A discussion of [the takings doctrine] will show why, in demanding releases
immediately relevant to this Article is the fact that, as a result of takings litigation, several states—although not Texas—have been motivated to articulate inherent limitations on these seemingly absolute water rights.\footnote{See Craig, supra note 165, at 131 (“California’s constitutional and public trust limitations on all water rights are one set of examples. More recently, the Florida Supreme Court emphasized the public trust, public use, and doctrine of avulsion limitations on beachfront property owners’ littoral rights to find that beach restoration projects effected no unconstitutional takings . . . .”).}

Nevertheless, even when there are well-defined and apparently absolute property rights, a court’s consideration of how the aggrieved private property owner also benefits from the government regulation at issue can cast a very different light on the harm—probably a more immediate harm—that owner has suffered from that same regulation. Regulatory takings analysis should, in other words, always be cognizant of the private party’s dual status as property owner and member of the benefitted public.

Although it arose in an eminent domain—rather than regulatory taking—context, the New Jersey Supreme Court’s 2013 decision in \textit{Borough of Harvey Cedars v. Karan (Karan II)}\footnote{70 A.3d 524 (N.J. 2013).} provides a revealing example of the power of this change in perspective. The Borough of Harvey Cedars exercised its eminent domain authority to build a dune in front of the Karans’ oceanfront home, blocking their view of the ocean.\footnote{Id. at 526.} The new dune connected with an existing line of dunes along the coast of Long Beach Island, and the entire line “serve[d] as a barrier-wall, protecting the homes and businesses of Long Beach Island from the destructive fury of the ocean.”\footnote{Id.} The Karans sought compensation based primarily on their loss of view and, given the eminent domain context, there was no question that compensation needed to be analyzed.\footnote{See Borough of Harvey Cedars v. Karan (Karan I), 40 A.3d 75, 78 (N.J. Super. Ct. App. Div. 2012) (affirming the lower court’s decision to exclude evidence that the dune provided a “special benefit”).}

On March 26, 2012, the New Jersey Appellate Division upheld the jury’s award of $375,000 to the Karans, finding no reason to deem it excessive and upholding the trial court’s decision to exclude evidence that the new dune benefitted the Karans as well as blocked their view.\footnote{Hurricane Sandy Fast Facts, CNN, Nov. 5, 2014, http://www.cnn.com/2013/07/13/world/americas/hurricane-sandy-fast-facts (last visited Apr. 17, 2015).} During the appeals process, however, Hurricane Sandy ravaged the East Coast between October 22 and November 5, 2012—leaving the Karans’ house standing. When the New Jersey Supreme Court decided the case in 2013, therefore, it—and almost everyone in New Jersey—was acutely aware of the benefits of
coastal protections such as sand dunes. The specific issue the court decided was whether the jury should consider such benefits in the compensation award, and the court answered in the affirmative, so long as the benefits were not too speculative or conjectural to be reasonably calculated. It then elaborated that, as members of the public, the Karans and their neighbors especially benefitted from these coastal protections:

Unquestionably, the benefits of the dune project extended not only to the Karans but also to their neighbors further from the shoreline. Yet, clearly the properties most vulnerable to dramatic ocean surges and larger storms are frontline properties, such as the Karans’. Therefore, the Karans benefitted to a greater degree than their westward neighbors. Without the dune, the probability of serious damage or destruction to the Karans’ property increased dramatically over a thirty-year period.

That the court clearly recognized the Karans’ dual status as members of the benefitted public and as individual property owners became even clearer in its treatment of the Karans’ taxes:

The Karans argue that they should not be made to pay twice for storm-damage protection afforded by a public project, once by their taxes and again by deducting the enhanced value of their home from the damages. However, that argument is far-fetched when the actual numbers are considered. The Harvey Cedars shore-protection project cost twenty-five million dollars, with the federal government bearing most of the cost, with the State bearing a lesser amount, and with the municipality pitching in one million dollars. Tens of millions of taxpayers contributed to the shore-protection project that shields the Karans’ property from destruction. Because the Karans occupy frontline ocean property, the benefits afforded to them are much greater than to others. The portion of the Karans’ taxes that goes to support the project may be infinitesimal compared to the value added to their home by the dune protection.

Finally, the court also concluded that property buyers would take the value of public protections into account when calculating the fair market value of the property. While the property’s fair market value is clearly the touchstone of any compensation award, the court’s observation that willing buyers would consider the dunes in calculating an acceptable

177 Karan II, 70 A.3d at 543.
178 Id. at 541.
179 Id. at 542.
180 Id. at 541 (“[I]t is also likely that a rational purchaser would place a value on a protective barrier that shielded his property from partial or total destruction. Whatever weight might be given that consideration, surely, it would be one part of the equation in determining fair market value.”).
purchase price nevertheless underscores the basic point—that private property owners do directly benefit from government actions designed to protect the public more generally.

Bragg thus illustrates the overvaluing of private harm that can occur because the Penn Central regulatory takings analysis conflates government action with the public interest, ignoring the fact that private individuals also often benefit—at least on net—from the regulation at issue.\textsuperscript{182} Karan II, in contrast, demonstrates the power of decoupling the government from the public and recognizing that public benefits often accrue to particular individuals.\textsuperscript{183} As the public trust doctrine litigation indicates, and as the Karan II court was careful to acknowledge, this relationship between public and individual is complex and does not guarantee that the private property owner should always lose a taking compensation claim.\textsuperscript{184} Nevertheless, to ignore the fact that individuals often benefit, as members of the public, from government action unrealistically skews the takings analysis in favor of compensation.\textsuperscript{185}

**IV. WE’RE IN THIS FOR THE LONG HAUL—WE HOPE**

Although it is important, as Part II and Part III argue, to acknowledge that private individuals benefit from being members of the public and from exercising public rights, it is potentially as damaging to conflate the public with its constituent individuals as it is to conflate the public with the government. As Joseph Sax cogently noted in one of his last articles, outside the constitutional takings context, property law has regularly but inadequately conflated the interests of private landowners with the public interest, assuming that:

what benefits the individual owner also benefits the general public (in terms of both product and incentives for long-term sustenance)\.\.\. The telling point is that we have assumed that current patterns of ownership would necessarily take care of the future, both by the incentives of owners to care for their land and by the capacity of technology and innovation to deal with problems like exhaustible resources. Although neither of those assumptions is wrong in toto\.\.\. both have proved insufficient as we have learned more about the economy of nature and seen the inadequacy of the present system to protect it and us.\textsuperscript{186}

\textsuperscript{182} See supra notes 149–159 and accompanying text (citing Bragg, 421 S.W.3d 118).

\textsuperscript{183} See supra notes 170–180 and accompanying text (citing Karan II, 70 A.3d 524).

\textsuperscript{184} See id. (explaining the complex factors courts take into account in takings litigation—such as in Karan—when having to weigh a private party’s dual status as property owner and member of the benefitted public).

\textsuperscript{185} See supra notes 122–169 and accompanying text (describing Texas cases that skew takings analysis in favor of compensation by ignoring individual benefit of landowner, and valuing private harm over public benefit).

More specifically, I would argue, the danger of conflating the public and private perspectives arises because protection of public rights and interests requires a broad and long-term perspective on complex systems that exceeds the interest that any individual, or even generation, could assert.  

The assessment in Part III of the Day and Bragg decisions has already suggested some of the problems that can arise when courts ignore the broader public interest in effective resource management.  

This Part, in turn, more positively discusses how courts can actually effectuate broader and longer-term public rights in natural resources through the evolving example of fishing regulation. Notably, governmental fisheries managers have effectively benefitted from the lack of private property rights in fisheries resources, which has significantly limited constitutional takings claims in this field. Even so, political pressure to allow fisheries to continue despite dwindling stocks can be enormous, and this political pressure created a history of regulators in effect privileging private fishing interests over long-term public interests despite the limited nature of private property rights.  

The public trust doctrine has offered state regulators an important corrective perspective on fisheries management, and that perspective now appears to be working its way into federal fisheries management, as well.  

Fishing is one of the three quintessential public rights protected through the public trust doctrine. As with the motorboartists in Minnesota and Wisconsin, however, fishermen in a number of states have sought to use their public trust rights to block state regulation of fisheries—that is, to insist on an absolute private right to fish. Courts' responses to these challenges reveal their awareness of the broader public interests in natural resources that the public trust doctrine protects.  

Fishing is a particularly good activity to focus on in an analysis of how individual, and usually shorter-term, interests can diverge from broader

187 See supra notes 113–114 and accompanying text.
188 See supra notes 150–165 and accompanying text.
189 See, e.g., Conti v. United States, 291 F.3d 1334, 1341–42, 1344–45 (Fed. Cir. 2002) (holding that the plaintiff's swordfish permit created a revocable license, and hence the plaintiff had no taking claim in the face of a ban on gillnetting); Gen. Category Scallop Fishermen v. U.S. Dep't of Commerce, 720 F. Supp. 2d 564, 576 (D.N.J. 2010) (finding that "[h]olders of fishing permits issued pursuant to the Magnuson–Stevens Act do not possess a valid property interest in such permits").
194 See, e.g., id. at 897.
public rights. As has been almost universally recognized, fisheries are a commons resource. Moreover, they are one of the more prominent examples of Garrett Hardin’s “tragedy of the commons,” particularly in the oceans, where an alarmingly increasing number of fish stocks are fully exploited, overfished, or have crashed. As Hardin recognized, this tragedy occurs because the individual interest of an unregulated fisher under the prevailing doctrine of capture is to catch as many fish as fast as possible, before other fishers take them. Obviously, however, the collective result of those individual decisions undermines the public interest, both in terms of food supply and in terms of functional marine ecosystems.

Nevertheless, it is also a truism that fishermen will generally resist attempts to limit fishing—including through public trust doctrine arguments. For example, the Washington State Geoduck Harvest Association challenged Washington State’s decision to regulate commercial geoduck harvests on state-owned tidal submerged lands, on the grounds that such regulations violated the public trust doctrine. The Washington Court of Appeals, however, disagreed. It recognized that the public trust doctrine takes a longer-term perspective on public natural resources and “prohibits the State from disposing of its interest in the waters of the state in such a way that the public’s right of access is substantially impaired, unless the action promotes the overall interests of the public.” As a result, the Washington Department of Natural Resources (DNR) “has a continuing obligation under the public trust doctrine to manage the use of the resources on the land for the public interest.”

Moreover, the regulation of commercial geoduck harvesting did not violate the public trust doctrine under Washington’s two-part test:“(1)
whether the State, by the questioned legislation, has given up its right of control over the jus publicum; and (2) if so, whether by so doing the State (a) has promoted the interests of the public in the jus publicum; or (b) has not substantially impaired it.\(^{204}\)

Regarding the first prong of the test, under the DNR regulatory scheme, the state had not given up control over the relevant public trust resources—the geoducks—because: 1) "no title to state land is conveyed;" 2) "DNR is responsible for appraising the resources in the water beds;" 3) "the resource bidders must provide an estimate of resources to be removed;" 4) "the state may apply ‘such terms and conditions deemed necessary . . . to protect the interests of the state;’" and 5) "DNR has a right to revoke or suspend a commercial harvesting agreement, and the harvester must comply with applicable commercial diving safety standards and federal occupational safety and health administration regulations."\(^{205}\)

More important for purposes of this discussion, regarding the second prong of Washington’s public trust doctrine test, the regulation of geoduck harvests actually promoted, rather than hindered, the public’s rights under the public trust doctrine:

The public trust doctrine, as applied to DNR’s regulation of commercial geoduck harvesting, protects the public right to recreation, commerce, and commercial fishing, all of which are bolstered by the state’s system of facilitating sustainable geoduck harvesting and natural regeneration of the resource. And the proceeds from the sale of harvesting rights go to support aquatic resource management and enhancement of aquatic lands for all uses by the public.\(^{206}\)

Thus, as the Washington Court of Appeals recognized, limiting the private right to exploit specific natural resources can actually preserve public rights in those same resources.\(^{207}\) The two sets of rights, in Sax’s terms, are in fact relational.\(^{208}\) Several other states have reached the same conclusion.\(^{209}\)

---

\(^{204}\) Id. (quoting Caminiti v. Boyle, 732 P.2d 989, 994–95 (Wash. 1987)). In addition, the court stated, “[w]e apply heightened scrutiny, as the statutes are essentially being measured against constitutional protections for public access to unique resources.” Id. (citation omitted).

\(^{205}\) Id. at 897 (quoting WASH. REV. CODE §§ 79.90.310, 79.96.080 (2004)) (recodified at WASH. REV. CODE §§ 79.140.160, 79.90.310 (2008)).

\(^{206}\) Id. (emphasis added).

\(^{207}\) Id. ("Thus, DNR’s procedures and regulation of commercial geoduck harvesting serves the public, satisfies the public trust doctrine’s requirements, and is not an unconstitutional infringement on the public’s rights.").

\(^{208}\) See Sax, Sustainability, supra note 186, at 14 (asserting a reformed view from distinct private and public property rights to “evolve an image of land with values that pertain not simply to individuals but to communities as a whole, values whose scope accords with the way we think about our historical heritage, or public health, or education”).

Importantly for an article on constitutional takings, states have also used their public trust doctrines to prevent privatization of fisheries' resources, effectively rejecting private property rights to those resources. In 1907, for example, the Oregon Supreme Court decided *Hume v. Rogue River Packing Company*,\(^\text{210}\) in which Hume, a private citizen, sued the Rogue River Packing Company to prevent the company from fishing for salmon in an eighteen-mile stretch of the Rogue River upstream from where it joins the Pacific Ocean.\(^\text{211}\) Hume claimed a private and exclusive right to fish for salmon based on custom and prescription.\(^\text{212}\)

The Oregon Supreme Court denied the claim for several reasons, but one of the more important reasons was the public’s common right to fish in navigable waters and the state’s control over that right:

> The title to the bed of all navigable rivers being in the state, and the right to fish therein being subject to its control and supervision, the grant of an exclusive right to fish must come from the state, either by special act or through a general law. But we do not find that the Legislature of this state has ever authorized or empowered by general law any of its officers or agents to convey in the name of the state to any one its title to lands covered by the navigable waters thereof, or particularly any exclusive rights to fish therein; but such general legislation as has been enacted in the exercise of its proprietary rights over navigable waters and the rights of fishing therein, [which] appears to have been for the common benefit of all citizens, and not for the particular advantages of any.\(^\text{213}\)

Moreover, the court continued, any attempted grant of such a private and exclusive fishery would create an unconstitutional monopoly.\(^\text{214}\) The public’s right to fish simply could not be compromised by private property claims.

Similarly, the North Carolina Supreme Court recently limited private property rights in shellfish resources in *State ex rel. Rohrer v. Credle*.\(^\text{215}\) North Carolina had long recognized a limited exception to the public trust doctrine’s right to fish in leases to private parties of portions of submerged lands for shellfish cultivation.\(^\text{216}\) Credle, a private landowner, sought to build upon this exception and claim an exclusive right to harvest shellfish through prescription.\(^\text{217}\) The North Carolina Supreme Court first summarized the law regarding the convergence of the state’s public trust doctrine and private shellfish rights as follows:

(1) Because of our recognition of the public trust doctrine, no title in fee can be granted to lands submerged beneath navigable waters. (2) The exclusive

---

\(^\text{210}\) 92 P. 1065 (Or. 1907).

\(^\text{211}\) Id. at 1067.

\(^\text{212}\) Id.

\(^\text{213}\) Id. at 1072.

\(^\text{214}\) Id. at 1073.

\(^\text{215}\) 369 S.E.2d 825, 826 (N.C. 1988).

\(^\text{216}\) Id. at 829.

\(^\text{217}\) Id. at 826.
cultivation and harvesting of oysters is permitted only where no natural oyster bed exists. (3) The “perpetual franchise” system existed only for a period of twenty-two years ending in 1909. A lease system is now in force. (4) Our state constitution mandates the conservation and protection of public lands and waters for the benefit of the public.\(^{218}\)

It then denied the landowner even a jury trial on his prescription claim, in part because of the lack of evidence but also, importantly, because of the state’s public trust doctrine:

This Court has held that no exclusive right to fish in navigable streams exists. The general common law rule is that “no right in natural oyster beds can be gained by prescription against the state.” Defendant maintains that he has planted oysters on the bottom in question here. His argument appears to be that because he did so, the bottom was not a natural oyster bed. We cannot assume from this bare assertion, however, that the oyster bed to which defendant lays exclusive claim to harvest is solely the result of cultivation... Finally, the legislature has mandated that in evaluating claims of the type upon which defendant builds his prescription theory, the public ownership of submerged lands and public trust rights shall be favored. In the face of this mandate, the rocks of defendant’s arguments are no more than shifting sands. As Chief Justice Clark wrote in the Twiford case:

Navigable waters are free. They cannot be sold or monopolized. They can belong to no one but the public and are reserved for free and unrestricted use by the public for all time. Whatever monopoly may obtain on land, the waters are unbridled yet.

History and the law bestow the title of these submerged lands and their oysters upon the State to hold in trust for the people so that all may enjoy their beauty and bounty.\(^{219}\)

As in Washington, therefore, public rights in shellfish militated against the recognition of permanent private property rights in those resources.\(^{220}\)

Thus, state courts’ applications of the public trust doctrine to fisheries have recognized and promoted the sustainable management of fish and shellfish for the long-term and multi-generational benefit of the public against more immediate private interests. Similarly, pursuant to their public trust doctrine, states have refused to permanently privatize fisheries’ resources—a sharp contrast to Texas’s treatment of groundwater rights in Day and Bragg or prior appropriation rights throughout the West.\(^{221}\) Under the public trust doctrine, therefore, the protection of public rights in fishery resources trumps the more immediate private claims to unlimited or exclusive exploitation of those resources, a legal recognition and promotion

\(^{218}\) *Id.* at 831.

\(^{219}\) *Id.* at 832 (citations omitted).

\(^{220}\) See supra notes 193–203 and accompanying text.

\(^{221}\) See supra notes 163–164 and accompanying text.
of long-term public rights over shorter-term desires for private exploitation rights.

Interestingly, something of the same attitude has begun to creep into federal fisheries management under the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act).\(^{222}\) In 1996, Congress amended the Magnuson-Stevens Act through the Sustainable Fisheries Act\(^ {224}\) to shift federal management goals away from the elusive pursuit of optimum yield and toward a firm command to prevent overfishing.\(^ {225}\) In the wake of these amendments, several federal courts have realized that—somewhat akin to the state court public trust doctrine cases—protecting the longer-term public interest in fisheries can justify, even require, the imposition of short-term pain on particular private fishermen.

In 2000, for example, the U.S. District Court for the District of Massachusetts upheld the National Marine Fisheries Service’s (NMFS) decision to impose fishing restrictions that would probably shut down the spiny dogfish fishery for five years.\(^ {226}\) The plaintiff fishermen argued, inter alia, that the new Spiny Dogfish Fishery Management Plan (SDFMP) violated National Standard Eight for such plans, which counsels NMFS to try—when consistent with the Magnuson-Stevens Act’s conservation goal—to minimize economic impacts on local communities.\(^ {225}\) However, the district court rejected the argument, emphasizing that NMFS had “concluded that without the measures contained in the SDFMP, data indicates that the fishery will collapse completely within two or three years. A collapsed fishery will not be economically viable for decades, creating drastically worse economic consequences than the temporary measures contained in the SDFMP.”\(^ {227}\)

Thus, viewed from a broader public perspective, the fishery’s temporary shutdown served even the fishermen’s longer-term economic interests despite the immediate economic impact that they would suffer. Interestingly, free of the property rights perspective that a regulatory takings concern would impose, the court instead analogized this necessary fishery management measure to healthcare: “As a sick person must undergo painful surgery and then convalesce for a short time in order to regain his health, a sick fishery must suffer this drastic procedure and then conserve itself for a short time in order to recover its full vitality.”\(^ {228}\) NMFS was, in a very real sense, healing the natural world so that the fishermen—and their descendants—could continue to depend on ecosystem goods.

\(^{224}\) See 16 U.S.C. § 1854(e)(4) (2012) (as amended). “Overfished” is “a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” \(\textit{Id.}\) § 1802(34).
\(^{226}\) \(\textit{Id.}\) at 102–03.
\(^{227}\) \(\textit{Id.}\) at 103.
\(^{228}\) \(\textit{Id.}\) at 108.
Five years later, the Ninth Circuit similarly invoked a longer-term public perspective on fishery management that could override short-term private economic interests in the fishery. Specifically, in rejecting NMFS’s forty-seven year timeframe for rebuilding the population of overfished darkblotted rockfish along the Pacific Coast, the court emphasized that:

The purpose of the Act is clearly to give conservation of fisheries priority over short-term economic interests. The Act sets this priority in part because the longer-term economic interests of fishing communities are aligned with the conservation goals set forth in the Act. Without immediate efforts at rebuilding depleted fisheries, the very long-term survival of those fishing communities is in doubt.

As a result, NMFS’s proposed rebuilding plan with increased catch limits violated the Magnuson-Stevens Act. As with the Massachusetts District Court, moreover, the Ninth Circuit described fisheries management as a survival measure, with NMFS’s failure to properly restore natural resources posing an existential threat to the fishing communities that depended on those resources.

V. CONCLUSION

As Joseph Sax so aptly identified, there is a fundamental tension between constitutional regulatory takings doctrine and natural resource protection—a tension that the public trust doctrine can illuminate by underscoring the public perspective on and public rights in those natural resources. Although he did not articulate the problem in quite the same way that I have, Sax did recognize that the “public-ness” of public rights poses a challenge to those seeking to recognize those rights as rights equal in weight to private property interests. For example, he noted that regulating coastal wetlands without paying compensation can be difficult, because the ocean is not owned as conventional private property, but is in essence owned by the public at large. Though cumulatively the public’s interest may be very great, the interest of each member of the public is typically small. By ignoring the cumulative right, each person having an interest in the use of the ocean is treated not as a legitimate interest-holder but as an interloper, and is forced to pay for the protection of his interest. This result is the consequence of our traditional inability to recognize public rights, i.e., to see that claims of

---

230 Id. at 876.
231 Id. at 879 (citation omitted).
232 Id. at 882 (“We hold that even granting the Agency some leeway in extending rebuilding periods when the 10-year cap is not applicable, the 2002 darkblotted rockfish quota was based on an impermissible construction of the Act.”).
233 See id. at 879.
right to use resources ought not to be discriminated against simply because they are held in one, rather than another, conventional form of ownership. According to Sax, moreover, “[c]urrent takings law assumes that when the government restricts the use of private property, the public has acquired something to which it did not previously have a right.”

While Sax argued for a more relational view of physical property, the public trust doctrine teaches us to view the public as a third stakeholder in the property rights evaluation, separate from both governments and private individuals. Although the government can often act to protect public rights, particularly when it acts as the public’s trustee, the Penn Central analysis overdeterminedly conflates the public interest with government action, ignoring the facts both that the government has its own interests that can deviate from public rights and that the private property owner is also a member of the public who benefits from the government’s actions. The net result is that regulatory takings analyses regularly privilege a private property owner’s short-term and often limited harm without considering either the benefits that have accrued to that property owner as a member of the public or the longer-term public harms and interests at stake.

The public trust doctrine, viewed in this light, is a communitarian doctrine, protecting the broader and longer-term community interests against private exploitation that eventually can destroy both the community and the exploiters. As the fisheries cases have most clearly recognized, under the public trust doctrine—and now federal fisheries management—individual members of a community may have to endure shorter-term pain in order to ensure that both they and, more importantly, the community as a whole avoid long-term diminishment or disaster.

Ironically, because fishery management is largely free of private property rights and hence takings claims, it also graphically demonstrates where regulatory takings doctrine has gone astray. While political pressure remains an issue, state and federal fishery managers are legally free to take a broader view of the natural resources they manage and to adjust management—sometimes drastically—in response to changing realities. Regulatory takings doctrine, in contrast, suggests that property rights are defined once and for all at the time of creation. As a result, states have only limited authority to adjust property rights in light of evolving public needs and changing realities—the lesson of Lucas.239

234 Sax, Takings, supra note 4, at 160.
235 Id.
236 See supra notes 110–112 and accompanying text.
237 See discussion supra Part IV.
238 See Adler, supra note 190, at 17; Elizabeth A. Fulton et al., Human Behaviour: The Key Source of Uncertainty in Fisheries Management, 12 Fish & Fisheries 2, 5 tbl.1 (2011) (explaining that political pressure is one of the “sources of uncertainty [that] can act to undermine effective fishery management” because “[p]olitical pressure can mean management bodies do not follow scientific advice”); see also supra text accompanying notes 190–191.
239 Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1027–29 (1992) (“Any limitation so severe [as to deprive owner of all economically beneficial use of property] cannot be newly legislated
Property law, however, has never been so fixed. As Sax emphasized, the history of water rights is a tradition of change. The same is true for the whole history of real property law as well, from the breaking of fee tails, to Married Women’s Property Acts, to the reformation of landlord–tenant law, to zoning. Thus, from the public–communitarian perspective, the fact that fishery management fortuitously has largely escaped regulatory takings litigation because of the lack of private property rights underscores rather than distinguishes the basic point: Why should a community have to pay to effectuate and enhance its own survival?

That question, if a bit dramatic, is simply one articulation of a key question that Sax identified in one of his last published articles—the question of harm. According to Sax, “[o]ur definition of harm defines how and where we draw the line between what ought to be in the individual’s private realm and what is the business of the public.” Moreover, he noted, the question of what constitutes harm defines not just individual property rights but community identity. Specifically, our concepts of harm:

tell us what we think property rights consist of, and in a more profound sense what we consider a proper relation between the community and the individuals within it. The general notion we carry around in our heads about what we ought to be able to do as owners (which is our business because we are not doing any “harm”) is in fact a way of describing the community’s sense of what is important and what constitutes legitimate control of private autonomy.

Equally important, however, the concept of harm and value both change. When development was the goal most valued in the United States (the cowboy economy), “[t]he rules of land ownership were shaped in order...
to incentivize transformation to the new economy and to discourage retention of nature’s economy.”

Switching goals, therefore, also requires fundamental changes in property law. As Sax himself put it:

To the extent we want the benefit of natural services (to stanch the decline of biodiversity, to benefit from the role of forests in controlling warming, to rely on seashore dunes to protect uplands, and to facilitate renewable energies like solar), the role played by those services has to be accounted for on the land everywhere, including the great majority of land held as private property. To do that calls for a different way of thinking about what ownership entails.

The public trust doctrine, the public rights it recognizes and protects, and the communitarian shift in perspective that it allows can facilitate the shift to Sax’s different way of thinking about private property. Indeed, the need for such a shift helps to explain the emergence in western prior appropriation law of what I have elsewhere called the “ecological public trust doctrine.”

The need to evolve, however, is becoming ever more urgent. We have pushed development beyond sustainability, epitomized by the existential threat that climate change poses to the entire planet. Communities need strategies and legal frameworks through which they can recognize their dependence on natural resources, enhance socioecological resilience, and promote their survival at acceptable standards of living. Property law needs to catch up with this scary new world, and—as was true forty years ago when Joseph Sax began writing about it—the public trust doctrine can help.

249  Id. at 6.
250  Id. at 9.
251  Craig, Western States’ Public Trust Doctrines, supra note 58, at 71; id. at 83 (citations omitted) (arguing that “The articulation of a ‘public trust’ encapsulates a more general values system for the environment and its ecosystems—an environmental ethos, if you will—that is longer-term in focus, more comprehensive in its considerations, and more willing to preserve purely public values than regulatory law. . . . Moreover, the public trust doctrine provides one well-grounded legal mechanism for re-balancing private and public rights in the environment, and scholars increasingly perceive such a rebalancing to be necessary. Thus, the recognition of a ‘public trust’ provides both a rhetorically resonant articulation of the larger public interests in intact and functional ecosystems and a means of imposing broad duties on governments to act for the long-term preservation of ecosystems and other environmental values.”).
252  See generally Melinda Harm Benson & Robin Kundis Craig, The End of Sustainability, 27 SOC’Y & NAT. RESOURCES 777, 778–79 (2014) (proposing “resilience thinking” as an alternative to sustainability, which fails to address modern threats such as climate change); Robin Kundis Craig & Melinda Harm Benson, Replacing Sustainability, 46 AKRON L. REV. 841, 844–45 (2013) (arguing that sustainability is impossible to define and implement and proposing “resilience thinking” as a more effective means of addressing environmental threats).
253  See Benson & Craig, Replacing Sustainability, supra note 252, at 865–66, 880 (stating that “resilience thinking” allows for more dynamic solutions for communities).