

ARTICLES

THE UNBEARABLE COST OF SKIPPING THE CHECK: PROPERTY RIGHTS, TAKINGS COMPENSATION & ECOLOGICAL PROTECTION IN THE WESTERN WATER LAW CONTEXT

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INTRODUCTION: BACKGROUND AND SUMMARY

Many have told the story of the development of western water law based on appropriation of usufructuary rights.¹ In brief, settlers crossing the 100th Meridian found an arid country completely unlike the humid and well-watered lands of the American East and the British Isles.² In response to these conditions of scarcity, settlers rejected the communal-use riparian rules of the lands of plenty.³

Instead, the settlers developed a system in which individuals could claim the use of water flows as property, and could divert such flows from natural courses for their private purposes.⁴ The

¹ See, e.g., 1 WELLS A. HUTCHINS, *WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES* 159–65 (1971); 1 SAMUEL C. WIEL, *WATER RIGHTS IN THE WESTERN STATES* 65–117 (3d ed. 1911); Norman K. Johnson & Charles T. DuMars, *A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands*, 29 NAT. RESOURCES J. 347, 347–56 (1989); Christine A. Klein, *The Constitutional Mythology of Western Water Law*, 14 VA. ENVTL. L.J. 343, 343–52 (1995); Anthony Scott & Georgina Coustalin, *The Evolution of Water Rights*, 35 NAT. RESOURCES J. 821 *passim* (1995).

² See, e.g., Reed D. Benson, *Whose Water Is It? Private Rights and Public Authority Over Reclamation Project Water*, 16 VA. ENVTL. L.J. 363, 363 (1997) (citing U.S. BUREAU OF RECLAMATION, *ACREAGE LIMITATION AND WATER CONSERVATION RULES AND REGULATIONS: FINAL ENVIRONMENTAL IMPACT STATEMENT*, ch. 3, at 2, 45 (1996)); Scott & Coustalin, *supra* note 1, at 903–04.

³ See, e.g., *United States v. Willow River Power Co.*, 324 U.S. 499, 504 n.2 (1945); *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 704 (1899); *Coffin v. Left Hand Ditch Co.*, 6 Colo. 443, 446–49 (1882); *State v. Sw. Colo. Water Conservation Dist.*, 671 P.2d 1294, 1305 (Colo. 1983).

⁴ See, e.g., *Boquillas Land & Cattle Co. v. Curtis*, 89 P. 504, 508 (Ariz. 1907) (Kent, C.J., concurring) (“Great property rights have become established upon a different theory [than riparianism]. The physical conditions and the demands of agriculture and mining are utterly inconsistent with its applicability.”), *aff’d*, 213 U.S. 339 (1909); *Coffin*, 6 Colo. at 449 (“[T]he disastrous consequences of our adoption of the [riparian] rule . . . forbid our

basic rule of this new system, often generically known as “prior appropriation,” was that “[t]he person who is first in time to appropriate water is the first in right” to use it.⁵ Private uses had to be beneficial; non-beneficial use or non-use was waste subject to forfeiture.⁶ The amount of water appropriable for a given use was set by water “duties” based on the amount of water generally required for the proposed use, up to the amount of water available for appropriation.⁷ Use was not appurtenant to riparian land.⁸ By comparison, in riparian jurisdictions, owners of land bordering a water body (riparian owners) enjoy certain use rights as appurtenances to their land ownership. Riparian owners’ uses of water must be “reasonable” relative to the actual and potential uses of all other riparian owners, and must be adjusted to ensure equivalent access by all other riparian users. Earlier uses receive no priority over later uses. Uses on riparian lands and within original watersheds receive priority over other uses.⁹

The western polities embraced the new prior-appropriation system. It developed first as local custom, and subsequently in the common-law of the new territories,¹⁰ and was eventually enshrined in initial state constitutions.¹¹ It was reduced to system by statute as claims, settlements, and need for the available water

giving such a construction to the statutes.”); *see also* sources cited *supra* note 1.

⁵ 2 WATERS AND WATER RIGHTS § 12.01, at 12-2 (Robert E. Beck ed., 1991 ed., repl. vol. 2000); *see also id.* § 12.02(e), at 12-56; Klein, *supra* note 1, at 347-48; Scott & Coustalin, *supra* note 1, at 914.

⁶ *See* 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12.02(b), at 12-8; *id.* § 12.02(c)(2), at 12-28.

⁷ *See id.* § 17.03(d), at 17-18 to 17-19. *See also* Conrow v. Huffine, 138 P. 1094, 1096-97 (Mont. 1914); Foster v. Foster, 213 P. 895, 896-98 (Or. 1923); Dep’t of Ecology v. Grimes, 852 P.2d 1044, 1049 (Wash. 1993) (en banc).

⁸ *See generally* 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12.02(f), at 12-64 to 12-68.

⁹ *See* 1 WATERS AND WATER RIGHTS, *supra* note 5, § 6.01(a).

¹⁰ *See, e.g.,* United States v. Rio Grande Dam & Irrigation Co., 51 P. 674, 678 (N.M. 1898) (“The law of prior appropriation existed under the Mexican republic at the time of the acquisition of New Mexico”), *rev’d*, 174 U.S. 690 (1889); Coffin v. Left Hand Ditch Co., 6 Colo. 443, 446 (1882) (“[T]he . . . doctrine has existed from the date of the earliest appropriations of water within the boundaries of the state.”); Nielson v. Parker, 115 P. 488, 490 (Idaho 1911) (“The doctrine prevailed prior to statehood, and in the earliest territorial history”).

¹¹ *See, e.g.,* ALASKA CONST. art. VIII, § 13; ARIZ. CONST. art. XVII, §§ 1-2; COLO. CONST. art. XVI, §§ 5-6; IDAHO CONST. art. XV, § 3; MONT. CONST. art. IX, § 3; NEB. CONST. art. XV, § 5-6; N.M. CONST. art. XVI, §§ 1-3; UTAH CONST. art. XVII, § 1; WYO. CONST. art. VIII, § 3.

multiplied.¹² The federal government repeatedly and consistently acceded to the new water regime in these states.¹³ As the U.S. Supreme Court has recognized, that accession has long-since become obligatory and irrevocable.¹⁴

These constitutional and statutory acts enshrining western water law were clear: the water rights created were, though usufructuary rights (i.e., ownership of the use of the flow of the water, rather than ownership of any individual molecules of water), nevertheless genuine property rights.¹⁵ Because these

¹² See, e.g., Act of Apr. 13, 1893, no. 86, 1893 Ariz. Sess. Laws 135; Act of Feb. 11, 1881, 1881 Colo. Sess. Laws 161; Act of Feb. 28, 1881, ch. 142, 1881 Dakota Sess. Laws 226; Act of Mar. 16, 1899, ch. 97, 1899 Nev. Stat. 115; Act of Feb. 26, 1891, ch. 71, 1891 N.M. Laws 130; Act of Mar. 12, 1897, ch. 19, 1897 Okla. Sess. Laws 187; Act of Mar. 19, 1889, ch. 88, 1889 Tex. Gen. Laws 100; Act of Mar. 11, 1886, ch. 61, 1886 Wyo. Sess. Laws 294. See also 1 HUTCHINS, *supra* note 1, at 438–40 (collecting statutes). Beneficial uses tended to be defined by statute (though sometimes constitutionally or judicially); see, e.g., 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12(c)(2), at 12-27 to 12-41.

¹³ See, e.g., Federal Water Pollution Control (Clean Water) Act § 101(g), 33 U.S.C. § 1251(g) (2000) (enacted in 1948); 43 U.S.C. § 321 (2000) (originally enacted as Desert Land Act of 1877, ch. 107, § 1, 19 Stat. 337); 43 U.S.C. §§ 372, 383 (2000) (originally enacted as Reclamation Act of 1902, Ch. 1093, § 8, 32 Stat. 390); 43 U.S.C. § 661 (2000) (originally enacted as Mining Act of 1866, ch. 262, § 9, 14 Stat. 253); 43 U.S.C. § 666 (2000) (originally enacted as McCarran Amendment of 1952, ch. 651, tit. II, § 208(a)–(c), 66 Stat. 560); see also *California v. United States*, 438 U.S. 645, 674–79 (1978).

¹⁴ See, e.g., *California Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142, 155, 162 (1935); *Rio Grande Dam*, 174 U.S. at 702–06; *Broder v. Water Co.*, 101 U.S. 274, 276 (1879) (describing western water rights as “rights which the government had, by its conduct, recognized and encouraged and was bound to protect”). Getches claims that federal accession is a “myth” because *Rio Grande Dam* includes reservations of continuing federal authority. David H. Getches, *The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States’ Role?*, 20 STAN. ENVTL. L.J. 3, 6–7 (2001). Taken together, however, the two reservations serve only to “vest[] in that [g]overnment the right to take all needed measures to preserve the navigability of the navigable water courses of the country even against any state action.” *Rio Grande Dam*, 174 U.S. at 703. But the federal navigation servitude, while real, cannot be bootstrapped into plenary authority to federalize water law. See *infra* Part I.B–C.

¹⁵ See, e.g., 1 HUTCHINS, *supra* note 1, at 441–43 (“[The] right of diversion and use . . . is a usufructuary right . . . a right of possession and use only . . . and hence it does not include an ownership of the *corpus* of water while still in the natural source of supply.”); 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12.02(e), at 12-56. Pragmatically, the important principle is that private ownership of stream water while in its natural environment does not exist; but private rights to abstract and use such waters—under state supervision and control in the exercise of its police powers—do exist, and they are property rights.

states, not to mention the federal government, also provided (and provide) constitutional protection against government taking of property rights for public purposes without compensation, the water rights the states had created were compensation-protected rights as well.

Beginning in the 1970s, however, many scholars have attempted to defeat the presumption that compensation obligations apply to these water rights. These scholars' various motives have included concerns that private water rights pose an unacceptable challenge to environmental protection and efficient use, that justice forbids private rights in water, and that water by its very nature is unamenable to private ownership. Their task, though, is not an easy one. As a leader of the effort has long acknowledged, "[f]rom a constitutional perspective all property rights have exactly the same status."¹⁶ That status is one of compensation for government takings.¹⁷ Thus, to justify taking water rights without payment, proponents of the compensation-denying position must demonstrate that, despite all evidence and reasonable presumption to the contrary, water rights are something different than property rights.

In Section I, I review the various efforts to undermine the compensable property-right status of water rights. These efforts include claims based on the ancient and federal public trust doctrines, other federal doctrines, and various aspects of state water law (sometimes aggregated under the label "state public trust doctrine"). I conclude that none of these efforts succeeds. Ancient rules and practices governing the ownership and use of waterways and water provide no support for the non-compensation position. The federal public trust doctrine either is silent on the issue or, along with the Fifth Amendment, affirmatively obliges compensation for vested water rights. Other federal doctrines also fail to support the compensation-stripping proposition.

¹⁶ Joseph L. Sax, *The Constitution, Property Rights and the Future of Water Law*, 61 U. COLO. L. REV. 257, 260 (1990) [hereinafter Sax, *Constitution*] ("Insofar as 'there appears to be a broadly held view that a water right is a special kind of property right which cannot be regulated in the same manner as other property rights,' a simple response can be given: that view is wrong." (citation omitted)).

¹⁷ See U.S. CONST. amend. V ("[N]or shall private property be taken for public use, without just compensation."); 2A JULIUS L. SACKMAN & PATRICK J. ROHAN, *NICHOLS ON EMINENT DOMAIN* § 7.01[1] (Supp. 1997) (collecting state-level provisions).

State statutory and common law provide similarly scant assistance. Because western water-law systems, including water rights, have state-constitutional roots and protections, coeval constitutional provisions must be read, if possible, not to obviate the water-right provisions and their property protections. As I demonstrate, such a consistent reading is straightforwardly available, and it is therefore obliged. This robs the non-compensation position of a state-constitutional hook, while confirming the compensation-protected status of the water rights. This in turn disables claims that state statutes or common-law doctrine (which must be read in conformance with constitutional mandate) can do the work of denying property status to the water rights. As a result, no defenses to compensation arise from state law, either—or at least none consistent with the integrity of, and the rules of construction inherent in, the American constitutional system.¹⁸

(Famously, California alone has adopted an interpretation of its state public trust doctrine that seems to permit taking of water rights without compensation for public trust purposes.¹⁹ California's water law, however, is unique: it continues to recognize riparian rights alongside of and co-equal to prior-appropriation rights, and its law is contoured by a 1928 constitutional amendment that has been interpreted to qualify water rights in ways that have no counterpart in the other prior-appropriation states.²⁰ Much confusion and misunderstanding has arisen in the scholarly literature, particularly with regard to the actual and potential scope of state-level public trust doctrines in western states other than California, because scholars have conflated California's singular situation and doctrine with that of

¹⁸ Eight states, the most arid of the Rocky Mountain West, constitute the hard core of western water-law jurisdiction, where riparian water rights have been effectively extinguished. These are Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. In the remaining states, each of which contains both less- and more-arid sections, riparian rights remain in subordination to, or by incorporation into, the prior-appropriation system. These are: Kansas, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Washington, and to a lesser extent Alaska and Texas. 1 HUTCHINS, *supra* note 1, 1-3, 14-17, 192-99.

¹⁹ See *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709, 727 (Cal. 1983).

²⁰ See CAL. CONST. art. X, § 2; Douglas L. Grant, *Western Water Rights and the Public Trust Doctrine: Some Realism About the Takings Issue*, 27 ARIZ. ST. L.J. 423, 461-62 (1995).

western states generally.²¹ California's novel circumstances and development require independent consideration; this article's scope extends to western water-law states other than California.)

Compensation, then, must be paid upon taking of western water rights. In Section II I show how these taking obligations fit into modern physical-takings jurisprudence without altering that jurisprudence.

As noted, the compensation-denial argument arose in large part from scholarly attempts to render western water law more responsive to increasing scarcity and multiplying ecological concerns. This position essentially treats water rights and ecological values as competitors, and favors elimination of water rights in purported aid of the environment. In Section III I address these public-policy claims, as well as related claims that both considerations of justice and of the nature of water itself militate against private water rights. I conclude that, contra these claims, each of these considerations support respecting, clarifying, and strengthening defensible water rights and favor straightforward application of eminent-domain rules to such rights. In practical fact, pitting environmental protection against preservation of property rights turns a potential ally of ecological interests into an inevitable foe. Destroying the water right, meanwhile, will rob ecological-preservation interests of an important tool for preserving water for ecologically dedicated uses. It will purchase a short-term increase in water available for environmental use at the cost of long-term transfer of underpriced water to subsidize additional urban development, and of injustice to current water-right holders who lack the political power to fight uncompensated taking of their water rights.

Given these considerations, it is not surprising that compensation-denying theories have received such short shrift in the real world. Only the California courts, under the unique circumstances mentioned above, have articulated a doctrine permitting uncompensated water-right taking—and that fully a

²¹ See, e.g., 4 WATERS AND WATER RIGHTS § 33.03, at 33-16 to 33-17 (Robert E. Beck ed., 2003); Brian E. Gray, *The Property Right in Water*, 9 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 1, 12-17 (2002) (recognizing California's peculiar jurisprudence while nevertheless considering water rights in general terms); Joseph L. Sax, *Rights that "Inhere in the Title Itself": The Impact of the Lucas Case on Western Water Law*, 26 LOY. L.A. L. REV. 943, 951-53 (1993) [hereinafter Sax, *Rights that Inhere*].

quarter-of-a-century ago.²² It is time to recognize that attempts to preserve ecological values by eviscerating water rights are incoherent and unwise. Section IV, therefore, proposes a modest plan of action for western states designed to respect constitutional rights, maximize efficient use of water resources, and ensure that water remains available to serve reasonable ecological goals in the face of ever-increasing demands on water by ever-burgeoning western-state populations. States should renounce any pretence to uncompensated-taking authority, establish ecological-use water trusts of a quasi-private nature, and arm these or co-ordinate public agencies with both eminent-domain power and the power to negotiate agreements freeing extant water rights from various alienation-and-use restrictions.

I. ANALYSIS OF ASSERTED DEFENSES TO COMPENSATION

Scholars have proposed a wide variety of defenses to the formation of valid and compensable water rights in the western water law system. The effort began four decades ago, when Professor Joseph Sax proposed²³ a wide-ranging modern public trust doctrine, based loosely on his interpretations of the content of ancient and federal public trust doctrines, that would “contain some concept of a legal right in the general public,” be “enforceable against the government,” and “be capable of an interpretation consistent with contemporary concerns for environmental quality.”²⁴ Sax imagined an expansive scope for the doctrine. “Public trust problems are found whenever government regulation comes into question, and they occur in a wide range of situations in which diffuse public interests need protection against tightly organized groups with clear and immediate goals.”²⁵ This included “controversies involving air pollution, the dissemination of pesticides, the location of rights of

²² See *Nat'l Audubon Soc'y*, 658 P.2d at 727.

²³ Sax's exposition of the doctrine was ostensibly partially positive, based in the various public trust cases he cited. Yet he treated isolated cases from scattered jurisdictions as dispositive explications of the general “American” public trust doctrine, and he significantly departed from any positive description of the historical doctrine in his proposal for an expanded public trust doctrine. See Sax, *Rights that Inhere*, *supra* note 21 *passim*; *infra* Part I.D.

²⁴ Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 474 (1970) [hereinafter Sax, *Natural Resource Law*].

²⁵ *Id.* at 556.

way for utilities, and strip mining or wetland filling on private lands,”²⁶ but also non-environmental issues such as those “affecting the poor and consumer groups.”²⁷ And though the proposed scope was sweeping, the doctrine’s proposed effect was, in its 1970 explication, relatively limited. It would permit courts to take a “hard look” at transactions falling within the doctrine,²⁸ but clear legislative and executive action, as well as constitutional dictate, could not be thwarted.²⁹ Additionally, Sax sidestepped the takings implications of his proposal, noting that “the courts can limit their intervention to regulation which stops short of a compensable taking.”³⁰

Within a decade, though, Sax sought a more aggressive role for his doctrine,³¹ and within two he had asserted that one of the effects of his proposed doctrine was that it, combined with or subsuming related doctrines and traditions, rendered water rights unamenable to takings-compensation protection.³²

²⁶ *Id.* at 556–57.

²⁷ *Id.* at 557.

²⁸ *See id.* at 486 (“[C]ourts [would] not look kindly upon such grants and [would] usually interpret them quite restrictively, and apply a more rigorous standard than is used to analyze conveyances by private parties.”); *see also* Carol M. Rose, *Joseph Sax and the Idea of the Public Trust*, 25 *ECOLOGY L.Q.* 351, 355 (1998) (“In particular, in his 1970 *Public Trust Doctrine* article, Sax effectively treated the public trust as a common-law version of the then-novel ‘hard look’ doctrine for environmental impacts. According to Sax’s analysis, the public trust doctrine required the collection of adequate information, public participation in decisions, informed and accountable choices, and close scrutiny of private giveaways of environmental resources.”).

²⁹ *See, e.g.,* Sax, *Natural Resource Law*, *supra* note 24, at 482–83 & n.36. Sax recognized that allocations of property or designations of property status made in state constitutions could be countermanded only by repeal of the constitutional provision.

³⁰ *Id.* at 557.

³¹ *See* Joseph L. Sax, *Liberating the Public Trust Doctrine From its Historical Shackles*, 14 *U.C. DAVIS L. REV.* 185, 185–86 (1980) [hereinafter Sax, *Liberating*].

³² *See* Sax, *Constitution*, *supra* note 16, at 269 (claiming that “water’s capacity for full privatization has always been limited” and “in demanding releases to meet instream flow needs, a state is only asserting a right it has always had and never granted away”); Joseph L. Sax, *The Limits of Private Rights in Public Waters*, 19 *ENVTL. L.* 473, 475 (1989) [hereinafter Sax, *Limits of Private Rights*] (claiming that public trust and pollution doctrines deny water compensability protections). This position partly unpacked statements about water law that Sax first included in his 1970 piece. *See* Sax, *Natural Resource Law*, *supra* note 24, at 485; *see also* Thomas W. Merrill, *Compensation and the Interconnectedness of Property*, 25 *ECOLOGY L.Q.* 327, 333–34, 341 (1998)

The central and unambiguous message [of the “modern” public trust doctrine Sax had propounded] is that water is and always has been a public resource. The law is that water flows to benefit those uses that advance the contemporary public interest. No private right may stand in the way of that flux and reflux of water rights. Since the public interest, as now perceived, demands the retention and augmentation of in-stream water supplies, that is the way the water is going to flow. Property rights secured under the prior appropriation system will not be able to resist this basic limitation on the privatization of water.³³

In other words, appropriative water rights simply are not property rights—and as such, may be taken by government without compensation. “Rights” holders “were not . . . being vested with a private property right that could be asserted against [the public] interest when public goals changed. They obtained a right because they were making a use that was at the time compatible with the public interest. Their water right extended only as far as that compatibility.”³⁴

Many scholars in the field embraced this compensation-denying position.³⁵ They have alternatively relied on ancient and federal public trust doctrines, other federal doctrines and jurisprudence, state constitutional provisions, the usufructuary nature of water rights, common-law doctrine, and generalized recourse to claimed public-policy considerations.³⁶ Sometimes

(noting that while Sax’s theories and justifications change, his opposition to compensation remains constant).

³³ See Sax, *Limits of Private Rights*, *supra* note 32, at 475.

³⁴ See *id.* at 476.

³⁵ See *infra passim* for citations to scholarly treatments supporting or accepting claim.

³⁶ The scholars do not consistently define these different defenses, or the doctrines and other edifices upon which they rely, in the same way. In particular, the concept of “public trust doctrine” gets employed in a wide variety of inconsistent (if not somewhat mutually exclusive) ways, and the foundations and support for the doctrine are often divergent, unclear or unexplained. See, e.g., Rose, *supra* note 28, at 354–60 (detailing the “generalized,” “vague,” and indistinct or undefined use of the concept); see also Michael C. Blumm & Thea Schwartz, *Mono Lake and the Evolving Public Trust in Western Water*, 37 ARIZ. L. REV. 701, 708–09, 713–15 (1995) (considering variety of sources); James L. Huffman, *A Fish Out of Water: The Public Trust Doctrine in a Constitutional Democracy*, 19 ENVTL. L. 527, 552–555 (1989); John D. Leshy, *A Conversation About Takings and Water Rights*, 83 TEX. L. REV. 1985, 1999 (2005); Sax, *Rights that Inhere*, *supra* note 21, at 950–51; Joseph L. Sax, *Property Rights and the Economy of Nature: Understanding Lucas v. South Carolina Coastal*

they have followed Sax in wrapping these claims together under the heading of a modern public trust doctrine. However they are packaged, though, none of these claimed bases supports the conclusion that compensable rights in water (a) cannot be formed; (b) have not been formed; or (c) may be stripped of takings-compensation protection despite their valid formation. It must be concluded, therefore, that western states successfully created water-property rights that enjoy takings-compensation protection.

A. *The Ancient Public Trust Doctrines*

Both Roman and English law unsurprisingly included provisions concerning ownership and use of natural resources in various circumstances, including water. Although Sax, in his 1970 article, recognized that “only the most manipulative of historical readers could extract much binding precedent from what happened a few centuries ago in England,”³⁷ much less millennia ago in Rome, both he and other non-compensation advocates nevertheless frequently invoke English and Roman legal tradition, and their rhetorical force, to support the compensation-denial position.³⁸

Council, 45 STAN. L. REV. 1433, 1452–53 (1993) [hereinafter Sax, *Property & Economy*]; Sax, *Constitution*, *supra* note 16, at 280; Sax, *Natural Resource Law*, *supra* note 24, at 475–76, 484–86; George P. Smith II & Michael W. Sweeney, *The Public Trust Doctrine and Natural Law: Emanations Within a Penumbra*, 33 B.C. ENVTL. AFF. L. REV. 307, 313 (2006). For clarity and concision, therefore, this article: (a) refers to ancient Roman and English rules of ownership and use of waterways as, generally, the “ancient public trust doctrine”; (b) draws from U.S. Supreme Court precedent a specific definition of the federal public trust doctrine and employs it accordingly, reviewing distinct federal doctrine in separate terms; and (c) eschews any attempt to articulate a comprehensive theory of a state-law public trust doctrine per se, instead reviewing each possible location of and basis for such a doctrine (or other propounded compensation-stripping device) on its own terms. *Cf.* Sax, *Natural Resource Law*, *supra* note 24, at 485 (“Certainly the phrase ‘public trust’ does not contain any magic such that special obligations can be said to arise merely from its incantation. . .”).

³⁷ Sax, *Natural Resource Law*, *supra* note 24, at 485. Similarly, in 1980 Sax called for “liberating the public trust doctrine from its historical shackles,” asserting that “neither Roman Law nor the English experience with lands underlying tidal waters is the place to search for the core of the trust idea.” Sax, *Liberating*, *supra* note 31, at 185–86. Sax suggested that “the tradition of the commons in medieval Europe” provides “the proper sources for the legal public trust doctrine today,” but without explaining how “regional French law in the 11th century” plays any role in American jurisprudence. *Id.* at 189. Additionally, the legal rule he cited asserted a right common in individuals to use the relevant public resources—not a governmental right to exclude all users or capture the resource for its own uses.

³⁸ Even by raising the ghosts of the ancient doctrines (and calling his theory

In reality, however, neither the Roman nor the English rules governing ownership and use of water or other natural resources provide any legitimate foundation, real or rhetorical, for the notion that property rights cannot be created in such resources. In fact, property rights to water, including flowing water, existed in both regimes.

The ancient doctrine was not a blanket rule applying to all natural, or water, resources. Even the short-hand and essentially aspirational treatise statements of Roman and English law that are often cited as full expositions of the ancient law make no claims about universal applicability to water or to natural resources generally.³⁹ Rather, these sources claim as “common to mankind”

“the public trust doctrine,”) Sax and his supporters have attempted to associate the new strategy with the old rules—without, however, considering deeply the specifics of those rules. See Sax, *Natural Resource Law*, *supra* note 24, at 484–85. See also Blumm & Schwartz, *supra* note 36, at 713, 737; Jane Maslow Cohen, *Of Waterbanks, Piggybanks, and Bankruptcy: Changing Directions in Water Law—Foreword*, 83 TEX. L. REV. 1809, 1851–52 (2005); Leshy, *supra* note 36, at 1998–99; Rose, *supra* note 28, at 351, 355; Sax, *Constitution*, *supra* note 16, at 269–71; Jan S. Stevens, *The Public Trust: A Sovereign’s Ancient Prerogative Becomes the People’s Environmental Right*, 14 U.C. DAVIS L. REV. 195, 195–198 (1980); Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425, 425–31 (1989). This is because the specifics do not support the position. See *infra* this section; see also Huffman, *supra* note 36, at 549 (“By linking the flexibility of constitutional interpretation with the deep historical roots of the public trust doctrine, it is possible to manufacture new rights while claiming simply to uphold existing rights.”).

³⁹ See THE INSTITUTES OF JUSTINIAN: TEXT, TRANSLATION AND COMMENTARY 65, §§ 2.1.1–2.1.5 (J A C Thomas ed. & trans., North-Holland Publishing Company 1975), *cited in* Sax, *Natural Resource Law*, *supra* note 24, at 475 n.15, and Stevens, *supra* note 38, at 197 n.7. The Institutes were a portion of the *Corpus Juris Civilis*, a legal code in “four main parts: the *Institutes*, a brief, elementary textbook of law intended for the use of law students, but having the force of law; the *Digest* (or *Pandects*), a 50-volume codification of the legal writings of the great Roman jurists; the *Code* (or *Codex*), a collection of imperial enactments; and the *Novels*, a collection of imperial legislation enacted after the *Code* was promulgated.” Glenn J. MacGrady, *The Navigability Concept in the Civil and Common Law: Historical Development, Current Importance, and Some Doctrines that Don’t Hold Water*, 3 FLA. ST. U. L. REV. 511, 518 (1975). As the Digest reveals, the Institutes’ summary is a misleading statement of actual Roman law. In developing what has been called “England’s first ‘general treatise’ on law,” Henry Bracton relied heavily on selected Roman sources—including this section of the Institutes—to craft a normative statement of the general law as he favored it. See MacGrady, *supra*, at 555–56 (citing 1 HENRY BRACTON ON THE LAWS AND CUSTOMS OF ENGLAND (Samuel E. Thorne trans., Belknap Press of Harvard University Press 1968); STUART A. MOORE, A HISTORY OF THE FORESHORE AND THE LAW RELATING THERETO 31–33 (1888));

only “running water, air, the sea, and the shores of the sea, as though accessories of the sea.”⁴⁰

Neither did the ancient doctrine apply to water per se. As the treatise statement above suggests, the “running water” referred to is not water qua water, but rather waterways, insofar as they participate in a relation with the seas, as common-carrier highways.⁴¹ The details of Roman and English law confirm this interpretation: in both, larger waterways were (in some senses) public, while smaller waterways were effectively private.⁴² (This distinction corresponds roughly with the modern American notion of “navigability.”⁴³) Thus, for instance, at Roman law none could “do anything in a public river ‘whereby the landing or the navigation is made worse’; do anything in a public river ‘whereby the water is made to flow otherwise than as during the summer before’ (i.e. to divert the boundaries of the watercourse); or do violence to anyone ‘who is doing a work in the public river . . . with the lawful purpose of protecting the banks.’”⁴⁴ Similarly, English law forbade erection of permanent fishing structures that interfered with navigation.⁴⁵ Notably, non-watercourse waters

James R. Rasband, *The Disregarded Common Parentage of the Equal Footing and Public Trust Doctrines*, 32 LAND & WATER L. REV. 1, 9 (1997). As with the Institutes, Bracton’s treatise differed significantly from actual English practice.

⁴⁰ BRACTON, *supra* note 39, at 39–40; *see also* INSTITUTES, *supra* note 39, § 2.1.1.

⁴¹ Some sympathetic to compensation-denial have obliquely recognized this incongruity, though without pursuing the ramifications of this and related disconnects. *See, e.g.*, Carol M. Rose, *A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation*, 53 WASH. & LEE L. REV. 265, 270 (1996) (“The use of waterways, for example, has been considered a public property right since the time of the Romans and, to a lesser degree, so have fisheries.” (emphasis added)); Smith & Sweeney, *supra* note 36, at 310 (“[The Institutes] articulated the ‘nearly universal notion’ that watercourses should be protected from complete private acquisition in order to preserve the lifelines of communal existence.” (emphasis added)). Authors less disposed to the theory have similarly noted the problem. *See, e.g.*, Richard A. Epstein, *The Public Trust Doctrine*, 7 CATO J. 411, 415–16 (1987); Barton H. Thompson, *The Public Trust Doctrine: A Conservative Reconstruction & Defense*, 15 SE. ENVTL. L.J. 47, 56–57 (2006).

⁴² MacGrady, *supra* note 39, at 520 (quoting DIGEST §§ 43.12.1.1 to 43.12.3 translated in EUGENE F. WARE, ROMAN WATER LAW 33–56 (1905)); *id.* at 581 (quoting Lord Fitzwalter’s Case, (1674) 86 Eng. Rep. 766–67 (K.B.), and The Royal Fishery of the Banne, (1610) 80 Eng. Rep. 540–41 (K.B.)).

⁴³ *See* MacGrady, *supra* note 39, at 520, 528–30, 581.

⁴⁴ *Id.* at 521 (citing DIGEST, *supra* note 42, §§ 43.12.1 to 43.15.1).

⁴⁵ *Id.* at 571 (“Apparently, the streams of England, both tidal and nontidal, were being choked by kydells, weirs, and other fishing devices; and originally

were not implicated at all—as presumably they would be were the doctrine about water rather than waterways.

Thus, waterways were not universally public: only common-carrier highways were to some extent public. Even the “public” waterways were not public in the government-control manner contemplated by modern theorists.⁴⁶ They were owned in common, available for use by all.⁴⁷ This kind of control is as little akin to state control as to private, and provides as little precedential support for the former as the latter.⁴⁸

The ancient doctrine provides no support for claims that no private rights in water may be asserted against the public.⁴⁹ As has been seen, water qua water was not implicated by the doctrine. But even for those things that were implicated, there were no

the complaint voiced against the kydells . . . was they interfered with navigation.”); *see also id.* at 572 n.315 (citing MOORE, *supra* note 39, at 151–52 (quoting a statute of 25 Edward III: A.D. 1351, requiring the removal of navigation-inhibiting fish-catching devices)).

⁴⁶ The Roman terms for the concept of state-owned property were *res publicae* and *res universitatis*. This differed from *res communes*, which described property common to all, that all could access free of constraint by government or other individuals. *See* MacGrady, *supra* note 39, at 518 (citing INSTITUTES, *supra* note 39, §§ 2.1.1–2.1.10); *see also* Lloyd R. Cohen, *The Public Trust Doctrine: An Economic Perspective*, 29 CAL. W. L. REV. 239, 250 (1992).

⁴⁷ *See* MacGrady, *supra* note 39, at 524 (quoting W. W. BUCKLAND, A TEXT-BOOK OF ROMAN LAW FROM AUGUSTUS TO JUSTINIAN 185 (2d ed. 1932) (“As to rivers themselves the texts contain differences of opinion as to the sense in which they are public.”)); *id.* at 525 (describing the possibilities of ownership by the state, by private owners, or in common); *id.* at 527 n.70 (“The use of public streams is common to all, just the same as public roads and the shores of the sea.” (quoting DIGEST, *supra* note 42, § 39.2.24)); Huffman, *supra* note 36, at 540 (“What the English courts and authorities relied upon was the Roman law distinction between *res communes* and *res publicae*, the former being rights held by the public and the latter being proprietary interests of the state.”); *id.* at 544–45, 550.

⁴⁸ *See* Huffman, *supra* note 36, at 550 (“Individuals navigated and fished the tidal waters of England, and individuals objected when the Crown precluded them from those waters. Clause 33 of the Magna Carta was a limit on the monarch’s ability to monopolize for himself or his favorites the benefits of the tidal waters.”); *see also* Cohen, *supra* note 46, at 244 (describing three possible kinds of ownership or control: private, collective, and communal).

⁴⁹ *See, e.g.,* Sax, *Limits of Private Rights*, *supra* note 32, at 475–76 (asserting that “water is and always has been a public resource” such that “[n]o private right may stand in the way,” and observing that, at the time when water use to promote industrialization was considered a “primary public goal,” private interests were not vested “with a private property right that could be asserted against that [public] interest”).

absolute rules against private ownership and use. For instance, the sea shores—named explicitly as a “public trust” property by the treatise writer—were in fact very broadly privately owned.⁵⁰ The same was true of other explicitly trust-concerned properties.⁵¹ Moreover, claims that arose in England to the contrary (i.e., challenging private ownership of the foreshore) were not claims that the foreshores must be publicly owned, but rather claims of a rebuttable presumption, absent strong proof of private ownership, that the lands were in the Crown—a doctrine devised by the Crown to seize lands it had previously granted or sold, so as to allow resale and revenue generation.⁵² (Notably, this course of conduct—of employing a legal fiction as an excuse for seizing the vested property of private parties for state use—eventually resulted in one of the charges levied against Charles I that cost him his throne and his head.⁵³)

The law that actually applied to water qua water similarly permitted private rights. At Roman law, waters not running in a watercourse were subject to privatization;⁵⁴ waters running in private watercourses were private;⁵⁵ and waters running in public watercourses were available for anyone to take and to reduce to private use, so long as the taking did not affect the common-carrier nature of the waterway.⁵⁶ Likewise in English law, fishing and water use were private rights in private waterways; in public waters, they were common rights, so long as they did not interfere with navigation.⁵⁷ Private water rights were not amenable to

⁵⁰ See MacGrady, *supra* note 39, at 555–68.

⁵¹ See Cohen, *supra* note 46, at 250; Rasband, *supra* note 39, at 21–33.

⁵² MacGrady, *supra* note 39, at 557–68; Rasband, *supra* note 39, at 11–14. There was never any suggestion that parliament was barred from selling off or otherwise erecting private rights in “trust properties.” See, e.g., Cohen, *supra* note 46, at 274.

⁵³ MacGrady, *supra* note 39, at 562 (citing MOORE, *supra* note 39, at 176).

⁵⁴ See Cohen, *supra* note 46, at 250; Scott & Coustalin, *supra* note 1, at 835–37.

⁵⁵ See MacGrady, *supra* note 39, at 527. References to water being private signify a private owner enjoying exclusive usufructuary rights in it. See generally *infra* Part I.E.1 (usufruct discussion).

⁵⁶ See MacGrady, *supra* note 39, at 527 n.70, 528, 529 (quoting DIGEST, *supra* note 42, §§ 39.3.10.2, 43.12.2); Scott & Coustalin, *supra* note 1, at 836–37.

⁵⁷ See MacGrady, *supra* note 39, at 527 n.70, 528, 529 (quoting DIGEST, *supra* note 42, §§ 39.3.10.2, 43.12.2); Scott & Coustalin, *supra* note 1, at 840 (discussing private use rights from the medieval period into the Nineteenth Century).

uncompensated seizure by the government for purposes the government labeled “public.”⁵⁸

In sum, no portion of modern compensation-denial theory finds succor in the ancient doctrine. The summary, treatise statement of the doctrine was concerned with waterways, not water per se. More importantly, it was honored only in the breach, if at all. In practice, the doctrine applied only to navigable waterways, and created in effect no more than a navigation servitude in them running to the people (i.e., permitting the people free use of navigable waterways).⁵⁹ The law relating to water itself expressed no rule of universal government control, permitted private water-use rights to arise, and required compensation for the taking of private rights. Ancient doctrine and practice no more support uncompensated taking of water rights than they support mandatory universal privatization of water resources.

Finally, the ancient public trust doctrines, both Roman and English, arise as principles of natural law.⁶⁰ Natural law, though, does not speak solely to management of (some) natural resources. It equally privileges a variety of legal doctrines, including that “[t]he great and chief end, therefore, of men[] uniting into commonwealths, and putting themselves under government, is the preservation of their property.”⁶¹ It is difficult to see how a single strand of natural-law can be plucked from the ancient fabric, extensively expanded, and then deployed without regard to or respect for principles of natural law at odds with that deployment. Such a tactic at least requires comprehensive explanation before it can support any modern doctrine. The move would equally

⁵⁸ Eminent domain, and thus takings compensation obligations, arose in England with Magna Carta, and developed along with, and more coherently than, the public trust doctrine relied upon by modern theorists. See, e.g., JAMES W. ELY, JR., *THE GUARDIAN OF EVERY OTHER RIGHT* 23–25 (3d ed. 2008); BERNARD H. SIEGAN, *PROPERTY RIGHTS: FROM MAGNA CARTA TO THE FOURTEENTH AMENDMENT* 25–27, 34–35 (2001).

⁵⁹ See, e.g., Cohen, *supra* note 46, at 257–58 (comparing the English doctrine of “constraint on the government’s power to alienate . . . some communal rights” with the “quite different” proposed doctrine designed to allow “government to extinguish private rights”); Huffman, *supra* note 36, at 528, 532–33 (describing the ancient doctrine as an easement).

⁶⁰ See BRACTON, *supra* note 39, at 39–40; INSTITUTES, *supra* note 39, § 2.1.1.

⁶¹ JOHN LOCKE, *Second Treatise on Government*, in *TWO TREATISES OF GOVERNMENT* 100, § 124 (Ian Shapiro ed., Yale Univ. Press, 2003) (1690) (emphasis removed). See also ELY, *supra* note 58, at 16–17; SIEGAN, *supra* note 58, at 46–50.

support seizing on statements of the inviolability of physical property at natural law (without regard to whether such inviolability were a legal reality rather than merely an aspirational statement), expanding that doctrine to include all potential property, and asserting the expanded property doctrine while ignoring all other considerations arising from natural law.

B. *The Federal Public Trust Doctrine*

The federal public trust doctrine (fPTD) arose from the ancient doctrine.⁶² It ensures that all lands beneath tidal or navigable waterways pass to states unencumbered by (most) pre-statehood land grants. The fPTD does not apply to the water running in the waterway, and the question of whether states can establish private rights in water has long since been answered affirmatively. Were the fPTD to apply to water, though, it would expressly free states to create private rights in that water, subject only to the limited obligations of the navigation servitude. Either way, no federal doctrine has ever interfered with state creation of property rights in water, and none can now arise as a shield against paying compensation for already extant water rights.

The Supreme Court most comprehensively explained the fPTD in *Phillips Petroleum Co. v. Mississippi*.⁶³ At issue therein was whether, “by virtue of the ‘equal-footing doctrine’ [Mississippi] acquired at the time of statehood and held in public trust all land lying under any waters influenced by the tide, whether navigable or not.”⁶⁴

The most coherent reading of *Phillips* indicates that the fPTD applies to the land beneath waterways, not to water itself. The Court explained that “[a]t common law, the title and dominion in lands flowed by the tide water were in the King for the benefit of the nation. . . . Upon the American Revolution, these rights, charged with a like trust, were vested in the original States within

⁶² Actually, it arose from a minor misunderstanding of ancient English doctrine. Though that doctrine only—at most—created a rebuttable presumption against private ownership in public trust properties, American authorities relied instead on the misunderstanding that the King could not sell the lands. This misunderstanding provided a basis for transmitting the lands in full fee title to the states. See MacGrady, *supra* note 39, at 547–51, 588–96; *supra* notes 49–53 and accompanying text. The doctrinal shift occasioned by this confusion, however, has no effect on these considerations.

⁶³ 484 U.S. 469 (1988).

⁶⁴ *Id.* at 472.

their respective borders, subject to the rights surrendered by the Constitution of the United States.”⁶⁵ Similarly, it explained that *Knight v. U.S. Land Association* stated that “[i]t is the settled rule of law in this court that absolute property in, and dominion and sovereignty over, the soils under the tide waters in the original States were reserved to the several States, and that the new States since admitted have the same rights, sovereignty and jurisdiction in that behalf as the original States possess within their respective borders.”⁶⁶ Such land-specific references continue throughout the opinion.⁶⁷ The Court also quoted *Shively v. Bowlby* for the proposition that “[t]he new States admitted into the Union since the adoption of the Constitution have the same rights as the original States in the tide waters, and in the lands under them, within their respective jurisdictions.”⁶⁸ Because of the Court’s focus on tide waters, and on English tradition, which related to waterways rather than water itself, this statement does not create the impression that the Court was implicating water as water—rather than waterways so far as they function as highways—as within the scope of the fPTD.

Assuming *arguendo*, however, that the water constituting the navigable waters is itself subject to the fPTD,⁶⁹ the result is that states are free to create cognizable—and constitutionally protected—private property rights in the water. As the *Phillips* Court explained, under the fPTD, “the individual States have the authority to define the limits of” property encompassed by the fPTD “and to recognize private rights in such [property] as they see fit.”⁷⁰ It noted that “[s]ome of the original States, for example, did recognize more private interests in tidelands than did others of the 13—more private interests than were recognized at common law, or in the dictates of our public trust cases.”⁷¹ The remaining

⁶⁵ *Id.* at 473–74 (emphasis added) (quoting *Shively v. Bowlby*, 152 U.S. 1, 57 (1894)).

⁶⁶ *Id.* at 474 (emphasis added) (quoting *Knight v. U.S. Land Ass’n*, 142 U.S. 161, 183 (1891)).

⁶⁷ See, e.g., *id.* at 475, 478, 479, 483.

⁶⁸ *Id.* at 474 (emphasis added); see also *id.* at 479 (“This Court’s decisions in *The Genesee Chief* and *Barney v. Keokuk* extended admiralty jurisdiction and public trust doctrine to navigable freshwaters and the lands beneath them.”).

⁶⁹ Cf. Wilkinson, *supra* note 38, at 462 (observing that *Phillips* involved a dispute over real property title to tidelands, not public’s right of access to water).

⁷⁰ *Phillips*, 484 U.S. at 475. Cf. Thompson, *supra* note 41, at 57.

⁷¹ *Phillips*, 484 U.S. at 475.

states enjoy the same freedom:

As this Court wrote in *Shively v. Bowlby*, ‘there is no universal and uniform law upon the subject; but . . . each State has dealt with the lands under the tide waters [i.e., the property covered by the public trust] within its borders according to its own views of justice and policy. . . . [M]any coastal States, as a matter of state law, granted all or a portion of their tidelands to adjacent upland property owners long ago. Our decision today does nothing to change ownership rights in States which previously relinquished a public trust claim to tidelands such as those at issue here.’⁷²

So even if water is subject to the fPTD, this simply places the water in the hands of the states at the moment of admission—for the states to use, legislate with regard to, and privatize if desired, so long as the federal navigational servitude is respected.⁷³ This done, the fPTD dissolves.⁷⁴ Alternatively, if the navigation servitude is understood as a component of the fPTD, then all aspects of the fPTD except the servitude extinguish. If water is not subject to the fPTD, the result is the same: the states are, as the federal government has long recognized, free to create private rights in their waters.

The plain statement of the fPTD in *Phillips* effectively forecloses claims that, as a descriptive matter, there is a fPTD (separate from the navigation servitude) holding that “while the states were granted title to” public trust properties, “the title was encumbered with a trust obligation that they use the [property] for trust purposes.”⁷⁵ Nevertheless, compensation opposers, ignoring or misconstruing *Phillips*, have persevered. Such scholars most commonly rely on *Illinois Central Railroad v. Illinois*⁷⁶ to support their positions.⁷⁷ But in doing so they either misread *Illinois*

⁷² *Id.* at 483 (citation omitted).

⁷³ *See id.* at 479.

⁷⁴ Huffman reached a similar conclusion prior to the *Phillips* decision. *See* Huffman, *supra* note 36, at 541 (“When the lands were transferred to the new states, however, consistent with the terms of the trust, the trust created by the equal footing doctrine was terminated.”).

⁷⁵ Blumm & Schwartz, *supra* note 36, at 714; *see also* R. Prescott Jaunich, *The Environment, the Free Market, and Property Rights: Post-Lucas Privatization of the Public Trust*, 15 PUB. LAND L. REV. 167, 183 (1994).

⁷⁶ 146 U.S. 387 (1892).

⁷⁷ *See, e.g.*, 4 WATERS AND WATER RIGHTS, *supra* note 21, §§ 30.02, 33.03; Blumm & Schwartz, *supra* note 36, at 713–15. *See also infra* notes accompanying this discussion.

Central, or demonstrate that *Phillips* and other Supreme Court precedent have overruled *Illinois Central* sub silentio.

Illinois Central arose because of a remarkable deal the state of Illinois offered the Illinois Central Railroad. It proposed in 1869 legislation to grant in fee simple to the railroad a vast swathe of Chicago's harbor, reaching a mile into Lake Michigan, in exchange for seven percent of the railroad's gross revenues.⁷⁸ The grant included "all the right and title of the State of Illinois in and to the submerged lands," provided that the railroad could never sell or convey the land or "obstruct[] . . . the Chicago harbor, or impair the public right of navigation," and that the grant would not exempt the railroad from state regulation of wharfage and dockage fees.⁷⁹ The railroad accepted in November 1870.⁸⁰ In April 1873 the Illinois legislature repealed the act authorizing the deal.⁸¹ Suit followed.

As the Court noted, the legislature's 1869 deal contained a massive flaw: while it required that the railroad not "obstruct[] . . . or impair" navigation, it had not required the railroad to develop navigational facilities, nor had it retained any authority to require or oversee such development, or navigation undertaken thereon.⁸² This abdicated the state's obligation to ensure that "the people of the state . . . may enjoy the navigation of the [navigable] waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties."⁸³

The opinion further clarified that the federal interest extends only to protecting the ability of the people freely to access navigable waters. "[G]rants of parcels of lands under navigable waters, that may afford foundation for wharves, piers, docks and other structures in aid of commerce," pass muster, as do "grants of parcels which, being occupied, do not substantially impair the public interest in the lands and waters remaining."⁸⁴ The limit was that "all the lands under the navigable waters" could not be alienated to "leave them entirely under the use and control of private parties" because "they cannot be placed entirely beyond the

⁷⁸ *Illinois Cent.*, 146 U.S. at 448–49.

⁷⁹ *Id.*

⁸⁰ *Id.* at 449.

⁸¹ *Id.*

⁸² *Id.* at 451.

⁸³ *Id.* at 452; *see also id.* at 453–64.

⁸⁴ *Id.* at 452.

direction and control of the State.”⁸⁵

The bargain at issue in *Illinois Central* exceeded that limit by wholly abdicating Illinois’s obligation to protect free navigation. The deal was invalid (or at least revocable) insofar as necessary to permit resumption of Illinois’s navigation-protection duties once the state judged that the railroad’s actions under the bargain were not wholly consistent with preferred navigation-protection policy.⁸⁶ (The Court hinted that the result might have been different if the railroad had accepted an interpretation of the contract that allowed state navigation-fostering regulatory authority, but the railroad had insisted that the contract precluded such authority.⁸⁷) Hence, the state’s 1873 revocation of the grant was validated.⁸⁸ Even so, Illinois could not unload on the railroad the costs of its erroneous abdication of navigation oversight, and was obliged to compensate the railroad for any “expenses incurred in improvements made under” the grant.⁸⁹

This understanding of *Illinois Central* reconciles it with *Phillips*. *Phillips*, as discussed, teaches that the fPTD conveys “absolute property in, and dominion and sovereignty over” trust-protected lands to a state upon admission; the fPTD is then extinguished. In fact, *Phillips* cites *Illinois Central* in support of exactly this proposition.⁹⁰ *Illinois Central* and *Phillips* cannot be read compatibly unless *Illinois Central* is interpreted as above, so that the only obligation (or “trust”) under consideration in the case is the one, running from the state to its people, imposed by the navigation servitude.⁹¹

The compensation-denial proposition makes rather more extravagant claims about *Illinois Central*, referring to it as the

⁸⁵ *Id.* at 453–54 (emphasis added).

⁸⁶ *See id.* at 455. *Cf.* Thompson, *supra* note 41, at 65 (“The major concern . . . in *Illinois Central* . . . was less the privatization of the outer Chicago harbor and more the potential loss of state jurisdiction and authority over the harbor.”).

⁸⁷ *See Illinois Cent.*, 146 U.S. at 450 (“This clause is treated by the counsel of the company as an absolute conveyance to it of title to the submerged lands Treating it as such a conveyance, its validity must be determined by the consideration whether the legislature was competent to make a grant of the kind.”).

⁸⁸ *Id.* at 459. *Cf.* Huffman, *supra* note 36, at 563.

⁸⁹ *See Illinois Cent.* 146 U.S. at 455.

⁹⁰ *See Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 474 n.2 (1988).

⁹¹ *Cf.* Rasband, *supra* note 39, at 66–69 (asserting that *Phillips* is similarly irreconcilable with *Shively v. Bowlby*, 152 U.S. 1, 57 (1894)).

lodestar of the project.⁹² As the discussion above indicates, however, the case is miscast in that role. If it is a lodestar, it reveals the true north of the navigation servitude, and the responsibilities running from the states to the people in light of that servitude, nothing more. Thus, it is not true that “[t]he Court’s decision makes sense only because the Court determined that the states have special regulatory obligations over shorelands, obligations which are inconsistent with large-scale private ownership.”⁹³ The real holding is only that complete ownership of such lands is impermissible if twinned with an abdication of general oversight of issues relating to navigation and the public’s free access thereto. Similarly, it is a misreading to suggest that *Illinois Central* stands for the proposition that

[w]hen a state holds a resource which is available for the free use of the general public, a court will look with considerable skepticism upon any governmental conduct which is calculated either to reallocate that resource to more restricted uses or to subject public uses to the self-interest of private parties.⁹⁴

None of this is actually the case. First, the *Illinois Central* Court was not considering any “resource which is available for the

⁹² Sax, *Natural Resource Law*, *supra* note 24, at 489–91. See, e.g., Jaunich, *supra* note 75, at 179; Sax, *Constitution*, *supra* note 16, at 275; Sax, *Limits of Private Rights*, *supra* note 32, at 481. See generally 4 WATERS AND WATER RIGHTS, *supra* note 21, §§ 30.02, 33.03.

⁹³ Sax, *Natural Resource Law*, *supra* note 24, at 489; see also 4 WATERS AND WATER RIGHTS, *supra* note 21, § 33.03. Sax’s argument that *Illinois Central* only makes sense if read to forbid large-scale private ownership of the shorelands relies on his assertion that the conclusion is obliged because “the mere granting of property to a private owner does not ipso facto prevent the exercise of the police power, for states routinely exercise a great deal of regulatory authority over privately owned land.” Sax, *Natural Resource Law*, *supra* note 24, at 489. But Sax provides no evidence that such power was routinely exercised in 1870. Nor does he suggest that whatever routine authority was exercised then would have permitted the state to oversee the details of navigation-protection (which details were plainly the Court’s focus) given the terms of the bargain between the state and the railroad. As the Court repeatedly explained, that bargain, to the extent it was valid, extinguished all state oversight of the property contained within the grant (except, as expressly preserved, the state’s right to set wharfage and dockage fees). See, e.g., *Illinois Cent.*, 146 U.S. at 451. It is this contract-extinguished oversight and protection of navigation that the Court stepped in to protect, as it explained. There is neither need nor room to manufacture expansive doctrine to make sense of the decision. Cf. Thompson, *supra* note 41, at 65 (stating that the key point of decision was state power to revoke the grant and exercise full jurisdiction over the harbor).

⁹⁴ Sax, *Natural Resource Law*, *supra* note 24, at 490 (emphasis in original). Cf. Stevens, *supra* note 38, at 212.

free use of the general public,” whatever that might actually mean. It was dealing with the right of access for free navigation (and fisheries) afforded to individuals by the federal Constitution (and pre-constitutionally memorialized in the Northwest Ordinance),⁹⁵ and protecting that right. Thus the Court held no brief against governments reallocating resources to uses more restricted than “the free use of the general public,” so long as the uses did not substantially interfere with the navigation servitude. As noted above, the Court expressly contemplated sale of shorelands to private parties.⁹⁶ Nor did the Court object to the state’s subjecting public uses to the self-interest of private parties. Again, it expressly contemplated the “subjection” of the sole public use—access for navigation and fishing—to private self-interest.⁹⁷

Another barrier to using *Illinois Central* to establish a compensation-denying fPTD arises because the Supreme Court has long since repudiated *Illinois Central* as a statement based on federal law at all. It explained in *Appleby v. New York* that “the conclusion reached [in *Illinois Central*] was necessarily a statement of Illinois law.”⁹⁸

Phillips, *Illinois Central* and the fPTD provide a particularly poor lodestar for the compensation-denying proposition. References in *Phillips* and *Illinois Central* to “waters” refer to navigable waterways, not to water itself. More stymieing, the cases demonstrate that even property subject to the full extent of post-statehood public interest (i.e., the navigation servitude) may be alienated broadly to private parties. Finally, in the extremely rare instance in which an alienation ineluctably interferes with the federal interest, unwinding the alienation requires compensation by

⁹⁵ See Northwest Ordinance, ch. 8, art. IV, 1 Stat. 50, 52 (1789) (“The navigable waters leading into the Mississippi and St. Lawrence . . . shall be common highways, and forever free . . .”); *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 71–72 (1913) (stating that title in the bed of a river granted to a private party was subject to a navigation servitude based in the Commerce Clause). The obligations of the Northwest Ordinance were instantiated as well in the Admission Acts of states carved out of lands not part of the Northwest Territory. See, e.g., Oregon Admission Acts, ch. 33, § 2, 11 Stat. 383 (1859) (declaring “rivers and waters, and all the navigable waters” of the state to be “common highways and forever free”).

⁹⁶ See *Illinois Cent.*, 146 U.S. at 452; *supra* text accompanying notes 84 & 85.

⁹⁷ See *Illinois Cent.*, 146 U.S. at 452.

⁹⁸ 271 U.S. 364, 395 (1926).

the state for any expenditures made in reliance upon it.⁹⁹

C. *Other Purported Federal Defenses to Compensation*

Beyond the fPTD as explicated above lie other federal authorities and doctrines that contour state authority to create water rights, and the permissible content of the rights, in certain narrow ways. They arise from the very fabric of the federal constitutional (and pre-constitutional) structure, and extend only to the circumscribed limits of these established, constitutionally necessary purposes. They provide no support for claims that federal law condones uncompensated taking of validly created water rights.

1. *Navigation Servitude*

The federal navigation servitude undoubtedly applies to waterways navigable under the federal definition.¹⁰⁰ The servitude grants the federal government

the power to destroy the navigable capacity of the waters, and prevent navigation, by the construction of obstructions. It also includes the power to protect the navigable capacity by preventing diversions of the water itself, or of nonnavigable tributaries that affect navigability, or by preventing obstructions by bridges or dams or by constructing flood control structures on the navigable waters or on their nonnavigable tributaries or even on the watersheds of the rivers and tributaries. The powers to prevent obstruction in turn lead to powers to license obstructions. The power to obstruct leads to the power to generate electric energy from the dammed water.¹⁰¹

The federal navigational servitude creates in states the responsibility of permitting access by state and U.S. citizens to navigable waters for purposes of navigation, fishing and commerce.¹⁰²

⁹⁹ Cf. *Illinois Cent.*, 146 U.S. at 455.

¹⁰⁰ See, e.g., *Propeller Genesee Chief v. Fitzhugh*, 53 U.S. 443, 453 (1851) (stating that the navigation servitude extends to navigable waters, not just tidal waters); Huffman, *supra* note 36, at 530–31 (describing the contours of the federal servitude).

¹⁰¹ Frank Trelease, *Federal Limitations on State Water Law*, 10 BUFF. L. REV. 399, 400 (1971) (citations omitted). See also *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1899).

¹⁰² See *supra* Part I.B. Note that the obligation is to provide *access* for fishing in navigable waterways, not some level of naturally undiminished fisheries. *But*

The roots of the servitude reach behind the Constitution to the Northwest Ordinance and the ancient public trust doctrine; it finds purchase in the Commerce Clause; and it reaches forward into the foundational instruments of numerous states.¹⁰³ However, nothing like that sort of pervasive injunction—in fact, nothing whatever—supports theories applying the servitude to defeat states' creation of water rights, or defending against compensation for takings of water rights, except as necessary to protect the navigable capacity of a federally navigable water.¹⁰⁴

2. *Federal Reservations of Water*

Interplay between state water rights and federal law also arises from federal reservations of water. The federal government had the power, pre-statehood, to reserve certain amounts of water from passing to a state upon admission.¹⁰⁵ This reservation could occur explicitly or, as in *Winters v. United States*, by absolutely necessary implication combined with “a rule of interpretation of agreements and treaties with the Indians, [that] ambiguities occurring will be resolved from the standpoint of the Indians.”¹⁰⁶ The Supreme Court has also recognized Congress's ability

cf. Ralph W. Johnson, *Water Pollution and the Public Trust Doctrine*, 19 ENVTL. L. 485, 488, 495 (1989). Johnson's concept cannot make sense, because fishing in the fisheries would itself derogate from the pristine natural condition that Johnson alleges the public trust doctrine to encompass. In fact, simply recognizing something as a *fishery* admits of it as a non-natural (in the sense of being protected from human intrusion) entity.

¹⁰³ See *supra* note 95. The Northwest Ordinance, enacted by the Confederation Congress in 1787, was the constitutive framework for the territories lying west of the Allegheny Mountains that the United States won from Great Britain in the Peace of Paris in 1783.

¹⁰⁴ See *Wisconsin v. Illinois*, 278 U.S. 367, 415 (1929) (citing *United States v. Chandler-Dunbar Co.*, 229 U.S. 53, 62 (1913)); *United States v. River Rouge Improvement Co.* 269 U.S. 411, 419 (1926); *Port of Seattle v. Oregon & Washington R.R.*, 255 U.S. 56, 63 (1921) (clarifying that the navigation servitude only sanctions federal interference in water as necessary to effect navigation purposes) (decided on statutory grounds). *Cf.* *New Jersey v. New York*, 283 U.S. 336, 344 (1931) (limiting federal interest in tributaries to extent of navigation servitude); Huffman, *supra* note 36, at 554–55 (describing the public's interest in access to navigation and fishing as “inviolable as . . . any other vested property right”); *id.* at 562–63 (defining the obligations arising from common-law tradition and federal mandate in the waters of a state as those of ensuring the public's access to navigation and fishing).

¹⁰⁵ See *Winters v. United States*, 207 U.S. 564, 575–78 (1908) (citing *United States v. Winans*, 198 U.S. 371 (1905); *Rio Grande Dam*, 174 U.S. at 702).

¹⁰⁶ *Id.* at 576.

impliedly to reserve “appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation.”¹⁰⁷ The Court has declared, however, that the organic national forest and parks acts, and later acts broadening their purposes, did not include general reservations for ecological uses,¹⁰⁸ while the National Park Service Act explicitly recognized the federal duty to establish (and pay for) water rights for non-essential, pre-reserved purposes in national parks.¹⁰⁹ The reservations doctrine, then, despite contrary claims,¹¹⁰ grants the federal government no ability to take, now, previously appropriated waters without compensation, nor to claim that it had, sub silentio, previously reserved since-appropriated waters for in-stream uses, thus effectively nullifying their appropriation without compensation.

3. *Interstate Apportionment*

In interstate apportionment cases, the federal courts open their good offices to the states to settle questions of the division of available water supplies. The federal government acts merely as an honest broker, and, as Justice Holmes memorably put it, as the means by which the Republic avoids war in contests between states;¹¹¹ its apportionment duties in no way implicate or support non-compensated takings of water rights. The interstate-apportionment doctrine that guides their labors, holding that waters that run through multiple states must be divided reasonably,¹¹² likewise does not establish a federal basis for uncompensated takings of water rights.¹¹³

Whether states should in some circumstances compensate right holders for water rights that effectively disappear upon any given apportionment is a nice question. The Supreme Court has answered that it does not, because the equitable apportionment to which each state is entitled represent an a priori limit on the

¹⁰⁷ *United States v. New Mexico*, 438 U.S. 696, 699–700 (1978) (emphasis changed) (quoting *Cappaert v. United States*, 426 U.S. 128, 138 (1976)).

¹⁰⁸ *See id.* at 705–15.

¹⁰⁹ *See id.* at 702–03.

¹¹⁰ *See, e.g., Getches, supra* note 14, at 7.

¹¹¹ *See New Jersey v. New York*, 283 U.S. 336, 342 (1931).

¹¹² *See Hinderlider v. La Plata River & Cherry Creek Ditch Co.*, 304 U.S. 92, 102–03 (1938).

¹¹³ *Contra Sax, Limits of Private Rights, supra* note 32, at 482 (asserting that equitable apportionment doctrine supports “reduc[ing] or displac[ing]” pre-existing water rights).

amount of water the state controls, and a state cannot create rights in, essentially, other sovereigns' property, so the rights were never created.¹¹⁴ The contrary position—that a state must pay takings compensation if it creates non-contingent rights in property that it turns out not to control, the error lying with it rather than the innocent purchaser or grantee—probably does greater equity and justice.¹¹⁵ Under neither interpretation, however, does the doctrine provide federal support for uncompensated takings of rights to water property under a state's control.

D. *Scholarly Failure to Treat Western Water Law as a Unique, Established Legal System*

Other federal cases raised to support compensation denial prove equally unavailing, and the claims made in their behalf illustrate a fundamental flaw in the compensation-denial position. Scholars—either by conflating the riparian water schemes in eastern states with prior appropriation schemes in western states, or simply by refusing to recognize the western system as a legitimate choice conclusively made by the relevant states—continue erroneously to assert that the water law of the western states remains a flux from which no rights could possibly have emerged and acquired constitutional protection. Sax and others have pointed, for instance, to a trio of early-20th century opinions penned by Oliver Wendell Holmes.¹¹⁶ In *Georgia v. Tennessee Copper*, Georgia sought an injunction against Tennessee Copper's practice of "discharging noxious gas from their works in Tennessee over the plaintiff's territory."¹¹⁷ The Court enjoined the discharge. In dictum, Holmes wrote that

in its capacity of quasi-sovereign . . . the state has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its

¹¹⁴ See *Hinderlider*, 304 U.S. at 108; James H. Davenport & Craig Bell, *Governmental Interference with the Use of Water: When Do Unconstitutional "Takings" Occur?*, 9 U. DENV. WATER L. REV. 1, 33–34 (2005).

¹¹⁵ See *Leshy*, *supra* note 36, at 1990 (describing the insecurity that arises from equitable apportionment doctrine).

¹¹⁶ See, e.g., *Leshy*, *supra* note 36, at 2019–20; Andrew H. Sawyer, *Changing Landscapes and Evolving Law: Lessons from Mono Lake on Takings and the Public Trust*, 50 OKLA. L. REV. 311, 344–45 (1997); Sax, *Constitution*, *supra* note 16, at 274–76; Sax, *Limits of Private Rights*, *supra* note 32, at 479–81.

¹¹⁷ *Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 236 (1907).

inhabitants shall breathe pure air. It might have to pay individuals before it could utter that word, but with it remains the final power.¹¹⁸

In *Hudson County Water Co. v. McCarter*, the Court held that a riparian state could restrict a resident's pumping of riparian waters in that state for transfer to another riparian state.¹¹⁹ And in *New Jersey v. New York*, the Court held that one riparian state could divert some riparian water for urban consumption as against another riparian state.¹²⁰

These cases together allegedly demonstrate that by federal imperative "it is within the power of each state to control its own economy and its own future by reserving to itself, and not abdicating to private property owners, the responsibility to determine the proper use of the natural resources within its border."¹²¹ In a sense, this is true without recourse to Holmes: the Fifth Amendment allows states to redirect the use of natural resources within their borders, over the heads of private owners—using eminent domain and paying compensation. Compensation opponents, though, mean something else: that some subtle federal principle, revealed by Holmes in these passages, allows states to upend private natural-resource rights without compensation.¹²²

These cases, though, do not support that proposition. The *Tennessee Copper* passage explicitly contemplates the eminent-domain power and the compensation obligation, but does not contemplate uncompensated takings at all. (If the passage were somehow read to mean that a state's "interest independent of and behind the titles of its citizens" permitted uncompensated takings, it would permit such takings of "all the earth and air"—all real property—"within its domain."¹²³ It is reasonable to expect that a federal principle that eviscerated a guarantee enshrined in the Bill of Rights would be stated somewhat more expressly, with surer support, and in a less obscure forum, than Holmes's dictum.)

To the extent that *Tennessee Copper* elaborates a state's freedom to develop "resource control" regimes of its own choosing, it thereby redundantly endorses the western states'

¹¹⁸ *Id.* at 237.

¹¹⁹ 209 U.S. 349, 354–56 (1908).

¹²⁰ 283 U.S. 336, 342–46 (1931).

¹²¹ Sax, *Limits of Private Rights*, *supra* note 32, at 479.

¹²² See, e.g., Sax, *Constitution*, *supra* note 16, at 280.

¹²³ *Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 237 (1907).

authority to depart from eastern riparianism. *Hudson County Water and New Jersey v. New York* further ratify this authority by explicitly limiting their holdings to riparian water rights in riparian states.¹²⁴ The Court also recognized in the latter case that the controversy, being between independent sovereigns, required application of a different standard than would a case involving private parties, which further undermines any reliance on the case for compensation-denial purposes.¹²⁵

Compensation opponents' reliance on these cases illustrates their failure to recognize or accept that western states have, in their sovereign capacity, established a non-riparian water-resource system, and that the western system deserves as much respect, on its own terms, as the eastern riparian system.¹²⁶ This failure, which appears repeatedly in scholarly literature opposing compensation, serves as the basis for claims that western water rights need not be treated with constitutional solemnity because water law has reacted flexibly to emergent challenges in the past.¹²⁷

¹²⁴ See *New Jersey v. New York*, 283 U.S. at 343 (focusing exclusively on riparian rights, noting that “[t]he different traditions and practices in different parts of the country may lead to varying results”); *Hudson County*, 209 U.S. at 356 (“The problems of irrigation have no place here. . . . [W]e are of opinion that the private property of *riparian* proprietors cannot be supposed to have deeper roots. . . . [W]e agree with the New Jersey courts, and think it quite beyond any rational view of *riparian* rights, that an agreement, of no matter what private owners, could sanction the diversion of an important stream outside the boundaries of the state in which it flows.”) (emphasis added).

¹²⁵ See *New Jersey v. New York*, 283 U.S. at 342.

¹²⁶ See Sax, *Constitution*, *supra* note 16, at 274. Sax praised the Holmes opinions above for, “vouchsaf[ing] to each state the capacity to control its economy and its future by letting *it* determine the role its natural resources would play.” *Id.* Then he deployed riparian-rights arguments as challenges to appropriative water rights, failing to acknowledge that the move undercuts—and reads out as illegitimate—western states’ departure from riparianism. When vouchsafed the capacity to control their economies and their future by determining the role their natural resources would play, western states abandoned riparianism and developed individual property rights in the use of water.

¹²⁷ See, e.g., Sax, *Limits of Private Rights*, *supra* note 32, at 473 (“The rights of water users have always changed to meet new public demands, whether for mill dams during the Industrial Revolution, for navigability to float logs during the timber era, or for reduced discharges under modern pollution laws.”). See also Leshy, *supra* note 36, at 1985–88, 1996; Sax, *Constitution*, *supra* note 16, at 273–74 (conflating water taken as riparian right with water taken by western appropriation); Sax, *Rights that Inhere*, *supra* note 21, at 943–46; Joseph L. Sax, *Environmental Law at the Turn of the Century: A Reportorial Fragment of Contemporary History*, 88 CAL. L. REV. 2375, 2384 (2000) [hereinafter Sax,

Taking western water law seriously forbids such analysis. While the broad sweep of the history of water law might be characterized by continuous change, this is as a general matter true of virtually all areas of law. That law generally evolves, however, does not provide license to ignore concrete enactments—particularly constitutional enactments—in a given legal field. State-level constitutional protections must be accorded dignity on their own terms, not be overturned by the changing fashions of non-conforming jurisdictions. The Eighth Amendment, for example, is not currently interpreted to ban the death penalty, but some states have forbidden the practice. Analysis of the law of punishment in a death-penalty-prohibiting state must attend to that state's additional protection; arguments citing to the lack of death-penalty prohibitions elsewhere, or to the changing face of punishment prohibitions generally, to favor application of the death penalty in the state would simply be ignoring the state's independent jurisprudence, not interpreting it. Using riparian precedent to justify the contention that “[h]olders of appropriative rights in the West will now similarly have to adapt to new conceptions” by surrendering their rights without compensation,¹²⁸ similarly reads western water law out of existence.

Reliance on *Arnold v. Mundy*,¹²⁹ a New Jersey Supreme Court case, as compensation-denial precedent provides a stark example

Reportorial Fragment]. Cf. Rose, *supra* note 28, at 354–55 (noting tendency of water rights regimes to evolve so as to “incorporate greater concern for diversity and changes in use”). Often embedded within these assertions about the continuously changing nature of water law are claims that western states extinguished riparian rights, creating precedent for the like extinguishment of prior-appropriation rights. See e.g., Leshy, *supra* note 36, at 1988. In fact, though, the states chose one of the following options: never recognizing riparian rights at all; extinguishing only *unexercised* riparian rights; recognizing unexercised, exercised or grandfathered riparian rights; or compensating for taken riparian rights. See, e.g., Davenport & Bell, *supra* note 114, at 69; Huffman, *supra* note 36, at 570–71. Hence, riparian rights were accorded substantial dignity in western states, even though never proclaimed or protected in western-state constitutions or laws. As precedent they demonstrate that prior-appropriation rights, which are so designated and protected, must be accorded yet greater dignity and protection.

¹²⁸ Sax, *Limits of Private Rights*, *supra* note 32, at 473. In asserting that “[t]he roots of private property in water have simply never been deep enough to vest in water users a compensable right to diminish lakes and rivers or to destroy the marine life within them,” Sax echoed Holmes’s pronouncement explicitly about *riparian* rights but dropped the reference to riparianism and applied the dictum to western water rights. *Id.* at 482.

¹²⁹ 6 N.J.L. 1 (1821).

of this regime-conflating phenomenon.¹³⁰ Such reliance additionally fails because *Arnold* contains no holding of modern relevance. In that case, Arnold claimed a right to exclude trespassers from an oysterbed (i.e., the land beneath a navigable waterway) on the basis of a grant from Charles II. The New Jersey Court, in what its author warned in advance was a poorly researched and hastily prepared opinion,¹³¹ held (erroneously, as has been discussed) that the King's power did not extend to granting title to such lands.¹³² As a result, the lands passed unburdened by private title to the state of New Jersey.

The *Arnold* Court added that because the King had lacked the power to grant such lands, so did New Jersey.¹³³ This conclusion failed to address Parliament's power to grant such titles, though, and thus, as later New Jersey courts recognized in disavowing it, lacked logical connection to New Jersey's entire sovereign power.¹³⁴ *Arnold* thus provides to history only a necessarily dead legal letter based on error, and logically fallacious dictum that has been repudiated for more than a century and a half—and all of this incapable of being a statement of anything more than New Jersey state law in any event.

E. *Asserted State-Law Defenses to Compensation*

As previous sections consider, compensation-denial theory can claim no justifiable support from ancient common law or federal dictate, nor meaningful rhetorical or logical connections to these sources of law and tradition. If any justification exists for denying compensation for governmental takings of water rights, then it must arise at the state level, without support from above or behind. A wide variety of attempted justifications have been made. These, stripped of their pretensions to federal or ancient

¹³⁰ See, e.g., 4 WATERS AND WATER RIGHTS, *supra* note 21, § 30.02(c); Jan S. Stevens, *The Public Trust and In-Stream Uses*, 19 ENVTL. L. 605, 606 & n.2 (1989) (demonstrating reliance on *Arnold* when discussing the public trust doctrine in the appropriation context).

¹³¹ *Arnold*, 6 N.J.L. at 9. *Arnold* is unfit as coherent precedent for anything, much less the uncompensated taking of western water rights. See also MacGrady, *supra* note 39, at 590–91; Rasband, *supra* note 39, at 22–25; Thompson, *supra* note 41, at 57–58.

¹³² *Arnold*, 6 N.J.L. at 70–71.

¹³³ *Id.* at 78.

¹³⁴ See *Gough v. Bell*, 22 N.J.L. 441, 458–59 (1850), *aff'd*, 23 N.J.L. 624 (1852).

common-law support (and without reference to whether the theories have been presented as part of a state public trust doctrine, or rather as a coordinate compensation-stripping theory¹³⁵) are considered below. All are found wanting.

As has been noted above, the migration by western states from riparianism to prior appropriation was no happenstance. It was a considered response to the aridity and ruggedness of western terrain.¹³⁶ Believing their new system to be a necessary response to immutable western conditions, the founders of these polities took few chances: many provided explicit constitutional status to the appropriative system and the water rights created thereby.¹³⁷ Those that went not quite this far nevertheless provided explicit constitutional protections (including takings-compensation protections) for private property, and moved quickly to establish statutory water rights.¹³⁸

This should end the question. The states have established property rights in water. The rights were important enough that the states' founders often explicitly mentioned them in state constitutions. If the government takes a property right, compensation must issue.¹³⁹ Ergo, compensation must issue for takings of water rights. Nevertheless, a variety of arguments have been made in attempts to deny compensation.

1. *The "Public Water" Clauses and Usufructuary Rights*

Scholars have argued that state constitutional clauses declaring either that "waters within the boundaries of the state are the property of the state"¹⁴⁰ or that "the use of all water . . . [is] a

¹³⁵ Again, scholars do not agree about which of the doctrines described below arise from or contribute to the state public trust doctrine theory, and which are merely concomitant. See *supra* note 36. Consequently, each potential basis of compensation-denial is treated separately.

¹³⁶ See *supra* note 3 (cases explaining that scarcity led to heightened private-property character of western water law). But see Leshy, *supra* note 36, at 1992 (asserting that scarcity led to heightened communalism in western water law).

¹³⁷ See *supra* note 11.

¹³⁸ See *supra* notes 12, 17. This is sufficient to create property rights. Property rights in, say, land are respected, and compensation for taking of them is due, without regard to the fact that property rights *in land* were not specifically enumerated in the Fifth Amendment.

¹³⁹ See *supra* note 17.

¹⁴⁰ MONT. CONST. art. IX, § 3(3). See also; N.M. CONST. art. XVI § 2; N.D. CONST. art. XI, § 3; WYO. CONST. art. VIII, § 1. In the remainder of western states, the provision is statutory. See 4 WATERS AND WATER RIGHTS, *supra* note

public use,”¹⁴¹ negate the property-right status of water rights, making appropriations of water mere licenses terminable at “public” (meaning governmental) whim.¹⁴² This argument ignores the fact that the same constitutions that declare the water to be state property, or all uses to be public uses, also declare water rights available for private appropriation—often in the same clauses. No coherent theory of constitutional interpretation allows one clause or provision to obviate another clause or provision of the same constitution—certainly not as against plausible readings of the provisions that are not mutually exclusive.

Fortunately, no difficulty arises in reading these clauses consistently and coherently together. First, the “public” clauses should be read as assertions by the various states to the federal government, which would ratify their initial state constitutions, that they, and not the federal government, would control water distribution within their states—and that they would follow the western, prior-appropriation system.¹⁴³

Second, the “public title” clauses do not logically conflict with the provisions creating property rights in the use of water. Ownership of title and right of use are legally separable things; concurrent constitutional provisions assigning the former to the state and making the latter assignable to private parties demonstrate that they have been separated.¹⁴⁴ This interpretation

21, § 30.04, at 30–66 n.297 (collecting statutes).

¹⁴¹ MONT. CONST. art. IX, § 3(2). See also ALASKA CONST. art. VIII, § 3; COLO. CONST. art. XVI, § 5; IDAHO CONST. art. XV, § 1; NEB. CONST. art. XV, § 5; OR. CONST. art. I, § 18.

¹⁴² See, e.g., Jan G. Laitos, *Water Rights, Clean Water Act Section 404 Permitting, and the Takings Clause*, 60 U. COLO. L. REV. 901, 910–11 (1989); Leshy, *supra* note 36, at 1991–92; Sax, *Constitution*, *supra* note 16, at 260. Cf. Douglas L. Grant, *ESA Reductions in Reclamation Water Contract Deliveries: A Fifth Amendment Taking of Property?*, 36 ENVTL. L. 1331, 1377–82 (2006) (accepting possibility that state public trust doctrine could expand to negate water rights).

¹⁴³ See, e.g., *Farm Inv. Co. v. Carpenter*, 61 P. 258, 264 (Wyo. 1900) (recognizing that the act of Congress admitting the state into the Union accepted, ratified and confirmed the constitution of Wyoming, including its clause vesting in the state title to the waters therein).

¹⁴⁴ Cf. John S. Harbison, *Waist Deep in the Big Muddy: Property Rights, Public Values, and Instream Waters*, 26 LAND & WATER L. REV. 535, 558 (1991) (proposing related explanation that clauses “mean[] . . . that water is common property until it is assigned to private individuals”). See also *Colorado v. Emmert*, 597 P.2d 1025, 1028 (Colo. 1979) (holding that the function of the clause is to ensure an appropriative system); *Willey v. Decker*, 73 P. 210, 222 (Wyo. 1903) (holding that public ownership is sovereign, not proprietary, and

carries particular power in the context of water, where the bare title to individual molecules of water provides no practical value to private owners. The practical value of the water lies in the ability to use a flow of it over time, and to continue that use without regard to individual particles of water—which of course will simply evaporate and recharge the system.

Third, the clauses created the space for states to regulate the use of water by means that do not implicate the taking of water rights. It is unsurprising that states would expressly reserve such regulatory power in the era when these constitutions were penned. As one non-compensation supporter has recognized, “the administration of water rights provided some of the earliest examples in American government of regulatory agencies controlling the use of private property for the common good.”¹⁴⁵ The authors of these innovations would have made the effort to ensure constitutional footing for their projects.¹⁴⁶

Fourth, the “public use” clauses ensured states the freedom to employ (not ignore) eminent domain against any private use of water in favor of any other use that the states might deem beneficial. (Note that the “public use” language in the water-right provisions tracks the “public use” language in the eminent-domain provisions of those same constitutions.¹⁴⁷) In the days before *Kelo*,¹⁴⁸ the general presumption was that the words “public use” in the U.S. Constitution meant something. If the use proposed by government as the reason for taking a property were not public, the taking could not occur, compensation notwithstanding. By declaring constitutionally that all water uses were public uses, the states could attempt to ensure that any uses proposed by government would be deemed public, and thus taking of private

subject to appropriation rights).

¹⁴⁵ Leshy, *supra* note 36, at 1994 n.29. In some states these general guarantees of the state’s right to *regulate* water rights were supplemented by more specific explications of the administrative process that was to obtain. Compare WYO. CONST. art. I, § 31, with *id.* art. VIII, § 2.

¹⁴⁶ Cf. *Ormsby County v. Kearney*, 142 P. 803, 806 (Nev. 1914) (stating that administrative oversight is permissible because it is “designed to protect all water users in their rights”).

¹⁴⁷ See IDAHO CONST. art. I, § 14 (“Private property may be taken for public use, but not until a just compensation, to be ascertained in the manner prescribed by law, shall be paid therefor”); MONT. CONST. art. II, § 29 (“Private property shall not be taken or damaged *for public use* without just compensation” (emphasis added)).

¹⁴⁸ *Kelo v. City of New London*, 545 U.S. 469 (2005).

property to achieve these purposes would be permitted—upon payment of takings compensation.¹⁴⁹

Thus, the best reading of western state constitutions—taking seriously both the “public” clauses and the “private rights” clauses—provides that the states retained title to and regulatory oversight of the water within their boundaries, but created private-use rights in the water’s flow.¹⁵⁰ The states ensured that such use rights could be taken by eminent-domain proceedings in favor of any other beneficial use that the state might elect, but that the state would have to pay compensation for any exercise of eminent domain.¹⁵¹

Some commentators have objected that use (or usufructuary) rights are somehow not genuine property rights, and thus were never amenable to compensation when taken by eminent domain.¹⁵² The assertion, however, lacks foundation—these

¹⁴⁹ Cf. *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 752 (1950) (“The waters of which claimants are deprived are taken [by the federal government] for resale largely to other private landowners . . . Thereby private lands will be made more fruitful, more valuable, and their operation more profitable.”). A provision that *all* uses are “public uses” would allow governments to use eminent domain even where, as here, the transfer is from one set of private users to another. It would not, however, justify failure to compensate the former owners.

¹⁵⁰ This “title for regulation” interpretation is not unique. The public title to wild animals allows for their regulation by the state until the animals are reduced to possession. See, e.g., *State v. Dickinson Cheese Co.*, 200 N.W.2d 59, 61 (N.D. 1972).

¹⁵¹ See, e.g., *White v. Farmers’ Highline Canal & Reservoir Co.*, 43 P. 1028, 1030 (Colo. 1896) (stating that water rights are “among the most valuable property rights known to the law.”). Cf. Benson, *supra* note 2, at 375 (“While water in the West is nominally owned by the public, it tends not to be managed or viewed as a public resource. Water rights holders generally view the water they use as being their own, and they stress the private property nature of water rights. Water management agencies and western state legislatures generally accommodate the water users. State or public ownership of water has far more meaning on paper than in practice.” (citation omitted)).

¹⁵² See, e.g., Sax, *Reportorial Fragment*, *supra* note 127, at 2383; Sax, *Rights that Inhere*, *supra* note 21, at 944; see also Laitos, *supra* note 142, at 911. Elsewhere, Sax suggests that usufructuary rights provide “only . . . a right to uses compatible with the community’s dependence on the property as a resource. Thus, for example, one may own private property rights in a navigable river to use the water, but those rights are subordinate to the community’s transportation needs in the river. The private use may be entirely eliminated where the community’s navigation needs so require . . . A usufructuary system drawing on precedents like the navigation servitude would subordinate private uses to demands for the maintenance of natural services, even where the private owner’s property is left valueless.” Sax, *Property & Economy*, *supra* note 36, at 1452–53

commentators cannot point to any doctrine or precedent, much less a doctrine weighty enough to override constitutional dictate, that denies compensation to usufructuary rights.¹⁵³ In fact, compensation for usufructuary right holders is common in the American system.¹⁵⁴ When a state constitution explicitly recognizes a usufructuary right, certainly, compensation must issue for the retaking of that right. As Sax has noted, “[t]he constitutional law of water is the same as the constitutional law of potatoes and pork chops.”¹⁵⁵ So it is. When a property right in a potato or a pork chop is extinguished by the government—say by the government’s taking the pork chop, or demanding that its owner give the pork chop over to someone else for government-mandated use—then the government must compensate the pork chop owner for this taking of property; as the Constitution declares, private property may not be “taken for public use,

(emphasis in original). Sax also asserts that “[t]he presence of the navigation servitude effectively reduces an owner’s property interest to a usufruct.” *Id.* at 1452 n.91. Impressing a servitude on a property right does not make it a usufruct, however. And neither the navigation servitude nor any other extant obligations on water rights extend to anything like the limits claimed here.

¹⁵³ The sources Sax relies on do not support his characterization of usufructuary rights. *Willow River*, for instance, explicitly considers *riparian* water rights, explicitly excludes appropriative rights, and is not about usufructs *per se* at all. See *United States v. Willow River Power Co.*, 324 U.S. 499, 502–06 (1945). Sax quotes Blackstone as explaining that usufructs are “temporary right[s] of using a thing, without having the ultimate property or full dominion of the substance,” but this does not suggest that usufructuary rights are revocable or non-compensable. Sax, *Property & Economy*, *supra* note 36, at 1452 n.90. See also 1 HUTCHINS, *supra* note 1, at 441–43; 1 WIEL *supra* note 1, at 14–21. Sax appears to have conflated the categories of usufructuary rights and riparian rights, and to have underrated the compensability of the former. See *infra* Part I.D (conflation of riparian and appropriative traditions).

¹⁵⁴ See *Liberty Dev. Corp. v. Metro. Utils. Dist.*, 751 N.W.2d 608, 616 (Neb. 2008) (recognizing compensation obligation when easement taken by utility district); *Moore v. United States*, 61 Fed. Cl. 73 (2004) (recognizing compensation obligation when easement taken by state Department of Natural Resources). Cf. *United States v. Petty Motor Co.*, 327 U.S. 372, 377–78 (1946) (discussing compensation to tenants whose temporary occupancy of a building was taken through eminent domain); *United States v. General Motors Corp.*, 323 U.S. 373, 377–79 (1945) (awarding compensation to tenant whose occupancy of a portion of a leased building was temporarily taken through eminent domain).

¹⁵⁵ Sax, *Constitution*, *supra* note 16, at 260. Sax is making the point that “[n]owhere in the decisions of the Supreme Court is there any hint that water rights are a constitutionally favored form of property.” *Id.* at 261. But neither, as the article demonstrates, is there any justification for treating water rights as an inferior form of property, or constitutional property protections as an inferior form of constitutional right.

without just compensation.”¹⁵⁶ Similarly, when a property right in water is taken for government (or government-dictated) use, compensation must issue.¹⁵⁷

2. *Beneficial Use, Waste, Nuisance and Pollution*

In contrast to the claims above—which at bottom are assertions that the water rights explicitly granted by the western states were not, a priori, compensable property rights at all—there also arise claims that the constitutional, statutory, or common-law structure of water rights allow them to be latterly redefined so as to curtail or eviscerate the rights without compensation. Thus, the argument goes, governments can change the meaning of “beneficial use,” or expand and redefine the doctrines against waste, nuisance, or pollution to defeat the constitutional protections for water rights.¹⁵⁸ Though each prong of this effort suffers unique flaws, a central problem cripples the whole: it simply fails to treat western water rights with constitutional dignity. Doing so—applying noncontroversial rules of constitutional interpretation to the considerations—defeats the challenge on all fronts.

The types of uses that states consider beneficial have changed over time—most relevantly, by recognizing in-stream uses as beneficial uses, and thus blessing ecological use as legitimate. This, as a prospective matter, is unobjectionable to a water-right holder; he has no guarantee that unappropriated waters will continue to be appropriated only for those uses for which they

¹⁵⁶ U.S. CONST. amend. V.

¹⁵⁷ Compensation for usufructs is neither denied nor confused by the fact that usufructs can be divided or subordinated. See Johnson, *supra* note 102, at 494, 496–97 (citing public recreational-use rights as justification for uncompensated takings). In Idaho, Montana, and Wyoming, for instance, the public enjoys rights to use waters recreationally where such use is possible. See *S. Idaho Fish & Game Ass’n v. Picabo Livestock, Inc.*, 528 P.2d 1295, 1298 (Idaho 1974); *Montana Coal. for Stream Access, Inc. v. Curran*, 682 P.2d 163, 168 (Mont. 1984); *Day v. Armstrong*, 362 P.2d 137, 151 (Wyo. 1961). In each of these instances, the general public usufruct to use recreationally is properly subordinated to the specific private rights at stake, including specific beneficial-use water rights; essentially the residuum is in the public after the specific grants are accounted for. See *Picabo Livestock, Inc.*, 528 P.2d at 1297; *Curran*, 682 P.2d at 170–71; *Day*, 362 P.2d at 145, 151.

¹⁵⁸ See, e.g., Leshy, *supra* note 36, at 1996–98, 2000–01, 2008, 2017; Sax, *Constitution*, *supra* note 16, at 268–69; Sax, *Rights that Inhere*, *supra* note 21, at 951.

have been previously appropriated. Similarly, a state may tighten the “duty” under which prospective water rights are granted; would-be right-holders have no a priori claim to a given set of water-right terms.

The claim that the beneficial-use rule can be used to reduce or cancel extant water right without compensation, however, hinges on the notion that it can be applied not only when the water right vests, but can be reapplied with adjusting standards: types of uses for which rights have been granted can be declared unbeneficial; quantities of water properly appropriated to a beneficial use can be revisited, found excessive, and scaled back.¹⁵⁹ This would allow states to reclaim water rights merely by redefining them out of existence.

There is nothing about the beneficial-use provisions, however, that compels or even suggests this retroactive, ratchet-like interpretation. Nor, despite claims to the contrary,¹⁶⁰ was such review-and-diminution the original interpretation of the beneficial-use requirement.¹⁶¹ Indeed, despite sometimes expansive language that could be interpreted to suggest otherwise (especially when considered out of context),¹⁶² courts have regularly permitted right

¹⁵⁹ See, e.g., Leshy, *supra* note 36, at 1996–98; Sax, *Constitution*, *supra* note 16, at 268–69. See generally Janet C. Neuman, *Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use*, 28 ENVTL. L. 919 (1998).

¹⁶⁰ See, e.g., Sax, *Rights that Inhere*, *supra* note 21, at 945–46, 948, 950–51.

¹⁶¹ See 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12.02(c)(2); see also Neuman, *supra* note 159, at 928.

¹⁶² See, e.g., *Huffine v. Miller*, 237 P. 1103, 1104 (Mont. 1925) (“Appropriators of water cannot maintain a valid claim to an amount of water in excess of the beneficial use to which it is applied, and when the appropriator or his successor ceases to use the water for such beneficial purpose, the right ceases.”); *Conrow v. Huffine*, 138 P. 1094, 1096 (Mont. 1914) (“If the conditions change as time passes, and the necessity for the use diminishes, to the extent of the lessened necessity the change inures to the benefit of subsequent appropriators having need of the use . . .”); *Foster v. Foster*, 213 P. 895, 898 (Or. 1923) (“No right is hereby granted or allowed to divert a greater quantity of water . . . than such appropriator can beneficially use for the purposes for which the water is to be put.”); *Romey v. Landers*, 392 N.W.2d 415, 419 (S.D. 1986) (“The reasonableness of the use depends upon the volume of water in the stream, seasons and climatic conditions and the needs of other riparian proprietors as well as the needs of the water user.” (quoting *Omernick v. Dep’t of Natural Res.*, 238 NW.2d 114, 116 (1976), *cert. denied*, 425 U.S. 941 (1976))); *Green River Canal Co. v. Thayne*, 84 P.3d 1134, 1144, 1146 (Utah 2003) (“Our obligation is to ensure that water is put to the most beneficial use.”); *Wayman v. Murray City Corp.*, 458 P.2d 861, 866 (Utah 1969) (“[I]t seems more in harmony with the

holders to continue to exercise their water rights in the manner and amounts appurtenant to the original grant of right.¹⁶³ Courts have limited appropriations on the basis that the water was not being put to the beneficial use for which it was originally granted, or was being used inefficiently based on the original standards.¹⁶⁴ The beneficial-use requirement has not, however, been used as a means, *ex post*, of stripping away water rights that continue to be used as originally authorized.¹⁶⁵ Various courts have recognized that giving the beneficial-use rule a ratchet effect would violate right holders' property interests.¹⁶⁶

These courts have reached the right conclusion. As a constitutional provision, the beneficial-use requirement must be interpreted according to the same constraints applied to the "public ownership/public use" clauses: no coherent constitutional-interpretation theory would permit reading one part of a constitutional provision to eviscerate another part—or the whole provision of which it is a part—if any other reading were plausibly available. (Statutory beneficial-use provisions, meanwhile, cannot obviate constitutional dictate.) Reading beneficial-use provisions to acquire specific content when the right vests gives meaning to both the beneficial use requirement and the water right itself, by

major objective of the law to conclude that the means of diversion must be reasonable and consistent with the state of development of water in the area . . ."); *In re Water Rights of Escalante Valley Drainage Area*, 348 P.2d 679, 682 (Utah 1960) ("Wasteful methods must be discontinued. The duty to accomplish this desired end falls upon all users regardless of the priority of appropriation."); *Dep't of Ecology v. Grimes*, 852 P.2d 1044, 1051 (Wash. 1993) (en banc) ("A particular use must not only be of benefit to the appropriator, but it must also be a reasonable and economical use of the water in view of other present and future demands upon the source of supply.").

¹⁶³ See, e.g., *Wayment v. Howard*, 144 P.3d 1147, 1150 (Utah 2006) (clarifying or overruling *sub silentio* dictum in *Wayman, Escalante Valley*, and other Utah cases); see also *Board of the County Comm'rs of Arapahoe v. Crystal Creek Homeowners' Ass'n*, 14 P.3d 325, 333 (Colo. 2000); *City and County of Denver v. Consol. Ditches Co.*, 807 P.2d 23, 34 n.8 (Colo. 1991); *Huffine v. Miller*, 237 P. at 1104; *Conrow v. Huffine*, 138 P. at 1094–97; *Foster*, 213 P. at 900; *Green River Canal Co.* 84 P.3d at 1146; *Wayman*, 458 P.2d at 867; *Escalante Valley*, 348 P.2d at 682; *Grimes*, 852 P.2d at 1054–55.

¹⁶⁴ See *supra* note 163.

¹⁶⁵ See *id.*

¹⁶⁶ See, e.g., *United States v. Winstar Corp.*, 518 U.S. 839, 868–70 (1996) (holding that sovereign acts that deprive a contract right holder of that right retroactively are a compensable taking of property); *Wayment*, 144 P.3d at 1150; *Escalante Valley*, 348 P.2d at 682 ("The court cannot by such means eliminate or modify established water rights."); *Grimes*, 852 P.2d at 1054.

establishing stable parameters to which constitutional protections thereafter apply. Reading beneficial-use provisions as permanently reinterpretable, however, robs the property right of any constitutional content.

A simple example illustrates this point. Consider the Eighth Amendment to the United States Constitution, which forbids “cruel and unusual punishments.”¹⁶⁷ The formulation of that Amendment is similar to that of “beneficial-use water rights”—an adjectival modification of a constitutionally recognized thing. The Eighth Amendment, of course, has not been interpreted to allow a government, state or federal, to overturn the determination that a punishment is cruel or unusual simply by declaring it non-cruel and non-unusual.¹⁶⁸ Nor is the content of “cruel and unusual” otherwise determined wholly at the present government’s discretion. In fact, if a proposed interpretation of the provision would allow such complete discretion, it would be rejected for that reason—because the interpretation would eviscerate the constitutional protection.¹⁶⁹

The doctrine of waste, meanwhile, does not have any meaning independent of beneficial use. Waste simply means taking water and failing to put it to beneficial use, whether by putting it to no use or to non-beneficial use.¹⁷⁰ Establishing that the parameters of beneficial use for a water right are set when it vests establishes the same thing about waste.

The common-law doctrine of nuisance also cannot strip a

¹⁶⁷ U.S. CONST. amend. VIII.

¹⁶⁸ See, e.g., *Ford v. Wainwright*, 477 U.S. 399, 405 (1983) (“[T]he Eighth Amendment[] . . . embraces, at a minimum, those modes or acts of punishment that had been considered cruel and unusual at the time the Bill of Rights was adopted.”).

¹⁶⁹ In fact, the hard core of the constitutional protection is that, *at very least*, what was a “cruel and unusual punishment” at the time of passage of the Amendment remains a cruel and unusual punishment today. See *id.* Additional punishments can be determined to be cruel and unusual by the development of public opinions and public policy, but the hard core of the right cannot shrink—and the whole of the right itself certainly cannot be destroyed. See *id.* at 406. The case is the same with “beneficial use” water rights. Developments in public opinion and public policy have caused the inclusion as “beneficial uses” of things that were not previously beneficial uses. While this expansion could itself raise objections if, as with in-stream uses, the new beneficial use is the very use that was initially considered un-beneficial, it is at least coherent in that it does not eviscerate the original rights articulated.

¹⁷⁰ See, e.g., 2 WATERS AND WATER RIGHTS, *supra* note 5, § 12.02(c)(2), at 12-35 to 12-36.

water right without compensation. By constitutional act and statutory explication the western states rejected the previously existing common law of riparianism, and adopted a new system.¹⁷¹ As part of that system, they granted rights to use water in specific ways (i.e., beneficial uses). By these enactments they explicitly declared that such uses were approved. They thereby extinguished any background notion that such accepted uses could be deemed nuisances, and foreclosed reliance on such arguments.¹⁷²

The states also thereby prevented the subsequent development of compensation-stripping doctrine. Much has been made about the supposed incoherence or incomprehensibility of nuisance doctrine,¹⁷³ and this has been cited as justification for arguing that, because nuisance doctrine can adapt over time, it is the adaptation itself that is the “background principle” of nuisance law—so that any new uses or values a state wishes to label “nuisance” can be denied a property owner without takings compensation.¹⁷⁴ This misreads the precedent, and defies constitutional logic.¹⁷⁵ The relevant issue is the actual nuisance

¹⁷¹ See *supra* note 4 and accompanying text, and Part I.D.

¹⁷² Cf. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1028–30 (1992).

¹⁷³ See, e.g., Louise A. Halper, *Why the Nuisance Knot Can't Undo the Takings Muddle*, 28 IND. L. REV. 329, 335–36 & n.41–46 (1995) (citing WILLIAM PROSSER, *HANDBOOK OF THE LAW OF TORTS* § 71, at 549 (1941) (describing nuisance law as an impenetrable jungle); John E. Bryson & Angus Macbeth, *Public Nuisance, the Restatement (Second) of Torts, and Environmental Law*, 2 *ECOLOGY L.Q.* 241, 241 (1972) (describing nuisance law as a quagmire); F. H. Newark, *The Boundaries of Nuisance*, 65 *L.Q. REV.* 480, 480 (1949) (stating that using nuisance law to allow non-compensable total deprivation of value is a doctrine “intractable of definition” and a mongrel); William A. Prosser, *Nuisance Without Fault*, 20 *TEX. L. REV.* 399, 410 (1942) (describing nuisance law as a legal garbage can); Warren A. Seavey, *Nuisance: Contributory Negligence and Other Mysteries*, 65 *HARV. L. REV.* 984, 984 (1952) (describing nuisance as a mystery)).

¹⁷⁴ See, e.g., Halper, *supra* note 173, at 337–38, 346 (critiquing the argument that public nuisance law, which can be adapted post hoc to protect “public goods,” is the appropriate determinant of whether compensation should issue); Leshy, *supra* note 36, at 2000–01 (using nuisance law as a justification for taking water rights without compensation). Notably, the authors of the Prosser on Torts series recognized the impenetrability of nuisance law in aid of condemning its application in cases in which “the defendant’s interference with the plaintiff’s interests is characterized as a ‘nuisance,’ and there is nothing more to be said,” W. PAGE KEETON ET AL., *PROSSER AND KEETON ON THE LAW OF TORTS* § 86, at 616–17 (5th ed. 1984), which is the purpose to which Halper *et al.* put it.

¹⁷⁵ In the context of speech and speech rights, for instance, doctrines against obscenity, libel, blasphemy and sedition predated the Constitution. The First

law articulated with reference to property at the time of the property's creation, not a meta-principle that nuisance law is infinitely malleable in the future.¹⁷⁶ In the face of an explicit property right to do what is being done, nuisance doctrine cannot evolve to take that right without compensation.¹⁷⁷ Moreover, nuisance claims that do not entail takings compensation result only in forbidding a property holder to do a specific thing with her property, not the taking of the property right itself.¹⁷⁸

Amendment worked to curtail the effects of some of these doctrines in the American Republic, however, and to foreclose the application of others, removing the issues from legislative legerdemain. *See, e.g.*, *W. Va. State Bd. of Educ. v. Barnette*, 319 U.S. 624, 638 (1943) (“The very purpose of a Bill of Rights was to withdraw certain subjects from the vicissitudes of political controversy, to place them beyond the reach of majorities and officials and to establish them as legal principles to be applied by the courts. One’s right to life, liberty, and property, to free speech, a free press, freedom of worship and assembly, and other fundamental rights may not be submitted to vote; they depend on the outcome of no elections”); *see also* *Simon & Schuster, Inc. v. N.Y. State Crime Victims Bd.*, 502 U.S. 105, 116 (1991).

¹⁷⁶ *See Lucas*, 505 U.S. at 1027 (stating that government “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*” and that roving, malleable concern about environmental interests may not be read backward into the title) (emphasis added); *see also* *Rose*, *supra* note 41, at 276 (“As the *Lucas* Court remarked, the mere invocation of ‘public nuisance’ is not an excuse for public appropriation of private property. Indeed it never was . . .”).

¹⁷⁷ *See Lucas*, 505 U.S. at 1028–29; *see also* James S. Burling, *Protecting Property Rights in Aquatic Resources After Lucas*, SB99 ALI-ABA 349, 375–76 (1997) (“Once a government sees fit to create a property right, that right cannot be later abrogated or taken away at whim—unless just compensation is paid and there is due process.”) (citing *Dows v. Nat’l Exch. Bank of Milwaukee*, 91 U.S. 618, 637 (1875) (“The owner of personal property cannot be divested of his ownership without his consent, except by process of law.”)); *West River Bridge Co. v. Dix*, 47 U.S. 507, 532 (1848) (“[I]t is undeniable that the investment of property in the citizen by the government, whether made for a pecuniary consideration or founded on conditions of civil or political duty, is a contract between the State . . . and the grantee; and both parties thereto are bound in good faith to fulfill it.”). *Cf. Rose*, *supra* note 41, at 275 (“[C]ompensation was not due when regulation effectively prevented private owners from doing something to which they were not entitled. Thus traditional American law did not necessarily regard land ownership as a license for a landowner’s *unrestricted ‘piggybacked’ use of adjacent diffuse resources* such as water, air, or wildlife, particularly in situations in which one landowner’s use could have serious effects on many other owners and persons.” (emphasis added)); *id.* at 276 (“And *unless a private use was officially authorized* as a net public benefit, a private owner’s appropriation of diffuse but congested resources was considered an act of unjust encroachment, which could be abated as a public nuisance.” (emphasis added)).

¹⁷⁸ *See, e.g.*, *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 138

In the case of water rights, the doctrine of nuisance was effectively constitutionalized, regularized, and fixed by the beneficial-use rule. Uses that are recognized as beneficial by the granting of a right are acceptable; those that are not are nuisances that can be curtailed. By definition, a use (both as to type and as to manner/amount) that was sanctioned at the time the right vested could not have been a nuisance. Nuisance law can continue to play a role in regulating use of water rights in ways that do not defeat the constitutionally protected right of use, but it cannot take the right without compensation.

Also fatally flawed are claims that “no one can obtain a property right to pollute,”¹⁷⁹ and thus that compensation can be defeated by defining the uses for which right-holders enjoy a property right (i.e., use of a water right as originally deemed beneficial) as pollution.¹⁸⁰ Again, latter-day doctrinal expansion cannot defeat constitutional guarantees. Additionally, the maxim that there is no right to pollute or there is a right to be free of pollution is not a true statement of law.¹⁸¹ It arises only and

(1978); *Goldblatt v. Hempstead*, 369 U.S. 590, 593 (1962); *Hadacheck v. Sebastian*, 239 U.S. 394, 410–12 (1915); *Mugler v. Kansas*, 123 U.S. 623, 673–74 (1887); *Rose*, *supra* note 41, at 282–83 (citing *Hadacheck v. Sebastian*, 239 U.S. at 404–414). Even in the example of a nuclear power plant discovered to lie atop a fault line, the permissible uncompensable injury is that the plant owner will be forced to relocate its operation, while keeping its land for other purposes, *not* that its fixtures and land will all be taken without compensation. See *Lucas*, 505 U.S. at 1029. And even this limited uncompensated injury is possible only because the power plant owner did not have a *specific* property right to maintain a power plant in exactly that location. Lesly asserts the reverse—that nuisance law will justify non-compensated property taking—but his support belies his proposition. See Lesly, *supra* note 36, at 2000–01 (supporting the claim that water rights can be taken without compensation by demonstrating that a single, specific use of a property may be enjoined, though the property is not taken, “ordinarily” without compensation); see also Laitos, *supra* note 142, at 921.

¹⁷⁹ Sax, *Constitution*, *supra* note 16, at 273. See also Johnson, *supra* note 102, at 485 (“The ‘takings’ issue should not be troublesome because no one, not even prior appropriators, has or can acquire a legal right to pollute public waters.”); *id.* at 488 (“The law has never recognized a vested property right to pollute.”); Sax, *Reportorial Fragment*, *supra* note 127, at 2383 (“[M]ight the Court find that the irrigator’s property rights were qualified . . . by the proposition that no one can obtain a property right to denature a stream so as to exterminate one of its indigenous species.”).

¹⁸⁰ See Sax, *Constitution*, *supra* note 16, at 273–74.

¹⁸¹ Sax provides no precedent or explanation in support of the assertion. See Sax, *Constitution*, *supra* note 16, at 273. Johnson cites 1 WILLIAM H. RODGERS, JR., *ENVIRONMENTAL LAW: AIR AND WATER* 141–42 (1986). See Johnson, *supra* note 102, at 488 n.14. The cite is not only inapposite, but actually contradicts the

explicitly with regard to riparian water rights, and even then is only short-hand for the actual legal doctrine: “Water pollution is a disfavored use under riparian law” by various presumptions and conventions.¹⁸² As such, the maxim does not at all speak to western water-law systems or water rights.¹⁸³ Nor does it suggest that a use granted constitutional and statutory property-right status can be proscribed simply by labeling the protected activity “pollution.” Even in riparian jurisdictions, statutory protections of an activity (that does not enjoy constitutional property-right status) decrease a court’s willingness to declare the activity an impermissible act of pollution.¹⁸⁴

Legal reality and basic constitutional theory ratify this conclusion. Cap-and-trade permits, for instance, expressly create rights to pollute, demonstrating that such a creature is not impossible of legal construction.¹⁸⁵ More importantly, the western states, as noted, created property rights in water that explicitly permitted, for instance, dewatering of some natural watercourses.¹⁸⁶ If that activity is now defined as “pollution,” then

assertion. *See infra* this section.

¹⁸² 1 RODGERS, *supra* note 181, § 2.19 at 141.

¹⁸³ *See also* Sax, *Limits of Private Rights*, *supra* note 32, at 475 (“There is no legal or logical difference between poisoning fish by what you put in the water and suffocating them by what you take out. The question for both irrigators and industrialists is whether one can acquire a property right to destroy an aquatic system Polluting industries learned long ago that the answer is no; one may not acquire a property right to kill the fish in a river.”). Of course, the irrigators and other western water-right holders *do* have a vested property right to dewater, concomitant with the size of their water rights. Simply refusing to acknowledge the difference does not eviscerate it. Meanwhile, it defies reality to claim that no property right can issue if an incidental effect of employing the property right would be the killing of animals. Any development or use of land or water property *will* kill some animals, as well as some plants. Hunting licenses, meanwhile, though not property rights *per se*, are explicit rights to kill animals. Sax’s ungrounded claim, then, is demonstrably false, and if true would eviscerate all property rights. Once again, this interpretation arises, at least in part, from conflating riparian with western rights. *See supra* Part I.D.

¹⁸⁴ Sax, *Limits of Private Rights*, *supra* note 32, at 147–48.

¹⁸⁵ *See, e.g.*, Rose, *supra* note 41, at 297 (citing Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 401, 104 Stat. 2399, 2584 (1990) (codified at 42 U.S.C. § 7651–7651o (Supp. V 1993))).

¹⁸⁶ *See, e.g.*, Grant, *supra* note 20, at 462–63 (noting that early western-state cases allowed “appropriation of the entire flow of the stream”); Sax, *Reportorial Fragment*, *supra* note 127, at 2385 (“Nothing in the laws of most states appears to prevent diverters from dewatering a river in order to put its waters to other, out-of-stream beneficial uses.”). Blumm points to Grant’s recognition that these cases “concerned issues other than limiting appropriations to protect public trust

it follows that property rights to do what can later be described as pollution can in fact be created. This, of course, illustrates the incoherence of the maxim: any property right could be defeated simply by labeling use of the right “polluting.”¹⁸⁷ No constitutional protections can have meaning if affixing a new label (a label, moreover, that is entirely a stranger to the constitutional provisions at issue) to the subject matter of the protection can defeat it.¹⁸⁸ As with nuisance, actual pollution regulation can occur, but not uncompensated takings under the banner of pollution regulation.

Thus, for instance, state government (or the federal government, to the extent of its constitutional authority over such matters) may set a cap on the amount of a given chemical that can be released into the state’s water supply—or may prohibit release of that chemical at all. This regulation would apply equally to all water uses within the state—including uses by water-right holders. If the current irrigation methods of a right holder result in release into the water supply of more of the given chemical than is permitted under the regulation, she will be obliged to alter her behavior to accommodate the restriction. Her right to use the amount of water vested by her appropriation, however, remains intact.¹⁸⁹

By contrast, if a relevant government effectively cancels a water right, or some portion of it, to transfer the use of the water from the right holder’s beneficial use to some other use (e.g., a newly recognized ecological use), then a taking of the right (or some portion of it) has ensued. As a constitutional result,

uses,” suggesting that the case would have been different had such uses been considered. Blumm & Schwartz, *supra* note 36, at 714 n.97. But this presupposes that the “public trust uses” that Blumm articulates (*i.e.*, ecological uses) were public trust uses in contemplation when the cases were decided, or that state constitutions do not preclude recognition of such uses for purposes of compensation denial. As has been demonstrated, both of those presumptions are inaccurate.

¹⁸⁷ See, e.g., Johnson, *supra* note 102, at 506 (proposing exactly that).

¹⁸⁸ See *infra* Part III.

¹⁸⁹ This is not to say that all regulations that avoid rising to the level of physical takings will be immune from compensation or will be permitted without appropriate attention to the vested interests of rights holders. See, e.g., Rose, *supra* note 41, at 285 (recognizing that “takings and due process considerations typically have required that pre-existing uses be ‘grandfathered’ into new legislation aimed at protecting public rights”); see also, e.g., Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1027–29 (1992).

compensation must issue.¹⁹⁰

This clear division between regulation and taking is not confused by the fact that a right holder's ability to draw the whole of his water right will depend on contingent factors such as seasonal precipitation and whether other right holders take full advantage of their rights.¹⁹¹ Nor is it disturbed by the fact that

¹⁹⁰ Sax compares taking a portion of a water right (for transfer of the water to other uses) to "tighten[ing] up air emission standards for existing facilities because there is only so much assimilative capacity available in the ambient air." Sax, *Constitution*, *supra* note 16, at 266. He later compares such a taking (for in-stream uses) to forbidding industrial water pollution. *See id.* at 272–74. Each time the distinction that Sax fails to recognize is that the water right holder has a *specific right* to withdraw the relevant quantity of water for the use to which he puts it, whereas the polluter described has no such right (whether to the air or water). Again, the argument conflates riparianism and appropriation. Moreover, even if each act in Sax's examples implicated the equivalent of western water rights (i.e., a constitutionally protected right to use X amount of Y good), Sax's construction conflates two different kinds of government orders. Requiring users not to release pollutant Z into the water supply, while not curtailing or prohibiting the user's use of the water generally, is different than forbidding users from using water at all (whether because of fears that Z might be released into the water supply or for any other reason). While Sax may claim he cannot see the distinction, *see* Sax, *Constitution*, *supra* note 16, at 273–74, it is plain. And though the difference may not matter in some regulatory contexts, it matters intensely where the user has a constitutionally protected right to use the water. When such a right is at stake, the former government order is a regulation, the latter is a taking. *See also* Laitos, *supra* note 142, at 906, 911 (conflating decreasing or eliminating "a property right to divert or store a specific quantity of water" with regulation of the right); Leshy, *supra* note 36, at 1991–92 (equating taking of water right for ecological uses to zoning regulations); *id.* at 2020–21 (equating taking to government action that incidentally affects the price of private property); Sax, *Constitution*, *supra* note 16, at 280.

¹⁹¹ Leshy argues that takings-compensation protection is undercut because, *inter alia*: an environmental group could buy land near the stream from which an irrigator's water comes, drill a well on it, withdraw groundwater, and pipe the water downstream to provide in-stream water for ecological purposes; and other users are permitted to collect rainwater that might otherwise run into the right holder's collection point. *See* Leshy, *supra* note 36, at 1988–90. This does not follow. The relevant inquiry for takings analysis is whether the government has taken a right, not whether some party *could* act in a way that derogates from an otherwise more fulsome employment of a right. The government cannot take an individual's house without compensation because, for example, should new neighbors buy the next plot over and build on it, the owner would find herself more limited in her uses of her property. Nor can the government take a property right without compensation because it *could* (i.e., by acting like the environmental group in the example above) *buy* the right to use the property in its preferred manner. *Buying the right to use the property in the (public) buyer's preferred manner is exactly what eminent domain (i.e., takings with compensation) is.* The fact that government could employ eminent domain cannot provide an argument that it therefore does not have to.

some private water rights are granted with conditions, including the condition in some jurisdictions that government permission need sometimes be sought before changing uses. The right holder in these situations must attend to the conditions and obligations,¹⁹² but the government must as well, and cannot take the water as long as the conditions are followed, nor withhold approval as a means of effecting an otherwise compensable taking.¹⁹³

In sum: western-state water-property rights were articulated in state constitutions and statutes, and states' obligation to pay compensation when they take property rights arise from both state and federal constitutions. Other provisions textured the development and issuance of water rights in various ways, ensured that water rights could be regulated by the state, and served as markers to ensure that water-right dispensation remained within state (rather than federal) authority. These provisions did not, though, obviate the water-right or compensation provisions of the

¹⁹² See Benson, *supra* note 2 *passim* (considering, and perhaps overstating, conditions attached to federal project water); Leshy, *supra* note 36, at 1995 & n.31.

¹⁹³ It has been suggested that “the essence of a water right is priority and use, and not the right to a specific quantity of water,” and thus that water takings are permissible so long as “either the priority or use of the permit applicant’s appropriation” are not interfered with. Laitos, *supra* note 142, at 906–07. As the discussion above indicates, however, the terms of the water right are usually “Y quantity of water,” whether explicitly delineated or the “duty” appropriate at the time of vesting “to achieve X purpose.” Both of these terms are material. If the government wished to, in essence, buy out the quantity term, then compensation would have to issue for the modification of the right. See, e.g., *Almota Farmers Elevator & Warehouse Co. v. United States*, 409 U.S. 470, 473–74 (1973) (“The owner is to be put in the same position monetarily as he would have occupied if his property had not been taken . . . and is entitled to the fair market value of his property at the time of the taking.”). But see, e.g., Leshy, *supra* note 36, at 2007–08 (citing *Tahoe-Sierra* to justify the notion that physical taking analysis applies only if “the government’s measures to protect fish . . . completely and permanently prohibit you from exercising your water right”); *id.* at 2011–12 (claiming that *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982) does not apply because “the physical occupation must be permanent,” and is not permanent if recurring and not wholly predetermined of size); *id.* at 2012–13, 2020. See also Grant, *supra* note 20, at 430 (questioning whether non-continuous but repetitive takings of water would be considered permanent, and concluding that “no definitive answer exists” as to the Court’s position, without citing *Dugan*); Marcus J. Lock, Note, *Braving the Waters of Supreme Court Takings Jurisprudence: Will the Fifth Amendment Protect Western Water Rights from Federal Environmental Regulation?*, 4 U. DENV. WATER L. REV. 76, 99–110 (2000) (asserting the same).

constitutions. Because these are constitutional provisions, they pretermit application of antecedent common-law doctrines (particularly common-law doctrines arising from riparian, rather than western, jurisdictions) at variance with the provisions, and foreclose the development of contradictory subsequent doctrine. As a result, western states have the authority to regulate water-use rights, or to take them with compensation, but not to take them without compensation.

Some western states have developed state public trust doctrines during the last forty years. In these doctrinal explications the states have ratified, rather than undermined, their constitutional duties to respect water rights and compensation obligations.¹⁹⁴ Thus in North Dakota the doctrine requires “analysis of present supply and future need” before “alienation and allocation” of any further resources, not uncompensated taking of extant water rights.¹⁹⁵ In Montana, the doctrine, grounded in the state’s constitution, permits public use of surface waters capable of recreational use.¹⁹⁶ In the case establishing the doctrine, though, the Montana Supreme Court explicitly recognized that the plaintiff had no claim to the water at issue—and implied that if such a claim had been presented, a taking action would have arisen.¹⁹⁷ Utah has also explicitly recognized that application of the public trust does not extinguish the state’s obligation to pay takings compensation.¹⁹⁸ Other western states have likewise failed to endorse a public trust doctrine (or any other device) of a compensation-stripping character.¹⁹⁹

¹⁹⁴ It will be remembered that California’s unique development requires independent consideration. *See supra* text accompanying notes 19, 20, and 21.

¹⁹⁵ *United Plainsmen Ass’n v. State Water Conservation Comm’n*, 247 N.W.2d 457, 463 (N.D. 1976).

¹⁹⁶ *See Galt v. Dep’t of Fish, Wildlife and Parks*, 731 P.2d 912, 913 (Mont. 1987); *Montana Coal. for Stream Access, Inc. v. Curran*, 682 P.2d 163, 170–71 (Mont. 1984).

¹⁹⁷ *See Curran*, 682 P.2d at 171. *Cf. Galt*, 731 P.2d at 916 (“Only that use which is necessary for the public to enjoy its ownership of the water resource will be recognized as within the easement’s scope. The real property interests of private landowners are important as are [sic] the public’s property interest in water.”).

¹⁹⁸ *See Colman v. State Land Board*, 795 P.2d 622, 635 (Utah 1990).

¹⁹⁹ *See Owsichek v. State Guide Licensing and Control Bd.*, 763 P.2d 488, 494 (Alaska 1988) (holding that waterways are available for common use while remaining in a natural state); *State ex rel. State Game Comm’n v. Red River Valley Co.*, 182 P.2d 421, 428 (N.M. 1945) (extending public interest only to

II. THE PLACE OF WATER RIGHTS WITHIN TAKINGS ANALYSIS

As has been seen, western water rights are property rights amenable to takings-compensation protection. Given this, if current takings analysis would leave taking of these rights uncompensated, this shows the deficiencies of modern takings-analysis methodology, not the water rights. Some scholars have gotten this relationship backward: they have looked at current takings doctrine, concluded that it would not result in compensation for water-right takings, and thereby concluded that western water rights must not be compensable rights.²⁰⁰ In fact, though, this dilemma is a false one: water-rights takings fit neatly into current doctrine as physical takings, and are straightforwardly subject to compensation.²⁰¹

In *Loretto v. Teleprompter Manhattan*²⁰² the Supreme Court reviewed the distinction between physical and regulatory takings. It explained that “when the character of [a] governmental action . . . is a permanent physical occupation of property, our cases uniformly have found a taking to the extent of the

extent of permitting fishing access to non-navigable water); *Morse v. State*, 590 P.2d 709, 711 (Or. 1979) (explicating a constrained and non-compensation-denying understanding of the public-trust doctrine consistent with the interpretation provided in Part I.B. *supra*); *Rettkowski v. Dep’t of Ecology*, 858 P.2d 232, 239–40 (Wash. 1993) (limiting application of public trust doctrine to navigable streams, consistent with navigation servitude); *Day v. Armstrong*, 362 P.2d 137, 145, 151 (Wyo. 1961) (recognizing easement for floatation on non-navigable waterways while such waters remain in natural state). Idaho recognizes that “[t]he public trust doctrine takes preceden[ce] even over vested water rights,” *Kootenai Envtl Alliance Inc. v. Panhandle Yacht Club, Inc.*, 671 P.2d 1085, 1094 (Idaho 1983), but has also recognized that “the public trust doctrine is not an element of a water right,” *Idaho Conservation League, Inc. v. State*, 911 P.2d 748, 750 (Idaho 1995), and has not suggested that “taking precedence” could eliminate takings compensation rather than triggering it. Meanwhile, 1996 legislation prohibited application of the public trust doctrine to water rights. See IDAHO CODE ANN. § 58-1203(2)(b) (2008). The Arizona Supreme Court struck down the Arizona legislature’s effort to ensure that the court “shall not make a determination as to whether public trust values are associated with any or all of the river system[s] or source,” because the doctrine is a constitutional limit on legislative power, but did not rule that takings-compensation protection could be stripped from vested property rights. See *San Carlos Apache Tribe v. Superior Court*, 972 P.2d 179, 199 (Ariz. 1999) (invalidating ARIZ. REV. STAT. ANN. § 45-263(B) (2003).

²⁰⁰ See Sax, *Constitution*, *supra* note 16 *passim*.

²⁰¹ See generally Grant, *supra* note 142, at 1361–72 (discussing recent Federal Claims Court cases considering this question, reviewing scholarship in the area, and tentatively concluding largely in accord with this section).

²⁰² 458 U.S. 419 (1982).

occupation, without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner.”²⁰³ Opponents of compensation have recognized that treating water takings as physical takings would cripple their position.²⁰⁴ They have failed, however, to recognize that the Court has in fact already settled the issue in favor of compensation—a conclusion consistent with the nature of water rights and of constitutional protections generally.

In *Dugan v. Rank*,²⁰⁵ for instance, the Court found that the federal government had taken water-districts’ use rights by diminishing their access to San Joaquin River water by collecting it behind Friant Dam.²⁰⁶ The *Dugan* Court explained that

[t]he right claimed here is to the continued flow of water . . . and to its use. . . . A seizure of water rights need not necessarily be a physical invasion of land. . . . Interference with or partial taking of water rights in the manner it was accomplished here might be analogized to interference or partial taking of air space over land. . . . Therefore, when the Government acted here with the purpose and effect of subordinating the respondents’ water rights to the Project’s uses whenever it saw fit, with the result of depriving the owner of its profitable use there was the imposition of such a servitude as would constitute an appropriation of property for which compensation should be made.²⁰⁷

This concise paragraph answered—in advance—many of the objections later raised against compensation for water-right takings. It recognized that the property at issue is the water itself, not the land on which the water is going to be used. (Invasion of that land would constitute a separate physical taking). Thus, when the government orders that the water be redirected from the right holder’s uses to the government’s uses, it has taken physical command—or physical occupancy—of the property for its own purposes. It makes no doctrinal difference whether the government achieves its occupancy through employees’ efforts (as

²⁰³ *Id.* at 434–35 (internal citations & quotation marks omitted).

²⁰⁴ See, e.g., Leshy, *supra* note 36, at 2009; Sax, *Constitution*, *supra* note 16, at 258–59, 263.

²⁰⁵ 372 U.S. 609 (1963).

²⁰⁶ *Id.* at 613–14.

²⁰⁷ *Id.* at 625 (citations and quotation marks omitted).

in *Dugan*), through third parties, or by orders to right holders.²⁰⁸ Nor could this distinction make any difference as a matter of sense or justice: if the government can defeat property (or any other) constitutional protection of individual liberty merely by requiring a citizen's own assistance in surrendering the liberty in question, then no liberties can be of any value.

Moreover, *Dugan* recognized that the water right is a right to use a flow; thus a "temporary" occupation for certain periods "whenever [the government] sees fit" qualifies as a compensable physical taking—because it is not really a temporary taking at all. This is so because the water right contains at core an inextricable temporal function: it is the right to draw an amount of water through a period of time. If the government temporarily restricts an owner's access to his gold mine, it has not, at the end of that period of temporary restriction, reduced the total amount of gold remaining in the mine.²⁰⁹ If the government temporarily restricts a

²⁰⁸ See *Loretto*, 458 U.S. at 427 & n.5 ("[A] permanent physical occupation of real property" arises as "[t]he one incontestable case for compensation (short of formal expropriation) . . . when the government deliberately brings it about that its agents . . . regularly use, or permanently occupy, space or a thing which theretofore was understood to be under private ownership." (internal quotation marks omitted)); *Int'l Paper Co. v. United States*, 282 U.S. 399, 407 (1931) (holding that compensable taking arises when government issues order curtailing right holder's ability to draw and use water for private purposes); *Pumpelly v. Green Bay Co.*, 80 U.S. 166, 172 (1871) ("It is not necessary that property should be absolutely *taken*, in the narrowest sense of that word, to bring the case within the protection of this constitutional provision. There may be such serious interruption to the common and necessary use of property as will be equivalent to a taking, within the meaning of the Constitution. The backing of water so as to overflow the lands of an individual, or any other superinduced addition of water, earth, sand, or other material or artificial structure placed on land, if done under statutes authorizing it for the public benefit, is such a taking as by the constitutional provision demands compensation."). Also of relevance: the Court particularly objects to physical occupations that forbid private landowners from keeping the public from using their property. See, e.g., *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992); *Kaiser Aetna v. United States*, 444 U.S. 164, 178–79. (1979). It is by use that water-right holders exclude others; thus, forbidding use (and commandeering the water for public uses) explicitly works an occupation that destroys the right holder's ability to exclude. All of this defeats Leshy's claims that the government can avoid physical-taking liability simply by ordering property rights holders not to exercise their property right, or refusing to honor their property right. See Leshy, *supra* note 36, at 2012–13.

²⁰⁹ This is an example of a temporary occupation recognized by the *Loretto* court. *Loretto*, 458 U.S. at 431–32. Notably, the temporary occupation was only "justified by the exigency of war." *Id.* at 432. See also *United States v. Cent. Eureka Mining Co.*, 357 U.S. 155, 168 (1958) ("Thus the WPB made a reasoned decision that, under existing circumstances, the Nation's need was such that the

water right holder's ability to draw his flow of water, however, it has permanently extinguished his ability to take the lost water (unless it replaces that water with water from a separate source at its own expense).²¹⁰ Thus, claims that *Loretto* and physical-taking analysis do not apply to water rights²¹¹ fail because they neither account for the nature of water or the water right, nor consider the water right within the context provided by *Loretto*, *Dugan* and related precedent.

III. PUBLIC POLICY ARGUMENTS FOR VALID COMPENSABLE PROPERTY RIGHTS

The analysis in the previous sections established the invalidity of arguments that western water rights do not merit the status of compensation-protected property rights. Left to be considered is the question of whether the secure legal status of private water

unrestricted use of mining equipment and manpower in gold mines was so wasteful of wartime resources that it must be temporarily suspended. . . . War, particularly in modern times, demands the strict regulation of nearly all resources. It makes demands which otherwise would be insufferable.”). Similarly, a temporary moratorium on building while a government determines what regulatory action to take merely delays the fulsome use of land property; it does not destroy any of the stock of land and does not place the land in uses preferred by the government in the interim. *Tahoe-Sierra Pres. Council v. Tahoe Reg'l Planning Agency*, 535 U.S. 302, 306, 337–38 (2002) (holding that a “moratorium on development imposed during the process of devising a comprehensive land-use plan [does not] constitute[] a *per se* taking of property requiring compensation . . .”); *see also* *Boise Cascade Corp. v. United States*, 296 F.3d 1339, 1349–50 (Fed. Cir. 2002) (holding that a temporary restriction on logging while permit pending, which was not pled to cause deterioration in the stock of timber, “cannot cause a compensable taking”). The proper analogy of water takings to the *Tahoe-Sierra* moratorium would be for the preservation council to have instituted the moratorium—and, at the moratorium's end, seized a third of the private land that had been under the moratorium for use as a wildlife preserve; or opened the whole of the private land to public camping, but allowed the land owners to camp there, too. These actions, of course, would raise physical-taking compensation obligations. *See Lucas*, 505 U.S. at 1018–19.

²¹⁰ This is not an option often considered in the literature with regard to government takings of water. It should, however, present no difficulties, and should be permitted on the same basis as “physical solution” (or right of replacement, or substitute supply) settlements in which junior private users may provide a substitute supply, or improve a senior's “diversion, distribution, and use at a junior's expense.” Harrison C. Dunning, *The ‘Physical Solution’ in Western Water Law*, 57 U. COLO. L. REV. 445, 447, 482 (1986). *See also* 2 WATERS AND WATER RIGHTS, *supra* note 5, §§ 12.02(e) at 12-61 to 12-63, 14.04(c)(3) at 14-57 to 14-60.

²¹¹ *See supra* note 193.

rights presents a cause for celebration. Scholars have variously asserted that considerations arising from the nature of water, the necessities of environmental protection, and the obligations of justice disfavor private water rights. As will be demonstrated below, however, public policy favors not only respecting western water rights, but strengthening and expanding the western water-right system.

A. *The Nature of Water*

Many arguments against private property interests in water arise from the claim that water differs uniquely from all other substances in ways that render private rights in water fundamentally improper or revocable without compensation. In fact, though, water is not fundamentally different than non-controversially privatizable goods.

The most fundamental claim of arguments that water is uniquely different than other goods is that water is specially necessary to human and other life.²¹² This, however, simply is not true. Human life requires space in which to live, food, shelter, raiment, energy, and other needs as surely as it requires water. Most obviously, it requires land as much as water, for living space and for most food, shelter, clothing and energy production, and land, of course, is entirely amenable to private ownership.²¹³ Human life also requires all of the other necessities listed above. And while there are, in most instances, multiple sources of energy or food or shelter, so that they are intra-categorically fungible, the categories of need are not themselves fungible, and the whole panoply of goods available for provision of the need category are privatizable and privately owned. Similarly, while there is only

²¹² See, e.g., Cohen, *supra* note 38, at 1819, 1859–60.

²¹³ Multiple-story dwellings hardly negate the need for land on which to live, but merely demonstrate *efficient use* of a privately owned good: the multiple stories still rest on a foundation of land. Similarly, while not every individual must own or have access to land for food to be generated, the land on which food is generated is privately owned, the food itself is privately owned, and consumers purchase it through markets. See Myrl L. Duncan, *Reconceiving the Bundle of Sticks: Land as a Community-Based Resource*, 32 ENVTL. L. 773, 798 (2002). Support is sometimes provided to assist needy consumers, but such assistance—and the need for food itself—hardly eviscerates the whole property structure, or the possibility of property rights in land or food. See, e.g., Robert Glennon, *Water Scarcity, Marketing, and Privatization*, 83 TEX. L. REV. 1873, 1896 (2005) (“[R]ecognizing a human right to water does not resolve the issue of privatization; indeed, it begs the question.”).

one good (water) to satisfy the relevant need category (water), there are multiple sources of water just as there are multiple sources of shelter, clothing and fuel.

Water is in certain senses fungible, reusable, mobile, and not entirely predictable.²¹⁴ Individual molecules of water, after use, will flow away,²¹⁵ or will evaporate and rain down again, and then be available for reuse somewhere else. But this difference between water and more solid goods is accounted for in the usufructuary property-right system that appends to water. As noted above, ownership of individual molecules of water would do little good. But a property right to use a flow of water accounts for fungibility and reusability. Similarly, the right to use a flow of water is in a sense renewable, in that the flow will continue, subject to contingencies of weather and other natural processes. But this renewability differentiates water in no way from other private and privatizable renewable resources, such as timber, which with proper management regenerate, subject to natural vagaries such as weather.

Water, too, does have a role to play as “part of a larger entity—the earth.”²¹⁶ It is an important part of the global ecosystem. So, of course, are all other products and constituents of the earth, rather by definition. All resources, like water, are “part of our common capital, from which we sustain our limited capacity to furnish the means for our common survival and well-being.”²¹⁷ Virtually all of these resources, though, have been subjected to private ownership and are amenable to privatization. Water is not, in this respect or for this reason, meaningfully different. To the extent that this argument has any power, it is to suggest that water is particularly unamenable to private control because water is a particularly vital common capital stock. But this logic would necessarily advocate stripping private control from entities in proportion to their centrality as “common capital” (presumably

²¹⁴ See Denise Lach, Helen Ingram & Steve Rayner, *Maintaining the Status Quo: How Institutional Norms and Practices Create Conservative Water Organizations*, 83 TEX. L. REV. 2027, 2030 (2005) (describing water as unpredictable); Laitos, *supra* note 142, at 905 (describing water as storable and mobile); Leshy, *supra* note 36, at 1995 (describing water rights as “mobile, fungible and reusable”).

²¹⁵ See Leshy, *supra* note 36, at 1995; Rose, *supra* note 41, at 271.

²¹⁶ Sax, *Constitution*, *supra* note 16, at 281.

²¹⁷ *Id.* at 282.

their value as capital to human development as well as to ecological function) and their effect on the earth. First among these would be land—and people themselves.

Beyond all these concrete assertions lies a set of claims about water as an inherently and necessarily natural thing, and concomitant claims that property rights may not arise in water because of this inherent naturalness.²¹⁸ All things, though, were “natural,” in the sense of being un-touched by human hands or minds (though it is not clear why or how humans alone among the inhabitants of the earth can or should be treated as “unnatural”²¹⁹) at one point—water is not unique in this respect. As with most of those other initially natural goods, water has been removed from its “natural” condition by the efforts of man on a massive scale—particularly, in the United States, in the very lands in which western water law holds sway.

Water, then, is not uniquely “natural.” Moreover, like other once-natural goods, water simply cannot be returned, wholesale, to its “natural” state (whatever that might mean at this point, after human activity has shaped the location and condition of the water, leaving behind forever any notion of what condition would have obtained to the water absent the human interactions²²⁰) without effectively abandoning human occupation of the areas in question.²²¹ Some scholars may dream of achieving ecological paradise by preserving “the bulk of” the water in its natural

²¹⁸ See, e.g., Cohen, *supra* note 38, at 1832–33.

²¹⁹ See, e.g., Terry W. Frazier, *Protecting Ecological Integrity Within the Balancing Function of Property Law*, 28 ENVTL. L. 53, 103–04 (1998) (arguing that people must be treated “as members of the biological community,” not outsiders whose actions are necessarily deviations from biological truth).

²²⁰ Cf. Frazier, *supra* note 219, at 101–05 (recognizing that “nature” is no stasis to be preserved in one picturesque moment, but naturally morphs, and explaining that “[b]iologists now know that . . . [e]cosystems are dynamic and constantly change in response to natural and man-made disturbances. Natural disturbances may even be good for ecosystems”).

²²¹ See, e.g., Glennon, *supra* note 213, at 1875 (“Increased demands result from one simple fact: population growth.”); *id.* at 1882 (detailing the demands of continuing exponential growth); Daniel McCool, *The River Commons: A New Era in U.S. Water Policy*, 83 TEX. L. REV. 1903, 1903–05, 1908–11, 1917–18 (2005) (detailing massive human intrusions into once-“natural” conditions in the West); A. Dan Tarlock & Sarah B. Van de Wetering, *Western Growth and Sustainable Water Use: If There Are No “Natural Limits,” Should We Worry About Water Supplies*, 27 PUB. LAND & RES. L. REV. 33, 41–47 (2006) (recognizing inevitability of permanent management, possibly enhanced by potential climate-change scenarios).

condition, “while permitting very modest uses at the fringes, as it were, compatible with the preservation of the whole.”²²² This dream, though, cannot be fulfilled, nor even approximated. Resources may permit the preservation of some land and waterscapes as, essentially, museum-piece replicas of the natural state of a landscape at some given time, but there is no way to avoid fundamental alterations from the patterns of flow that would exist absent human occupation of the western states. Accepting this fact requires accepting the fact that water will be treated as a commodity; all that remains is the opportunity to use some of that commodity to recreate or exemplify “natural” conditions. But whether that goal is achieved by collective, communal, private, or mixed ownership and control methods has nothing to do with the “naturalness” of water, and nothing about the once-natural state of water dictates the ownership and control regime that should now apply to water.²²³

In short, then, to the extent that water is meaningfully different from other goods, the difference has been accounted for in the structure of property rights in water—most notably in the usufructuary nature of the property right and in the navigation servitude that applies to waters insofar as those waters provide the stuff of public thoroughfares.²²⁴ Because this uniqueness has already been accounted for, it cannot even in theory provide, additionally, an excuse for eviscerating the very property system that has taken account of the differences. To the extent that water is not different from other goods, meanwhile, the argument that water rights can and should be revoked without compensation is nothing more than an entering-wedge argument that all property rights—and, inescapably, all human rights, given the place of people in the ecosystem and the prevalence of ecology-based

²²² Rose, *supra* note 28, at 360. See also Blumm & Schwartz, *supra* note 36, at 711–12 (praising a compensation-stripping public trust doctrine as incorporating a “feasibility standard” that “[u]ltimately . . . means that trust uses must be accommodated eventually; it means that public rights must be fulfilled”).

²²³ See, e.g., Glennon, *supra* note 213, at 1873–74.

²²⁴ Waterways, as has been thoroughly discussed, have served a unique function through much of history, though less so today, as common highways of highest efficiency and value. Cf. Epstein, *supra* note 41, at 420 (stating that the use of waterways as highways is “inherently public,” and it is impossible for society to be better off without this use available).

arguments in the mix—are liable to the same treatment.²²⁵

B. *Ecology & Efficiency*

Returning water, in the whole or the main, to its “natural” flows in the western states is a practical impossibility. So too is removing human oversight and control from the distribution of water in these areas. It is possible, however, to increase the amount of water dedicated to ecologically beneficial and natural-state-regarding uses. Accepting this as a valid goal does not, however, determine which methods of water control or forms of water law would best promote ecological dedication and use. A loud chorus insists—or simply presumes—that the collective form of control would best serve, and so advocates shifting to such control (without payment of compensation to private rights holders) to maximize environmental dedication.²²⁶ The chorus, though, sings the wrong tune. In fact, water rights are essential to maximizing ecologically beneficial use of water.

The primary reason for this is simple. The advantage of compensation-denial and water-right destruction, from the vantage of ecological-use supporters, is that it would allow the government to seize property-protected waters for ecological uses without having to pay anything. No doubt this would be the result in the short run: water would flow away from private right holders to ecological purposes faster than it would if water rights had to be condemned and purchased through eminent domain.

The short-run advantages of this strategy, however, would

²²⁵ See, e.g., Duncan, *supra* note 213, at 796–807. Cf. Epstein, *supra* note 41, at 412 n.1 (“The newer approach to the public trust doctrine is simply another unfortunate effort to create instability in private rights, in harmony with the modern efforts to eviscerate the eminent domain clause.”); Smith & Sweeney, *supra* note 36, at 325 (“If a state merely needs a [public] interest to expand the limits of the [public] trust . . . what is to prevent a state from expanding the trust to avoid a takings claim in any situation?”). *Contra* Sax 1933B, *supra* note 36, at 1452–53 (advocating a general rule allowing uncompensated taking of property).

²²⁶ See, e.g., Grant, *supra* note 20, at 424 & n.13 (cataloging articles in which “[m]any commentators have applauded use of the public trust doctrine to reallocate water from existing appropriations to trust uses without payment of just compensation to the appropriators”); Sax, *Limits of Private Rights*, *supra* note 32, at 473–74 (advocating taking without compensation for ecological purposes simply because “public values have changed”); Barton H. Thompson, Jr., *Water Law as a Pragmatic Exercise: Professor Joseph Sax’s Water Scholarship*, 25 *Ecology L.Q.* 363, 370–71 (1998).

soon be swamped by its longer-term disadvantages. First, the destruction of water rights would also destroy any meaningful way of protecting and preserving the ecological-use status of any water. All water would be in the full control of the government, including water temporarily freed for ecological use. This means, ultimately, that the allocation of water would be an entirely majoritarian determination. History and theory demonstrate that, in part because the majority of public sentiment arises from the ever-burgeoning urban population concentrations, majoritarian control of water resources results in directing water inexpensively toward urban uses.²²⁷ The problem will be exacerbated because destroying water rights will destroy the most effective—and only majority-checking—means of charging a market-related price for the use of water, and thus creating natural incentives to conservation and limits on growth. If water is market priced—something only possible under a rights-based regime—urban growth and use will be checked by increasing prices.²²⁸ If water rights are destroyed, the only charge that will be placed on water use will be the one affixed by government (again, ultimately, by the majority of users). There is virtually no chance that the price set will equal what would be the market price, if there were a market.²²⁹ The longer this condition continues, the more dependent these growing cities will become on under-priced water, the greater the urban usage will be, and the smaller will be the reserve for non-urban uses. While compensation-deniers might assert that “[u]rban users will also have to adopt more efficient

²²⁷ Witness the fact that municipal water suppliers charge only a “cost of service” covering the cost of water delivery, but pay (and charge) nothing for water itself, and that many urban areas in the arid West do not meter water. See Glennon, *supra* note 213, at 1883–84; see generally Cohen, *supra* note 46, at 262 (“[T]he will of the majority is, from a social wealth prospective, quite different from the general interest.”); Harbison, *supra* note 144, at 551–53 (describing the perils of marketless governmental goods distribution); Lach, Ingram & Rayner, *supra* note 214, at 2032–34 (describing institutional rejection of market (or more than minimal) pricing within public water-control agencies); Tarlock & Van de Wetering, *supra* note 221, at 35–39 (detailing priorities and advantages that growth-oriented urban areas enjoy).

²²⁸ Glennon, *supra* note 213, at 1883–84; see also *id.* at 1881–82 (discussing the resistance to municipal effluent re-use arising from “squeamishness”). A functioning market system would overcome such squeamishness by raising the price of non re-used water relative to re-used water. See generally 2 WATERS AND WATER RIGHTS *supra* note 5, § 14.01(b)(2), at 14-09 to 14-20 (providing an overview of the significant scholarly consideration of water markets).

²²⁹ See *infra* Part IV.

methods as demands to stop waste increase,”²³⁰ in reality their strategy will effectively have destroyed the primary mechanisms for fostering efficiency and deterring waste among urban (i.e., majority) users.²³¹

The lack of water rights and of market prices and mechanisms for water would also vastly complicate distribution of water resources to their most efficient ecological uses. Initial questions arise: what are the appropriate ecological or “natural” uses? Tension immediately arises in the western-state context, for instance, between the assertedly eco-friendly desire for dense urban living (to allow for greater “natural spaces”) and the similarly eco-endorsed goal of keeping water use within its watershed of origin.²³² As between similar uses, which will prove the wisest and most efficient allocation of water per improvement to the environment? For example, which waterscapes should be “restored,” and which should be “mined”?²³³ How much water

²³⁰ Sax, *Limits of Private Rights*, *supra* note 32, at 483; *see also* Glennon, *supra* note 213, at 1902.

²³¹ Even compensation-deniers have recognized that effective, full pricing of water is necessary to efficient, non-pollutive use of waters. *See, e.g.*, Johnson, *supra* note 102, at 502. Johnson makes this admission in concert with a lament that “water was made available without cost to appropriators” in the beginning. *Id.* The initial sale price (even were that sale price zero) of the water has nothing to do with the ability to establish full market pricing now, though. The justice-regarding aspects of the objection are considered below.

²³² *See, e.g.*, Sax, *Constitution*, *supra* note 16, at 278 (seeming to privilege less-wasteful out-of-basin uses to “wasteful” in-basin uses, but not unpacking the determination); Tarlock & Van de Wetering, *supra* note 221, at 53–56 (considering the tension). Similar dilemmas arise constantly. For instance, lining the All-American Canal will increase the efficiency of water use, but will do so by stopping seepages that wet other environmentally sensitive areas and by depriving Mexico of the drainage. *See* David J. Guy, *A Model Water Transfer Act for California: An Agricultural Perspective*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL’Y 709, 714 (2008). Similarly, “green” energy (e.g., water power) requires non-“natural” use of resources, such as hydroelectric dams. Merely invoking the mantle of environmental stewardship will not determine which of these courses to favor; measures of value and efficiency are required.

²³³ McCool regrets that “while these [water-control] agencies have gradually moved into river restoration, they have adamantly resisted giving up any of their traditional missions, which caused most of the problems in the first place. Thus, they use federal money to restore some riverine ecosystems while actively doing damage to others.” McCool, *supra* note 221, at 1927. This behavior, though, is unavoidable: even accepting as given that the Bureau of Reclamation’s damming and canal projects “would [never] have been undertaken by the private sector because they made absolutely no economic sense,” Glennon, *supra* note 213, at 1899, or, from a naturalistic point of view, much ecological sense, the fact remains that the population distribution and economic vitality of the West have

should be dedicated to preservation and restoration of given species, and to what level? What other needs should go unfulfilled to achieve these ends, and why? Is it advisable to mandate a natural-state-diminishing regulation in order to increase water conservation? Destroying the means of accurately valuing the water resources to be employed in any given proposal also destroys an important tool in making allocation determinations, and in incentivizing efficient use of those resources.²³⁴ The track record of public entities attempting to achieve efficient and innovative use (of water or any other resources) without market signals and price incentives and discipline is rather dire.²³⁵

Destroying water rights also destroys the incentive for private users to conserve and to invest in efficiency-enhancing technologies. If right holders cannot benefit from these improvements, they have little incentive to make the investment.²³⁶ If right holders cannot even know if they will continue to receive

come to rely on these massive interferences with the natural flow of water, and that the calls on water are multiplying, not declining. It will thus always be necessary to select some favored systems for restoration, and to continue to exploit the rest. Destroying water markets and rights will not obviate this reality; it will just make it harder to determine how best to allocate resources and how to maximize values such as restoration and efficiency.

²³⁴ See, e.g., Cohen, *supra* note 46, at 247 (stating that the value of just compensation is as a metric by which to determine whether public or private ownership of a resource is most efficient).

²³⁵ See, e.g., Reed D. Benson, *So Much Conflict, Yet So Much in Common: Considering the Similarities between Western Water Law and the Endangered Species Act*, 44 NAT. RESOURCES J. 29, 72–73 (2004) (regretting desuetude of “holistic”—but thus gridlock-ensuring—“Park City Principles”); Cohen, *supra* note 46, at 242–43 (stating that increasing communal use, overuse, and scarcity tends toward increasing value arising from privatization); Glennon, *supra* note 213, at 1882. See generally Cohen, *supra* note 38, at 1827 (chronicling the inefficiencies that characterize public water-control agencies); Lach, Ingram & Rayner, *supra* note 214 (same).

²³⁶ See, e.g., Glennon, *supra* note 213, at 1886–88; Grant, *supra* note 20, at 461 (citing *Arizona v. California*, 460 U.S. 605, 620 (1983); *Moyer v. Preston*, 44 P. 845, 847 (Wyo. 1896)); Thompson, *supra* note 226, at 377–79. Cohen notes that “the idea of a piggybank seems to me to be apt as a more general descriptor . . . of the behaviors and norms that are increasingly being called forth from water users These are the multiplicity of actions, each an incremental part of the whole, through which water, rather than being utilized in countless careless-to-profligate ways, can get saved parsimoniously . . . through the thrifty behavior of ordinary folks.” Cohen, *supra* note 38, at 1826. Of course, the spur to piggybank savings is the private and valuable nature of those pennies to the savers, and the improvement to those individuals’ well-being that arises from the savings. The same is the case with water savings.

the water to which their right entitles them, they are, to the extent of the insecurity of the right, actively discouraged from making any water use-related investments at all. Insecurity will, though, encourage water users to withdraw as much water as possible from natural conditions and move it into storage reserves, protecting themselves against the threat of having their access to water revoked. Insecurity and uncertainty are the enemies of increased efficiency for all users.²³⁷

Additionally, the right-destroying strategy will make it impossible for communities, organizations, and individuals to make directed investments in ecological uses of water. Without water rights, capital cannot be marshaled for dedicated-use water purposes, nor can restricted-purpose funding partnerships arise. Rather, only the distinctly second-best option of using capital to lobby government to continue such uses, as against the calls from vote-rich urban areas, will be available.

If water rights continue to be respected, in contrast, such rights can be assigned to ecologically protective purposes, organizations, and owners. Once this assignment has been made, the rights will work to protect the water so assigned from being commandeered for other uses, just as they protect private right holders. And the continuing value-structure embedded in the right-ownership regime will foster efficient use by all users—including ecological users. Eminent domain permits government to “control . . . hold-out positions, excessive cost impositions, and other rent-seeking behaviors.”²³⁸ It permits government to allocate as much water to ecological (or any other) uses as the public is willing to finance. It simply requires paying the just-compensation check.

In short, if the western water-law system did not already exist, those truly interested in maximizing allocation of water to ecologically beneficial purposes would be wise to invent such a system. It would not look exactly like the current system, but insofar as it differed it would favor stronger and more-easily

²³⁷ See, e.g., Cohen, *supra* note 46, at 275 (stating that modern public trust theory “undercuts . . . secure and predictable rights in property”). Cf. Rose, *supra* note 41, at 273 (“Increasing congestion in common resources . . . makes it worth the cost and effort to define property rights more explicitly.”).

²³⁸ Cohen, *supra* note 38, at 1855. Cohen claims that avoidance of such problems requires “a strong governmental role,” *id.*, but eminent domain provides that public role.

alienable water rights, not an absence of rights.²³⁹ And, in fact, this may be exactly the situation that eastern states find themselves in as water scarcity such as the West has faced for a century and a half begins to trouble them.

C. *Justice & Social Cohesion*

Denying compensation for water-rights takings would, as noted, result in the post hoc abridgement of a constitutionally protected right, establishing the precedent for treating other rights similarly.²⁴⁰ Neither justice nor wisdom endorse thus weakening the structure of constitutional protections. Even ignoring the larger constitutional implications, however, compensation denial does not pass the test of justice. Further, by setting the interests of property owners at odds with the goals of environmental protection, it sows needless social discord and creates unnecessary barriers to the achievement of both sets of interests.

As compensation-deniers have recognized, the mandate of justice that animates the just-compensation obligation is this: the general public must pay for benefits running to it; it must not be permitted to thrust the burden of paying for such benefits on hapless individuals or groups.²⁴¹ Yet attempts to take water rights without compensation to achieve the public good of environmental protection straightforwardly violate this maxim of justice.²⁴²

Some objections to compensation plainly misunderstand the

²³⁹ See, e.g., Cohen, *supra* note 38, at 1840 (critiquing use-or-lose aspect of rights structure); Rose, *supra* note 41, at 295–96. See generally 2 WATERS AND WATER RIGHTS *supra* note 5, § 14.01(b)(2)(A), at 14-14 (acknowledging that “water marketing has been an integral part of the doctrine since its inception and will assist in adapting the doctrine to meet new social values”). See also *infra* Part IV for reform suggestions.

²⁴⁰ See *supra* Part II.

²⁴¹ See, e.g., Rose, *supra* note 41, at 274–75, 295–96; Sax, *Natural Resource Law*, *supra* note 24, at 479; see also *Armstrong v. United States*, 364 U.S. 40, 49 (1960); *United States v. Willow River Power Co.*, 324 U.S. 499, 502 (1945).

²⁴² See, e.g., Cohen, *supra* note 38, at 1837 (taking water rights without compensation is “a *damnum absque injuria* outcome that I freely translate as: too bad, so sad”); Huffman, *supra* note 36, at 572 (“Why not pay? . . . [T]he only explanation is that it is expensive to pay and we would rather get our public benefits for nothing.”). But see Joseph L. Sax, *A Public Lecture by Joseph L. Sax, Environment and Its Mortal Enemy: The Rise and Decline of the Property Rights Movement*, 28 U. HAW. L. REV. 7, 13 (2005) (praising California’s generosity for being “willing to bear part of the burden of protecting listed species in the [Salton] Sea, rather than putting the economic burden all on irrigators.” (emphasis added)).

concept. It is not true, for instance, that if takings of water rights require compensation, “we would all be left more impoverished.”²⁴³ When a government takes a good and pays compensation, it should be paying as compensation the actual value of the property right taken. Hence both the government and the individual should, at the end of the transaction, be in the same economic position as before. The government’s motivation for initiating the taking, though, should be that the public will gain a higher aggregate value from ownership of the property right than the private owner could have gained.²⁴⁴ If the government is correct, then the transaction makes both the previous property holder and the public better off, because all members of the public share the additional benefit flowing from the publicness of the property right. Only if the transaction is one that the government should never have initiated would it be possible for the public to be “impoverished” as a result—and if this occurs, the public should bear the loss, for it is the public’s representative (i.e., the government) that demanded the wrong-headed swap. If compensation is not paid, on the other hand, the public may gain a windfall from the expropriation (just as does someone who leaves a restaurant before paying the check), but the right-holder will be impoverished; and all individuals will be impoverished also to the extent that their own property has been rendered that much more susceptible to confiscation.

Similar misunderstanding appears in the utilitarian argument that compensation should and can be denied because “what would happen is that the government would usually not pay; instead, it would regulate less.”²⁴⁵ This may well be true. But it is

²⁴³ Leshy, *supra* note 36, at 2024.

²⁴⁴ See Epstein, *supra* note 41, at 418.

²⁴⁵ Leshy, *supra* note 36, at 2024. Leshy goes on to assert that “[t]he government simply cannot raise the money that would be required to compensate water right holders for limiting the exercise of their water rights—especially in this era when many people, including many of the country’s political leaders, seem to regard taxation for public programs as a form of theft.” *Id.* This is a doubly-odd position. Though compensation-deniers often attempt to render their proposals more palatable by suggesting that the water to be taken will be “marginal,” see *id.* at 2017, 2023, here Leshy seemingly envisions massive takings, else paying compensation would not entail such massive expenditures. Additionally, Leshy argues that since the public does not want to pay for water rights, the government should on the public’s behalf take the rights outright, without compensation—and that a public that thinks that *taxation* is theft will have no objection to having *outright theft* undertaken in their name by their

consonant—not discordant—with justice to require that society pay for what it gets, and get only what it pays for. This is, in fact, simply a restatement of the principle of justice at the core of eminent domain.

The injustice of non-compensation is challenged by arguments that rights holders did not pay enough for the water rights to begin with, or that they are earning windfall profits from the additional increment of value added to their land by the availability of water, or that their use of water consistent with the bargain struck in their water rights represents, by modern lights, immoral waste.²⁴⁶ The terms of property rights, however, were set by the government (i.e., the public).²⁴⁷ In response to these terms, individuals undertook the efforts envisaged by the government, met their side of the deal, and received their water rights. As *Illinois Central* rightly teaches, the minimum obligation of justice for a government that insists on revoking a previously negotiated bargain is compensation to make good all expenses arising from reliance on the bargain²⁴⁸—which, given the longevity of most of these water rights, would be significant compensation indeed. Properly, justice requires full market compensation for any alterations of the bargain at the base of the property right.²⁴⁹ It will not permit uncompensated taking and the impoverishment of rights holders as their reward for trusting the honor and veracity of their

government. If this means anything, it seems to mean that Leshy expects that the public will be sufficiently confused by the uncompensated-takings scheme that it will not realize what has occurred in its name in time to forbid it.

²⁴⁶ See, e.g., Glennon, *supra* note 213, at 1899 (noting that farmers' payments for their water rights did not cover the costs of provision, and were set lower than were theoretically justified as part of the effort to "allur[e] . . . prospective farmers and irrigation districts"); Johnson, *supra* note 102, at 502 ("One reason the water quality problem has become so serious is because water was made available without cost to appropriators. This encouraged, and continues to encourage, profligate use of this valuable resource . . ."); Sax, *Limits of Private Rights*, *supra* note 32, at 483 ("Western water users have benefited from a long period of subsidy in the form of public projects to supply them with new supplies to meet each new demand."); Sax, *Constitution*, *supra* note 16, at 278 ("[T]here is a price paid in distributive justice for greasing the wheels of reallocation. . . . That price is the concession of a windfall to the least efficient appropriators.").

²⁴⁷ 2 WATERS AND WATER RIGHTS *supra* note 5, § 14.01(b)(1), at 14-7; Glennon, *supra* note 213, at 1899; Thomas J. Graff & David Yardas, *Reforming Western Water Policy: Markets and Regulation*, 12 NAT. RESOURCES & ENV'T. 165 (1998) (detailing the bargain).

²⁴⁸ See *supra* text accompanying note 89.

²⁴⁹ See generally Cohen, *supra* note 46, at 261–62.

governments.²⁵⁰

In a similar vein, the amounts of money that federal and state governments currently spend on operation and maintenance of water-delivery facilities²⁵¹ do not justify taking water rights (be they of property or contract) without compensation. The government elects to bear those operation and maintenance costs; it may elect to forgo them. If it does, then this savings will provide a ready-made pool of funds to compensate rights holders for any rights lost as a result. Such are the mechanisms of eminent domain: the government may act; the government must pay. Justice requires both sides of that equation.²⁵²

No justification arises, either, from the prospective difficulty in establishing the necessary amount of just compensation due for water-right takings.²⁵³ In fact, the idea turns standard American notions of justice on their heads. When dealing with constitutional rights, the Court has instructed, government functions may be proscribed, or burdens on government occasioned, in order to ensure that constitutional rights are not circumscribed.²⁵⁴ Here, in

²⁵⁰ Similarly improvident are suggestions that the whole class of water rights may be stripped of takings compensation protection because some rights may long ago have been obtained by or to benefit fraud. *Cf.* Glennon, *supra* note 213, at 1899. An entire class of rights may not be extinguished because some right holders may have gained them fraudulently: the implications for citizenship, voting rights, criminal-defense rights, and others are appalling, and illustrate the fallacy of the notion. Individual acts of fraud must be addressed by actions to revoke the associated water rights (and perhaps to pursue criminal sanctions) within the statutory period for pursuing such actions. Later property expropriation based on asserted but untested claims of misfeasance would violate fundamental tenants of civil and criminal justice.

²⁵¹ *See, e.g.,* McCool, *supra* note 221, at 1905–08, 1912–16.

²⁵² The “subsidies” argument is often part of a larger assertion that water rights are generally held by rapacious, politically powerful agricultural concerns. *See, e.g.,* Leshy, *supra* note 36, at 2025. Even accepting the contention *arguendo*, it provides no justice-based justification for uncompensated taking of water rights. If *all* water-right holders have massive, nefarious political pull, their power will ensure that no water rights are taken, mooted the point. If less-than-all right holders are privileged, the powerful will take care of themselves, while the non-powerful will suffer uncompensated takings. Justice does not permit stripping rights and property only from the innocent and powerless. If malevolent political power exists, it must be countered directly, not by destroying a class of constitutional protection.

²⁵³ *See* Leshy, *supra* note 36, at 2006 (citing difficulty of valuing claims, “tempt[ation] to assume that the plaintiff’s water rights are valid despite the uncertainty, in which case the government could end up compensating many holders of defective water rights,” as arguments against compensation).

²⁵⁴ *See, e.g.,* Simon & Schuster, Inc. v. N.Y. State Crime Victims Bd., 502

contrast, the argument amounts to a claim that a constitutional right should be eliminated because it would prove wearisome for the government to respect it. This move is akin to advocating the eradication of speech protections because some speech might create problems for the public authorities, and some of it might go too far.

Does justice require that the community in which a water right has been employed exercise veto control over it at the expense of the right holder?²⁵⁵ Professor Thompson has extensively considered the practical and theoretical problems that undermine such a claim.²⁵⁶ Here it is sufficient to note that communities enjoy and should enjoy, under eminent-domain authority, the power to force-purchase water rights, so that all water necessary to a community's continuity can be secured at the community's discretion. If a community needs financial assistance, it can apply to state or federal authorities. But it cannot in justice violate citizens' constitutional rights to achieve its community interests; nor could it ever be expected that such "community interests" would be coherent, constrained, or extricable from competing community interests if they could be funded "for free" by the violation of individual rights.

In fact, to the extent that communities and community interests are considered, those interests support compensable water rights. Making the issue of compensation payment central to the struggle for an improved environment serves no long-term purpose, and has the primary social effect of setting environmentalists and property holders at odds, with property holders (rightly, given the content of the compensation-denying efforts) fearing that environmental advances will necessarily come at the expense of their well-being and prosperity (rather than that

U.S. 105, 115 (1991) ("A statute is presumptively inconsistent with the First Amendment if it imposes a financial burden on speakers because of the content of their speech."); *Deutch v. United States*, 367 U.S. 456, 467-68 (1961) (describing burdens on governmental conduct arising from presumption of innocence in criminal proceedings).

²⁵⁵ See, e.g., Joseph L. Sax, *Understanding Transfers: Community Rights and the Privatization of Water*, 1 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 13, 13 (1994).

²⁵⁶ See Thompson, *supra* note 226, at 367-68, 379-83; cf. Glennon, *supra* note 213, at 1878-79 (discussing economic benefits running to communities from dam removal).

of the general public or of environmentalists themselves).²⁵⁷ Some leaders of the environmentalist movement have recognized that creating this dynamic will only propagate injustice and retard ecologically beneficial efforts.²⁵⁸ Where the threat of expropriation is removed, voluntary cooperation and interaction between environmental and property interests can flourish to the benefit of both.²⁵⁹

IV. ECOLOGICAL-USES WATER TRUSTS

Water rights are real and are constitutionally subject to just-compensation protections when taken. No doctrine, maxim, or other source of law, ancient or modern, can coherently or legitimately challenge this fact. Nor would it be wise, just, or justified to deny compensation in aid of environmental protection even if such a move were possible. This recognition leads to the challenge of finding a reform agenda that accepts and attempts to take advantage of compensation-protected water rights while advancing legitimate environmental-protection interests. While explicating a comprehensive agenda—one that would deal fully with such important issues as junior rights, groundwater rights, and myriad related issues—is beyond the scope of this article, a modest outline of suggested reform follows.

First, states must explicitly reject the compensation-denying approach. No good can come from retaining the rhetorical position, but much ill: so long as the threat of uncompensated takings shadows rights holders, it will discourage investments in water-conserving, waste-reducing, and efficiency-enhancing technologies. It will hamper environmental-protection proponents'

²⁵⁷ See, e.g., James W. Ely, Jr., *Property Rights and Environmental Regulation: The Case for Compensation*, 28 HARV. J. L. & PUB. POL'Y 51 (2004) (describing such effects).

²⁵⁸ See, e.g., Frazier, *supra* note 219 *passim*.

²⁵⁹ See, e.g., Bonnie G. Colby & Tamra Pearson d'Estrée, *Evaluating Market Transactions, Litigation, and Regulation as Tools for Implementing Environmental Restoration*, 42 ARIZ. L. REV. 381 *passim* (2000); Ely, *supra* note 257. Colby asserts that some "compulsion" is necessary to "requir[e] landowners and water users to assist in restoration" and "to come to the negotiating table." Colby & d'Estrée, *supra*, at 385–86. But eminent-domain authority (designedly) provides the spur to negotiation and the trump against holdouts. It thus provides as much potential compulsion as is required. Cf. Thompson, *supra* note 226, at 372–74 (recognizing that compensation-denying strategies have not resulted in much actual progress, supporting need for respect for property rights to achieve environmental ends).

needed recognition that environmental good, like other goods, must be paid for.²⁶⁰ And it will continue to dampen the spirit of ecological-value-regarding innovation and generosity that has been shown to animate rights holders when not threatened with expropriation.²⁶¹

Next, states should incorporate, as some already have,²⁶² environmental-impact review of future water-right applications (including applications by municipal water systems), to determine *ex ante* whether the state can “afford” to sell or grant the water rights, or whether instead the rights must be set aside for ecological uses—recognizing that once the rights have been granted, they will have to be bought back or foregone. Further, laggard states that have not yet fully recognized in-stream uses as beneficial should do so, thus fully clearing the way for purchase and ownership of water rights dedicated to such use.

To make rights more fully alienable, water markets more efficient, and the cost of procuring water more reflective of actual fluctuating value and scarcity, states should liberalize the laws applying to water rights, permitting rights holders to negotiate for elimination of restrictions on alienation.²⁶³ Oregon made an effort along these lines in the 1980s, but without notable success in

²⁶⁰ See, e.g., Thompson, *supra* note 226, at 374 n.53 (“The public . . . might balk at paying for a good (e.g., instream flows) to which it believes it already has a right.”).

²⁶¹ See, e.g., Ely, *supra* note 257.

²⁶² See, e.g., Douglas L. Grant, *Two Models of Public Interest Review of Water Allocation in the West*, 9 U. DENV. WATER L. REV. 485, 488–89 (2006) (discussing review options and needs).

²⁶³ Meaningful reform would require concentrating all of the relevant alienation-negotiation authority in some set of hands, be it water districts or users, with proper protection and/or compensation for the dis-intermediated parties, to the extent of their valid property or contract interests. See, e.g., 2 WATERS AND WATER RIGHTS *supra* note 5, §§ 14.01(b)(2), 14.02. Similarly, junior users with valid claims that are lost because seniors have alienated the relevant water flow will require compensation for the actual right that the juniors have lost. Whether the state or the senior would provide that compensation would depend on the terms agreed between the state and the senior, and the junior’s role in negotiations. Cf. *Colorado Springs v. Yust*, 249 P.2d 151 (Colo. 1952); *Tanner v. Humphreys*, 48 P.2d 484 (Utah 1935) (permitting senior appropriator to alienate water upon mitigation to protect valid junior rights). It would also require decreasing, so far as possible, administrative hurdles to smooth market function. See, e.g., 2 WATERS AND WATER RIGHTS, *supra* note 5, §§ 14.01(b)(2), 14.02, 14.04(b), 14.04(d)(3). Some states have begun efforts in that direction. See, e.g., IDAHO CODE ANN. § 42-223; MONT. CODE ANN. § 85-2-402 (1979); WATER CODE § 11.002(4).

tempting water right holders to purchase expanded rights.²⁶⁴ The Oregon statute demonstrated some notable flaws, however. Most importantly, it did not allow the final cost of right liberalization to be set by negotiation, but rather set a default of 25 percent of the pre-liberalization water right—a figure that, as experience proved, was too high to entice right holders.²⁶⁵ Additionally, Oregon's act did nothing to reassure right holders that the water they retained would not be taken by various compensation-denying measures,²⁶⁶ thus discouraging investment in conservation technologies generally. A later effort by Washington State rectified one of these problems by allowing negotiation between the state and right holders, but the initiative was restricted merely to trading state funds for conservation measures for delivery to the state of the right to some or all of the conserved water, thus needlessly limiting available options and constraining opportunities for mutually beneficial exchange.²⁶⁷ These new statutes should allow open bargaining between right holders and the state for purposes of right liberalization, and should permit payment for such liberalization in either water or cash.

States and the federal government²⁶⁸ should establish

²⁶⁴ See OR. REV. STAT. §§ 537.455–.500 (2007); Thompson, *supra* note 226, at 378–79.

²⁶⁵ Harbison, *supra* note 144, at 561; Thompson, *supra* note 226, at 278–79.

²⁶⁶ In fact, Sax praised Oregon's continuing ability to expropriate water after the statute's enactment, and urged it to keep such options available. See Sax, *Constitution*, *supra* note 16, at 277–78. Sax suggested that “waste enforcement may be needed even to induce ‘voluntary’ conservation and sale,” *id.*, but this misstates the situation. Rather, the background threat of compensation-denial plus an excessive price for liberalizing property rights will deter investment in water-conserving technologies that would free water for transfer, and will make the transfer economically unattractive.

²⁶⁷ See generally WASH. REV. CODE ANN. § 90.42 (West 2004).

²⁶⁸ If the federal government wishes to enforce environmental mandates that require taking water rights (instead of merely regulating the use of water rights, see *supra* Part I.E.2 (distinguishing takings from regulations), then the federal government, rather than the states or private individuals, should pay the compensation. Establishment of a federal EUWT would go far toward internalizing some of the costs of federal environmental protection, and reduce the unfunded mandates at the heart of these programs. This would alleviate in part some of the imbalances that make federal environmental law so problematic in many western jurisdictions (*e.g.*, high number of specialized and endangered species in West, additional relative importance of water necessarily dedicated to environmental uses, etc.). See, *e.g.*, Bruce Babbitt, *The Public Interest in Western Water*, 23 ENVTL. L. 933, 939–40 (1993) (detailing process by which minor species arose in the West because of limited, discrete water supplies).

ecological use water trusts (EUWTs). These quasi-public trusts would serve as the repository of water rights reserved or procured for ecological uses. Transferring such water rights to these trusts would remove them from the general pool of water available for non-ecological uses and place them beyond the reach of grasping municipal and other uses as scarcity increases. EUWT rights, like private rights, would enjoy taking-compensation protection, and thus would not be available for majoritarian commandeering (as a means of avoiding market-price payment for water).²⁶⁹ As a consequence, ecological uses would be protected, while non-ecological use water prices would take into account the scarcity appropriate to the entire available pool of water less EUWT water.

The EUWTs or coordinate agencies should manage the ecological uses of waters as well. The responsible organization should be provided with the power to negotiate with right holders for the liberalization described above, and to collect the proceeds of these transactions; to buy and sell water rights (including conservation easements or other efficiently contoured rights²⁷⁰) with regard to the maximization of efficient ecological use of available EUWT resources; to condemn and pay for EUWT waters where necessary; and to assign water rights for ecological purposes. This would introduce pricing, and thus efficiency, into the evaluation of potential ecological uses. The trust management would employ cost metrics and pricing discipline to evaluate the best available uses for the available stocks of reserved water, and would have incentives to assign waters to proposed projects that made efficient and careful use of trust waters, getting the most environmental value per unit of water. The incentive would also

Where Bureau of Reclamation contracts between states and the federal government transferred water interests to the federal government in exchange for undertaking various engineering processes, then such contracts may mitigate federal obligations, but may also create alternative obligations in the federal government (such as continued maintenance of the facilities) derogation from which would itself require compensation.

²⁶⁹ Washington State has created a “trust water rights program,” but it includes, largely without differentiation, water procured for all beneficial purposes (including municipal uses), and permits trust-water release for all such purposes. See WASH. REV. CODE ANN. §§ 90.42.005(2)(b), .005(2)(d), .030(1) (West 2004). Reservations are only possible for in-stream uses, and only at the instigation of the conveyor. See *id.* at § 90.42.080.

²⁷⁰ See, e.g., Mary Ann King & Sally K. Fairfax, *Beyond Bucks and Acres: Land Acquisition and Water*, 83 TEX. L. REV. 1941, 1982 (2005) (referring to conservation easements).

arise for the trust to negotiate wisely with right holders (or, alternatively, wisely to select water for eminent-domain condemnation) to secure the most cost-effective supplies of water to achieve ecological purposes, rather than employing inefficient, over-protective, and therefore highly expensive standards.²⁷¹

Funding to secure ecological-use waters could come from a variety of sources. A primary source would be the treasury. General funds, though, could be supplemented in a number of ways that have been alluded to above. Funds (or in-kind water stocks) would be generated from right-liberalization agreements with water-right holders; these revenues could then be dedicated to ecological-water purchases or uses. Savings—in the form of unspent operation, management, and related fees—could be generated by de-commissioning particularly inefficient or environmentally problematic water-control facilities.²⁷² These should likewise be reserved: first, for the payment of compensation to any whose property or contract rights in water were injured by the de-commissioning decision; second, for EUWT purposes. Savings could also arise from slashing production and price subsidies to inefficient and water-intensive agricultural production.²⁷³ The savings could go to EUWT purposes, while reducing the subsidies would by itself release water from inefficient current uses by eliminating the reward for such use. All of these sources of revenue can greatly reduce the cost to the fisc of doing justice to property-rights holders while benefiting ecological interests.

Establishment of EUWTs will also allow for easier coordination, cooperation, and cross-subsidization between governments and private or subsidiary-government interests. Private individuals, non-profit organizations, and local governments could all offer dedicated subsidies for favored EUWT projects, secure that their contribution would remain restricted—whether within the general EUWT or by establishment of

²⁷¹ See *supra* note 243 and accompanying text. See also Sax, *Reportorial Fragment*, *supra* note 127, at 2378 (“The core of today’s environmental law . . . has no relatively clear objective limits.”).

²⁷² See, e.g., Glennon, *supra* note 213, at 1878–79, 1899; McCool, *supra* note 221, at 1905–06, 1912–16 (recounting subsidies and operations and maintenance expenses, and observing that “America does not have a water crisis; it has a subsidized agriculture crisis”).

²⁷³ *Supra* note 272.

individual trusts dedicated to the specific purpose at hand. EUWT managers could also stimulate such investment by offering matching-fund opportunities to communities and private interests. This flexibility would allow general EUWT resources to be put to maximum beneficial ecological use.²⁷⁴

CONCLUSION

Western water rights do not hold any higher position than other property rights, but neither do they occupy an inferior position. Eminent domain likewise enjoys the same stature and authority as other constitutional protections. Neither any public trust doctrine nor any other constitutional, statutory, or common-law provision works to rob water property rights of their constitutional eminent-domain protections. Regulation of water rights is permissible; takings of water rights are properly analyzed under the physical-takings methodology.

Environmental interests are not endangered by the solidity and compensation-protection of western water rights. In fact, ecological interests will be preserved and advanced by making peace with, and then looking to take advantage of and even to strengthen, western water regimes and private rights in water.

²⁷⁴ See, e.g., Benson, *supra* note 235, at 36, 67 (discussing need for states to recognize private in-stream rights); King & Fairfax, *supra* note 270, at 1982 (describing difficulties of securing dedicated water rights under current regimes); Klein, *supra* note 1, at 378 (same).