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A New Water Law Vista: Rooting the Public Trust Doctrine in the **Courts**

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A NEW WATER LAW VISTA: ROOTING THE PUBLIC TRUST DOCTRINE IN THE COURTS

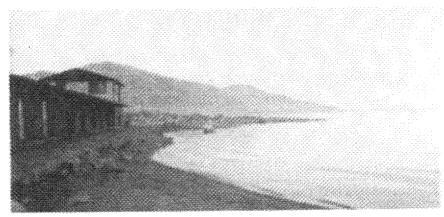
Joseph Regalia^I

TABLE OF CONTENTS

Ta	BLE OF CONTENTS
I.	A PUBLIC TRUST BOOTCAMP
II.	SOME STATES HAVE EMBRACED THEIR TRUST OBLIGATIONS TO MEET EVOLVING
	THREATS TO WATER RESOURCES; SOME HAVE SHED THEIR DUTIES COMPLETELY 12
	A. We are in a water crisis and adaptive, aggressive action is needed to protect
	precious water resources, especially in the west
	B. Many states have shed or cut their public trust duties
	C. These gaps in the state public trust compound the shortcoming in water
	management policy generally
III.	THE SOURCE AND DEFINITION OF THE PUBLIC TRUST
	A. The doctrine derives from the public conferring to their government their
	wholesale rights and interests in water – not from a notion of government
	title or interest in commerce
	B. That the public trust doctrine is based on protecting wholesale public
	interests in all waters aligns with its history: it has evolved to meet changing
	threats to water resources at large25
	C. The doctrine is about protecting public rights vis-à-vis the government, thus.
	it is constitutional in force27
	i. History suggests that the public trust doctrine reflects a basic
	constitutional or sovereign limitation on government authority28
	ii. The best theoretical (and practical) home for the doctrine sits in the due
13.7	process clause
IV.	WHEN COURTS FIND THAT A STATE INFRINGES THE PUBLIC'S INTERESTS IN WATER,
	EXPANDING THE PUBLIC TRUST'S REACH IS THE REMEDY—AND A JOB FOR THE
	JUDICIARY ALONE
	A. Interpreting when states exceed their authority and infringe on the
	public's general right to water is a unique job for the judiciary37
	B. The court's role in the public trust doctrine is best viewed as one of deciding
	remedies: because courts are requiring states to take trust duties over the
V.	waters needed to redress a public wrong
v. VI.	THE JUDICIAL FRAMEWORK FOR THE PUBLIC TRUST DOCTRINE
VI.	CONCLUSION45

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Walker Lake, 1984²

Nestled deep in the Nevada desert, Walker Lake is all that remains of an ancient ocean that once covered most of the state.³ The teardrop-shaped lake and the river that feed it are part of Nevada's Native American heritage, historically providing water for the Numa, as the Northern Paiute tribe calls itself, and several other tribes.⁴ If you drove by the lake in the late 1800s—back when the land now making up the glitzy Las Vegas strip was a patch of sagebrush—you would see fishing and pleasure boats dotting the lake's surface.⁵ Just decades ago, you would have seen huge flocks of birds swooping to feed on the lake's trout.⁶ In fact, Walker Lake was once home to one of the largest concentration of loons in the U.S.⁷

But starting in the late 1800s, farmers began draining Walker River, Walker Lake's sole source of water. The lake's water level steadily dropped—a staggering 140 feet between 1882 and 1994. That shrunk the surface area to less than half its

² WALKER LAKE CRUSADERS, https://web.archive.org/web/20180331082504/http://www.walkerlakecrusaders.com/ [https://perma.cc/K82R-CPTN].

³ Eric Cachinero, Ancient Nevada, Part 1: Water, NEV. MAG., Jan. Feb. 2017, https://www.nevadamagazine.com/issue/january-february-2017/4103/ [https://perma.cc/9XVX-KQKZ]. See L. V. Benson et al., Change in the Size of Walker Lake During the Past 5000 Years, 81 PALEOGEOGRAPHY, PALEOCLIMATOLOGY, PALEOECOLOGY 189 (1991), for a "fluctuation history of Walker Lake" over the last five thousand years.

⁴ See SAXON E. SHARPE ET AL., DESERT RESEARCH INST., THE WALKER BASIN, NEVADA AND CALIFORNIA: PHYSICAL ENVIRONMENT, HYDROLOGY, AND BIOLOGY 3-6 (rev. ed. 2008) (discussing the various tribes in the Walker River Basin, including their historical reliance on the lake itself and the natural wildlife that thrives in and around the lake).

⁵ See Thomas J. Lopes & J. Larue Smith, Bathymetry of Walker Lake, West-Central Nevada: U.S. Geological Survey Scientific Investigations Report 2, 4 (2007); Sharpe et al., supra note 4, at 1, 4, 47–48.

⁶ See SHARPE ET AL., supra note 4, at 13, 32, 39.

⁷ Sandra Chereb, Loon Festival Canceled—Lake is Drying up, SFGATE (Apr. 26, 2009), https://sfgate.com/green/article/Loon-festival-canceled-lake-is-drying-up-3243751.php [https://perma.cc/MLA4-YHC2].

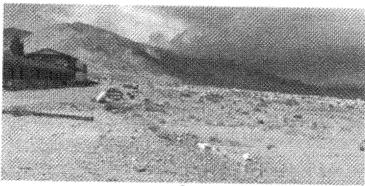
⁸ See SHARPE ET AL., supra note 4, at 6, 54.

U.S. GEOLOGICAL SURVEY, FS-115-95, WATER BUDGET AND SALINITY OF WALKER LAKE, WESTERN NEVADA (Apr. 1995) (illustrating its findings in a graph, which shows an approximate 140-foot

size, basically splitting the lake in two. 10 By 2017, the lake level was the lowest it has ever been. 11

Walker Lake is a rare beauty; it's one of the only perennial, natural terminal lakes (lakes without a natural outflow) in the nation. ¹² Unfortunately, lakes in the Great Basin, where Walker sits, are sensitive to even small changes in water levels. ¹³ Rapid declines like those Walker has suffered not only dry up habitats, they also spike salt levels, making the water and riparian zone increasingly uninhabitable to wildlife. ¹⁴

The fallout at Walker is not hard to spot. Species of fish and other wildlife have largely been eradicated in and around the lake. ¹⁵ Boat docks rest on dry lake bed. ¹⁶ The nearby town of Hawthorne has cancelled its annual loon festival because the birds no longer come. ¹⁷ The fish they used to eat all but driven from the waters. ¹⁸



Walker Lake (albeit without much of the lake), 2015¹⁹

decrease in the lake-surface altitude between 1882—at about 4,080 feet above sea level—and 1994—at about 3,940 feet).

 $^{^{10}}$ See Michael W. Collopy & James M. Thomas, Desert Research Inst.: Walker Basin Project, Restoration of a Desert Lake in an Agriculturally Dominated Watershed: The Walker Lake Basin iii (2009).

¹¹ KRIS URQUHART, NEV. DEP'T OF WILDLIFE, F-20-53, ANNUAL REPORT: STATEWIDE FISHERIES PROGRAM
1, 3 (2017), http://www.ndow.org/uploadedFiles/ndoworg/Content/Our_Agency/Divisions/Fisheries/Walker%20Lake%20JPR%202017-final.pdf [https://perma.cc/A8N6-BHGR]; see also Walker Lake Water Level, LAKES ONLINE, http://walker.lakesonline.com/Level/ [https://perma.cc/59A3-8MS6].

¹² U.S. GEOLOGICAL SURVEY, *supra* note 9; *see* COLLOPY & THOMAS, *supra* note 10, at iii; SHARPE ET AL., *supra* note 4, at vii, 13.

¹³ Hydrology of the Walker River Basin, USGS, https://nevada.usgs.gov/walker/ [https://perma.cc/X43N-YZZY] ("Due to high evaporation rates in the Great Basin, the water-levels and salinity of terminal lakes are extremely sensitive to changes in stream inflow."); see also SHARPE ET AL., supra note 4, at 13.

¹⁴ SHARPE ET AL., *supra* note 4, at 14, 38, 47.

¹⁵ See LOPES & SMITH, supra note 5, at 1–3.

¹⁶ Gordon Gregory, *Re-Watering Nevada's Dying Walker Lake*, HiGH COUNTRY NEWS (Aug. 10, 2011), https://www.hcn.org/issues/43.13/re-watering-nevadas-dying-walker-lake [https://perma.cc/XJ9F-CHHH].

¹⁷ Chereb, supra note 7.

¹⁸ Id.; see also LOPES & SMITH, supra note 5, at 1; SHARPE ET AL., supra note 4, at 13, 32.

¹⁹ WALKER LAKE CRUSADERS, supra note 2.

But Walker Lake's death throes have not gone unnoticed. For over a century, fierce political and court battles have been waged over the lake.²⁰ After years of fighting, a Nevada court issued a decree that allocated water for hundreds of private water users.²¹ Nevada, like most western states, adheres to a prior appropriation system: individuals can hold a private interest in water.22 This system was borne out of the necessity of the western expansion, when water literally meant the difference between life and death.23

The Walker Lake decree set aside plenty of water for these private users—but it wrote out the biggest interest holders of all: the public.24

See, we citizens have an interest in Walker Lake too, just as we have an interest in other natural waterbodies. That interest has been recognized since ancient Roman law—and consistently since.25 French law recognized it in the eleventh century,26 and Spanish law in the thirteenth.²⁷ Early English law recognized it, and the U.S. law recognizes it today.²⁸ Even Nevada's own Supreme Court has long confirmed this public interest.²⁹ As does its Constitution.³⁰ As does its statutes.³¹ But as far as the Walker Lake decree was concerned, the public interest might as well not have existed. The decree settled private and municipal rights to use the lake, but it said nothing about the public's interest in protecting the lake itself.32

Our public interest stems from our original sovereign contract with the government: we gave states our rights and interests in water, to hold in trust.³³ So long as that fundamental public interest in water remains unharmed, the government's trust duties remain satisfied. This principle has come to be known as the public trust doctrine.³⁴ It says that the government holds the public's important water resources in trust for them—and, like any trustee, cannot abdicate its duties.35

²⁰ See Mineral Cty. v. Walker River Irrigation Dist., 900 F.3d 1027, 1028-30 (9th Cir. 2018).

²¹ Id. at 1029.

²² Id. at 1029, 1029 n.2.

²³ See A. DAN TARLOCK ET AL., WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY 129 (7th ed. 2009).

²⁴ The defending parties argue that the public interest is actually considered because Nevada law requires water to be put to a "beneficial use," but beneficial use is a different sort of interest than the public trust protects. See Mineral Cty., 900 F.3d at 1034, n.7; see also Russell M. McGlothlin & Scott S. Slater, No Fictions Required: Assessing the Public Trust Doctrine in Pursuit of Balanced Water Management, 17 U. DENV. WATER L. REV. 53, 74-77 (2013) (comparing public trust duties and beneficial use principles). Not to mention that, as we will see, merely considering a public interest "factor" is not enough. See infra Parts IV-V.

See infra Section III.A.

²⁶ Charles F. Wilkinson, The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine, 19 ENVTL. L. 425, 429 n.22 (1989).

²⁷ Id. at 429 n.21.

²⁸ Allan Kanner, The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources, 16 DUKE ENVTL. L. & POL'Y F. 57, 64-75 (2005).

²⁹ See Mineral Cty., 900 F.3d at 1031 (citing Lawrence v. Clark Cty., 254 P.3d 606 (2011)).

³⁰ Id.

³² See id. at 1029-30.

³³ See infra Sections III.A, IV.B.

³⁴ See Mineral Cty., 900 F.3d at 1030, n.3.

³⁵ See infra Part I.

The tiny county harboring Walker Lake, Mineral County, seized on this doctrine and moved to intervene in a Nevada case to modify the Walker Lake decree. Mineral County argued that the State of Nevada must protect the public's basic interest in keeping Walker Lake alive. Py not doing so, the state was violating its trust obligations. The case meandered its way up to the U.S. Court of Appeals for the Ninth Circuit.

The court recognized that the public does indeed have an interest in the lake and that the public trust doctrine protects it, but the panel was unable to decide whether Nevada law allowed that public interest to trump the rights of the hundreds of private water users who had been given water permits under the decree (and if so, whether Nevada would have to pay for taking this "property").³⁹ That question is now certified to the Nevada Supreme Court.⁴⁰

The Mineral County v. Walker River Irrigation District⁴¹ case tees up questions that have remained only partially answered across the nation: what role does the public trust theory play in state water management? Can Nevada effectively abdicate its public trust duties over Walker Lake by deciding that the existing private water permits trump the need to save the lake and its ecology? And who decides: the judiciary, or instead, the legislature and agency water managers? Perhaps most importantly, if the state declines to recognize its public trust duties, what can the federal courts do about it, if anything?

It turns out that courts largely view the public trust doctrine as limited by state legislative and executive policy. According to this widespread theory, states may be required to hold in trust a handful of historically big waterbodies (referred to as "navigable" waters) for certain uses like commerce, but beyond that, states are free to dispose of water without substantial impairment of the public's interests. So there is no requirement that states consider, for example, the public's interest in conserving Walker Lake, a lake much older than the state of Nevada. And not only can the public not meaningfully challenge a state's legislative or executive decisions in *state* courts—they can't challenge the state's abdication of the public trust in *federal* court either, because the scope of the trust is supposedly a state law matter.

Courts and litigants have struggled to craft a theory that will allow the state's trust duties to extend to more water and more uses and, perhaps most importantly, be enforceable in both state and federal courts. I suggest such a theory here.

³⁶ See Mineral Cty., 900 F.3d at 1030.

³⁷ *Id*.

³⁸ *Id*.

³⁹ Id. at 1030-34.

⁴⁰ Id. at 1034-35.

⁴¹ See generally id.

⁴² See, e.g., Stephen H. Leonhardt & Jessica J. Spuhler, The Public Trust Doctrine: What it is, Where it Came From, and Why Colorado Does Not (and Should Not) Have One, 16 U. DENV. WATER L. REV. 47, 80–81, 94 (2012) (discussing legislative action and "limitations [] imposed by legislation, administrative action, constitutional amendment, or judicial decision").

⁴³ See id. at 50-52, 70-71 (criticizing the few states, like California, who have seriously expanded public trust protections because this expansion is out of step with historical notions about the public trust).
⁴⁴ See id. at 49-50 (citing PPL Mont., LLC v. Montana, 565 U.S. 576, 603 (2012)).

In short, this article explains why we should view the public trust doctrine as reflecting very basic principles of limited state authority over water. This limitation prevents states from seriously infringing on the public's interest in all flowing water. In other words: when states (and occasionally the federal government) abdicate their public trust duties, they are permitting an infringement on the public's fundamental right to water—a violation of due process and a violation of the states' sovereign authority.

This article proceeds in several steps,⁴⁵ but each is meant to float one realization to the surface: There is a link between the dynamic threats to the public's interest in water and the state's obligation to take waters into trust and protect them. A state's sovereign authority to dispose of water within its borders depends on the threats those waters face. And indeed, as we will see, this link is evident in the evolution of the public trust doctrine in the United States and long before. In the past, the threats to water were narrow, and so the public trust doctrine imposed duties on a narrow set of those historically big, navigable waterways. But as threats to water have grown, so have the states' obligation to take waters into trust.

This theoretical framework allows federal courts to review a state's decision to forego its trust duties, even when it needs to go beyond those historical, navigable waters. After all, viewed this way, enforcing the public trust is a remedy to protect the public's interest in natural waters generally. Not only should litigants be able to argue for an expansion of trust duties in state courts under state constitutions, they should also be able to argue for this expansion in federal courts under the U.S. Constitution.

Interpreting which waters and uses are protected by the trust is, in effect, interpreting the extent of sovereign authority over water. That is a job uniquely for the judiciary. The court doors should thus be flung wide open in even the most restrictive of states, allowing citizens to challenge legislative and administrative decisions about water allocation. Courts will be empowered to expand the public trust even in the face of legislative and administrative obstinance.

This article proceeds in five steps. First, we will take a public trust bootcamp so that you can understand the basic outlines of the doctrine. Second, we look at why a new view of the doctrine is needed on the ground. This includes a review of the pressing water crises that our nation faces, especially with climate change draining the little water we have. This part also lays out the gaps in current water management schemes and, most importantly, the gaps in the public trust that stymie the doctrine from doing more to help.

Third, we will examine the public trust doctrine's source and nature. This is important because the doctrine's origins and contours will implicate what guiding principles we should use when interpreting it today. This part makes several conclusions, including that (1) the doctrine derives from an ancient social contract

⁴⁵ The public trust doctrine is nuanced and complex, spawning a plethora of law review articles. E.g., James L. Huffman, Speaking of Inconvenient Truths—A History of the Public Trust Doctrine, 18 DUKE ENVTL. L. & POL'Y F. 1, 3 (2007) (noting that the doctrine has been the subject of a "raging flood of academic commentary"); Ivan M. Stoner, Leading a Judge to Water: In Search of a More Fully Formed Washington Public Trust Doctrine, 85 WASH. L. REV. 391, 391, 423 (2010) (noting "the froth that the public doctrine has generated among academics").

wherein the public entrusted all natural water resources to the government, (2) the doctrine is about protecting these public resources from state waste or abdication of its trust duties, and (3) the doctrine, as a limitation on state authority, is best viewed as constitutional in nature—specifically, at home in the Due Process Clause. ⁴⁶ This clause makes the most sense for several reasons, including because the trust doctrine is about protecting concrete rights in water from government harm.

Finally, the payoff: this article concludes that courts should be empowered to interpret both the reach and force of the public trust doctrine. When states privatize waters and cause the public interest to be harmed, the states have exceeded their constitutional and sovereign authority. Interpreting the bounds of that authority is at the heart of judicial function. That means that courts must be empowered to extend the reach of the public trust to new waters and new uses to adequately redress those public harms.

The article finishes by cataloguing the many advantages of this approach. Not only will the gaps in state adoption of the public trust be filled based on local and adaptive needs, but legislative failure will be shored up.

I. A PUBLIC TRUST BOOTCAMP

As many scholars have discussed at length, the public trust doctrine's roots are deep, extending through early America, English common law, thirteenth century Spain, eleventh century France, and all the way back to early Roman law.⁴⁷ The basic idea is that water is so essential to all mankind⁴⁸ that everyone should be allowed to freely enjoy it, like the air we breathe.⁴⁹ Indeed, because water is so important, it's better viewed as a fundamental right of the people rather than a fungible good owned

⁴⁶ Others have suggested a constitutional home for the public trust doctrine—as well as urged states to incorporate broader public trust protections for waters. See, e.g., Michael C. Blumm & Aurora Paulsen, The Public Trust in Wildlife, 2013 UTAH L. REV. 1437, 1450–51; Carol Necole Brown, Drinking from a Deep Well: The Public Trust Doctrine and Western Water Law, 34 FLA. St. U. L. REV. 1, 2–13, 17 (2006). This article attempts to build on this work.

⁴⁷ See, e.g., Gail Osherenko, New Discourses on Ocean Governance: Understanding Property Rights and the Public Trust, 21 J. ENVTL. L. & LITIG. 317, 348–52, 365–66 (2006); Wilkinson, supra note 26, at 428–31 (tracing the roots of the public trust doctrine to thirteenth century Spain, eleventh century France, the Qin dynasty 200 years before Christ, and beyond); see also MAGNA CARTA ch. 33 (1215); J. INST. 2.1.1; SIR MATTHEW HALE, A TREATISE RELATIVE TO THE MARITIME LAW OF ENGLAND, IN THREE PARTS 8–9, 11 (1787); Noah D. Hall & Joseph Regalia, Interstate Groundwater Law Revisited: Mississippi v. Tennessee, 34 VA. ENVTL. L.J. 152, 166–86 (2016).

⁴⁸ J. INST. 2.1.1.

⁴⁹ See Juliana v. United States, 217 F. Supp. 3d 1224, 1252–56 (D. Or. 2016) (discussing the trust theory of the doctrine).

by governments.⁵⁰ Water, in other words, is a property of the "commons" that no single landowner or sovereign can take for their own.⁵¹

That's where the trust part comes in. The theory is that sovereigns do not own water; instead, they are its trustees—protecting this precious resource for water's true beneficiaries: the state's citizens.⁵² It's rather similar to any other fundamental right that governments protect on behalf of the public (more on that later).⁵³ Even the U.S. Supreme Court has supported the force of this limitation on the government's relationship with water, explaining that "[t]he control of the State for the purposes of the trust can never be lost," except when "promoting the interests of the public" or when privatizing the water will not inflict "any substantial impairment of the public interest in the lands and waters remaining."⁵⁴

The public trust has come to be seen as both a limiting and empowering legal principle.⁵⁵ The trust imposes obligations on the sovereign, but at the same time, it also empowers sovereigns to take steps to protect water resources, even if doing so will conflict with some other interests (like private water rights).⁵⁶

The public trust doctrine has nearly always been concerned with state duties and powers over water.⁵⁷ Practically, there are two aspects of the doctrine that are worth covering at the outset: First, which state waters are covered by the trust, and second, what water uses must states protect?

⁵⁰ See id.; see also III. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 455 (1892) ("[O]wnership of the navigable waters of the harbor and of the lands under them is a subject of public concern to the whole people of the State. The trust with which they are held, therefore, is governmental and cannot be alienated ..."); Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 658 P.2d 709, 721, 727 (Cal. 1983); Joseph L. Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471, 478–85 (1970).

⁵¹ See HALE, supra note 47 at 8–9; see also In re Water Use Permit Applications, 9 P.3d 409, 445–56 (Haw. 2000) (applying public trust obligations to a state agency).

⁵² Sax, supra note 50, at 483, 485–86; see A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 8:4 (2005) ("Public ownership of submerged beds is the source of the public right to use the overlying waters.").

⁵³ See infra Part IV; see also Juliana, 217 F. Supp. 3d at 1250 (addressing substantive due process rights to water as impacted by climate change).

⁵⁴ Ill. Cent. R.R. Co., 146 U.S. at 453 (applying limitations on state power).

⁵⁵ See Geer v. Connecticut, 161 U.S. 519, 534 (1896), overruled by Hughes v. Oklahoma, 441 U.S. 322 (1979) ("[I]t is the duty of the legislature to enact such laws as will best preserve the subject of the trust and secure its beneficial use in the future to the people of the State."); In re Water Use Permit Applications, 9 P.3d at 453 ("Under the public trust, the state has both the authority and duty to preserve the rights of present and future generations in the waters of the state.").

⁵⁶ See McBryde Sugar Co. v. Robinson, 504 P.2d 1330, 1344 (Haw. 1973).

⁵⁷ There is some debate about whether the public trust stems from federal or state law, and we will take a look at that question later. And the federal courts have variously recognized some federal trust issues. But the public trust has practically been applied mostly to the states, and the U.S. Supreme Court has described the doctrine as a matter of state law. PPL Montana, LLC v. Montana, 565 U.S. 576, 603–04 (2012). So we will stick to the application to states for now.

Early U.S. cases, like English decisions that came before, extended the public trust to a relatively narrow set of "navigable," major waterways within each state. Think the Mississippi and major ocean-touching ports. Cases often connected a state's public trust duties with language about ownership. Courts reasoned that states took ownership of the beds of certain major waterways when they joined the union—and this ownership came with an attendant trust duty over the surface waters.

But as I explored in a prior article, the idea that states "owned" the water itself quickly proved to be a legal fiction. Instead, as will be explained below, courts were wrangling with two separate questions: (1) What lands do states own? and (2) Which waters should states be protecting? Suffice it to say for now that these navigable waterways triggered the sovereign's public trust duties; non-navigable waters, according to these early courts, did not—water in those bodies could be owned or used up. Likewise, early decisions required states to protect only a few public uses of water: navigation, commerce, and fishing.

As we will see later in this article, the contours of the public trust doctrine have evolved a lot on both of these points, especially in recent decades.⁶⁷ In terms of which waters are covered, for example, many states have expanded the scope of which waters trigger trust obligations to include smaller waterbodies or even all the water within their borders—labeling these waters as "navigable" for purposes of the public trust doctrine.⁶⁸

The evolution of the doctrine is complicated, in part, because U.S. water law fractured into two loose systems in the 1800s: existing riparian water law on the east

⁵⁸ The definition of "navigable waters" varies depending on the legal context in water law. "Navigable waters" reach different waters for: (1) state title purposes; (2) the federal Commerce Clause power; (3) federal jurisdiction under the federal Clean Water Act; (4) federal jurisdiction under the Rivers and Harbors Act; and (5) admiralty and maritime jurisdiction. See JOSEPH J. KALO ET AL., COASTAL AND OCEAN LAW 4, 16–21, 117–18, 134–38 (3d ed. 2007).

⁵⁹ See 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, 567–75 (1975).

⁶⁰ See id. at 569-75; Indeed, in England, navigable waterways for purposes of the trust included only water affected by the tide. Patrick Deveney, *Title, Jus Publicum, and the Public Trust: An Historical Analysis*, 1 SEA GRANT L.J. 13, 48, 68 (1976).

⁶¹ See, e.g., Utah v. United States, 403 U.S. 9, 10 (1971) (citing Shively v. Bowlby, 152 U.S. 1, 26–28 (1894)); United States v. Oregon, 295 U.S. 1, 1, 14 (1935); Martin v. Waddell's Lessee, 41 U.S. 367, 381, 410, 416–17 (1842).

⁶² See Utah v. United States, 403 U.S. at 10; United States v. Oregon, 295 U.S. at 14.

⁶³ Hall & Regalia, supra note 47, at 166-67, 181 n.223, 183.

⁶⁴ See infra Section V.

⁶⁵ See infra Section V. The evolution of navigability for purposes of public trust is discussed more below.

⁶⁶ See DAVID C. SLADE ET AL., COASTAL STATES ORG., PUTTING THE PUBLIC TRUST DOCTRINE TO WORK 6, 12 (2d ed. 1997); see also Shively v. Bowlby, 152 U.S. 1, 13 (1894) (emphasizing the public rights of fishing and navigation).

⁶⁷ See infra Section IV.

⁶⁸ Michael Blumm offers an excellent explanation of the state-title public trust and the sovereign public trust, pointing out that both exist. See Michael C. Blumm & Courtney Engel, Proprietary and Sovereign Public Trust Obligations: From Justinian and Hale to Lamprey and Oswego Lake, 43 VT. L. REV. 1, 2–3 (2018).

half of the nation and prior appropriation on the west.⁶⁹ Riparian law ties water rights to landownership and recognizes an egalitarian relationship between users: water is essentially "common property."⁷⁰

The prior appropriation system is a first-in-time private resource management scheme, borne out of the western expansion and based on mining law. Private parties can perfect a right to use a certain amount of water for beneficial uses. The basic rules of prior appropriation effectively lock in established water uses and allow them to continue without change. . . . [W]ater rights last forever, and their terms are rarely amended to reflect changed conditions. Most western states have created a permitting scheme to govern this process of perfecting private water rights. That is, with the exception of Colorado. Water is thus generally allocated in these states by legislative creation of schemes and executive execution of detailed permitting processes.

The prior appropriation doctrine complicates the scope of which waters are within the scope of the states' trust obligations. Back in the late 1800s, Congress subjected non-navigable waters to prior appropriation and gave western states control over those waters—in other words, it handed over all non-navigable waters to the states themselves. The general result of all this is that states (and the U.S. Supreme Court) have recognized that western states may generally determine which waters should be included in their trust—so long as states take trust ownership over historically navigable waterways. And the same goes for which public interests should be protected under the trust.

A sore spot for the public trust should also be mentioned at the outset: the prior appropriation doctrine relies heavily on private rights to water, and these private rights can conflict with a state's efforts to carry out its public trust obligations over water. 80 No one seriously disputes that private parties can secure a protectable right

⁶⁹ TARLOCK ET AL., supra note 23, at 43–133; see also William L. Andreen, The Evolving Contours of Water Law in the United States: Bridging the Gap Between Water Rights, Land Use and the Protection of the Aquatic Environment, 23 ENVTL. & PLAN. L.J. 5, 8–11 (2006).

⁷⁰ See Hudson Cty. Water Co. v. McCarter, 209 U.S. 349, 351, 356 (1908); Andreen, supra note 69, at 8.

⁷¹ See TARLOCK ET AL., supra note 23, at 121–33; see also Andreen, supra note 69, at 10.

⁷² Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 658 P.2d 709, 711, 714 n.8 (Cal. 1983).

⁷³ 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, 51 (2004).

⁷⁴ TARLOCK ET AL., supra note 23, at 194–95.

⁷⁵ Id. at 194.

⁷⁶ See id.

⁷⁷ See 43 U.S.C. § 321 (2018).

⁷⁸ See PPL Montana, LLC v. Montana, 565 U.S. 576, 603–04 (2012) (Justice Kennedy explaining that "the public trust doctrine remains a matter of state law" and "[u]nder accepted principles of federalism, the States retain residual power to determine the scope of the public trust over waters within their borders, while federal law determines riverbed title under the equal-footing doctrine"); see also Cappaert v. United States, 426 U.S. 128, 139 n.5 (1976); Nebraska v. Wyoming, 325 U.S. 589, 612 (1945); Ickes v. Fox, 300 U.S. 82, 95–96 (1937) (confirming the import of the Desert Land Act).

⁷⁹ See *PPL Montana, LLC*, 565 U.S. at 587–88, for an example of public interests affected by unauthorized use of riverbeds.

⁸⁰ See, e.g., id.; Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 658 P.2d 709, 711 (Cal. 1983); Bos. Waterfront Dev. Corp. v. Commonwealth, 393 N.E.2d 356, 357 (Mass. 1979).

to use water.⁸¹ But, for example, it's quite common for a private use of water—combining forces with other private uses or environmental factors—to threaten important waterbodies subject to a state's trust obligations.⁸² When private rights to water interfere with waters subject to the public trust, states are in theory required to step in and protect the trust waters.⁸³

But these conflicts have spawned contentious debate and diverging caselaw.⁸⁴ Some courts view a state carrying out its trust obligations as a constitutional taking when private rights are seriously harmed—a simple matter of a common law rule (the public trust doctrine) butting up against citizens' constitutional property rights (their prior appropriation water rights).⁸⁵

But other courts view the state's trust obligation as a fundamental limitation baked directly into private rights. This view recognizes that the public has a preexisting interest and right to water resources, and that when those rights are threatened so much that they touch on waters subject to the public trust, private water rights are qualified. This view is much like the principle that rights that come with owning land are qualified by the competing rights of others, like the right to be free from nuisances. 88

Another important feature of the public trust is that both members of the public and the states themselves can sue under the doctrine. So States can sue to protect trust resources under their *parens patriate* powers. Members of the public (who otherwise have standing) may sue the state for failing to comply with its trust obligations over a particular body of water.

There is much more that can be said about the public trust doctrine, but that should do for now.⁹² With the basics covered, let's dive deeper into what the doctrine looks like today and where some of its shortcomings lie.

⁸¹ See PPL Montana, LLC, 565 U.S. at 580 (offering support for the private right to use water under certain circumstances).

⁸² See, e.g., Nat'l Audubon Soc'y, 658 P.2d at 711.

⁸³ Id. at 732.

⁸⁴ See 2 WATERS AND WATER RIGHTS § 35.09 (Amy K. Kelley ed., 3d ed. 2019).

⁸⁵ Id. (describing this conflict and providing examples of cases in several footnotes).

⁸⁶ See id.

⁸⁷ See id.

⁸⁸ See Robin Kundis Craig, Public Trust and Public Necessity Defenses to Takings Liability for Sea Level Rise Responses on the Gulf Coast, 26 J. LAND USE & ENVIL. L. 395, 401–03 (2011).

⁸⁹ Paepcke v. Pub. Bldg. Comm'n, 263 N.E.2d 11, 18 (III. 1970) (utilizing the public trust doctrine as grounds for standing); Mary Turnipseed et al., The Silver Anniversary of the United States' Exclusive Economic Zone: Twenty-Five Years of Ocean Use and Abuse, and the Possibility of a Blue Water Public Trust Doctrine, 36 ECOLOGY L.Q. 1, 18–19 (2009) (describing the public trust doctrine as presumptive grounds for standing).

⁹⁰ See Turnipseed et al., supra note 89, at 18-19, 19 n.106.

⁹¹ See, e.g., Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 712 (Cal. 1983).

⁹² For example, the federal government has various conflicting and superior interests in water that can complicate trust principles. *See* Scranton v. Wheeler, 179 U.S. 141, 156–58, 163–65 (1900); Gibson v. United States, 166 U.S. 269, 271–76 (1897).

II. SOME STATES HAVE EMBRACED THEIR TRUST OBLIGATIONS TO MEET EVOLVING THREATS TO WATER RESOURCES; SOME HAVE SHED THEIR DUTIES COMPLETELY

A. We are in a water crisis and adaptive, aggressive action is needed to protect precious water resources, especially in the west.

There is little dispute about the pressing need for governments to protect their winnowing water resources.⁹³ The western U.S. is facing the worst water crisis in more than a century.94 And climate change is altering water resources across the nation.95

In Nevada, for example, a long-term drought has gripped much of the Colorado River Basin.⁹⁶ The amount of water flowing into Southern Nevada's major water storage. Lake Mead, has declined rapidly. 97 Climate change is predicted to put increasing pressure on Nevada's water resources. 98 Rainfall is expected to decrease, evaporation will increase, and water resource availability will decrease. 99 The same crisis is faced by many other states. 100 And that includes not just the arid west, but the east, too. 101

Couple these climate threats to water with an increase in water usage and greater demands for water in urban areas and you have a water management dumpster fire. We are already seeing water supplies dwindle in some areas of the U.S., as well as degraded water quality nationwide. 102 Government agencies have identified areas that will face critical water supply threats, regardless of climate change. 103

⁹³ See generally United Nations Environment Programme, Climate Change Science Compendium (Catherine P. McMullen & Jason Jabbour eds., 2009), http://wedocs.unep.org/bitstream/handle/20.500.11822/7798/-Climate%20Change%20Science%20Compendium%202009-2009881.pdf?sequence=3&isAllowed=y [https://perma.cc/EG79-AVCE].

⁹⁴ One potent example is California. See Amir AghaKouchak et al., Water and Climate: Recognize Anthropogenic Drought, 524 NATURE 409, 409 (2015).

⁹⁵ See Intergovernmental Panel on Climate Change, Climate Change 2007: Synthesis Report: 11 (Nov. 2007). 8, POLICYMAKERS FOR https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf [https://perma.cc/S5EC-KB7W]; U.S. GLOBAL CHANGE RESEARCH PROGRAM, GLOBAL CLIMATE CHANGE IMPACTS IN THE UNITED STATES: A STATE OF KNOWLEDGE REPORT 41 (2009), https://downloads.globalchange.gov/usimpacts/pdfs/climate-impactsreport.pdf [https://perma.cc/D5TY-9LFM] ("Evidence is mounting that human-induced climate change is already altering many of the existing patterns of precipitation in the United States, including when, where, how much, and what kind of precipitation falls.").

⁹⁶ See U.S. Envil. Prot. Agency, EPA 430-F-16-030, What Climate Change Means for Nevada (Aug. 2016), https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-changenv.pdf [https://perma.cc/F4W2-J3SA].

⁹⁷ See id.

⁹⁸ Id.

⁹⁹ Id.

¹⁰⁰ See, e.g., Feared Trout Drop-off Signals Climate Shift in Montana, PBS NEWSHOUR (Oct. 31, 2008, 6:40 PM), https://www.pbs.org/newshour/show/feared-trout-drop-off-signals-climate-shift-inmontana [https://perma.cc/X2ST-G2WK].

¹⁰¹ See U.S. GLOBAL CHANGE RESEARCH PROGRAM REPORT, supra note 95, at 41-42.

¹⁰³ See, e.g., U.S. DEP'T OF INTERIOR: BUREAU OF RECLAMATION, WATER 2025: PREVENTING CRISES AND CONFLICT IN THE WEST 9 (2005).

I won't belabor the threats to water resources because so many other scholars have done so, and better than I can. 104 You might think that given these threats, federal and state governments would be passing water management policy at every legislative session, anything to avert the coming disaster. But no. There remain glaring shortcomings in water management policy across the country, including stark gaps in state adoption of public trust duties to protect water resources.

B. Many states have shed or cut their public trust duties.

Following federal directives that states should decide the reach of their public trust obligations (at least beyond the historical minimum), a patchwork of approaches have developed. ¹⁰⁵ This is not necessarily a bad thing: one of the advantages of the public trust framework is that it is adaptive to local needs. ¹⁰⁶

But one major problem stems from states that have narrowly confined or abdicated their public trust duties altogether. This make some sense, given that the prior appropriation doctrine, at its heart, favors private water users. ¹⁰⁷ Using up water—indeed, using every drop of it up—is the goal in a pure prior appropriation world: "[W]ater users perceived pumping a stream dry not merely as an allowed outcome, but as a desired one." ¹⁰⁸

States have cabined the reach of their public trust duties in terms of (1) the waters covered, (2) the uses protected, and (3) the power of the trust obligations themselves. Other scholars have done admirable jobs of sorting the precise contours of each state's public trust doctrine, so I won't repeat all that here.¹⁰⁹

In short, many states have narrowed the waters, uses, and impact of the public trust doctrine to the basic scope described in a U.S. Supreme Court case from the 1800s, *Illinois Central Railroad Co. v. Illinois*. ¹¹⁰ Major waterways and the trinity of uses are protected, but not much more. ¹¹¹ Some states have expanded the scope of waters to include waterbodies capable of floating logs, or supporting certain sorts of recreation, or to artificial and major waterways. ¹¹² But most states have maintained a relatively narrow scope similar to the *Illinois Central* standard from the late 1800s,

¹⁰⁴ See, e.g., Robin Kundis Craig, A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust, 37 ECOLOGY L.Q. 53, 56–57 (2010); Patrick C. McGinley, Climate Change and the Public Trust Doctrine, 65 Plan. & Envtl. L. 7, 7 (2013).

Robin Kundis Craig, Adapting to Climate Change: The Potential Role of State Common-Law Public Trust Doctrines, 34 VT. L. REV. 781, 814 (2010).
 Id. at 785.

¹⁰⁷ Lawrence J. MacDonnell, Environmental Flows in the Rocky Mountain West: A Progress Report, 9 WYO. L. REV. 335, 335–36 (2009).

¹⁰⁸ Dave Owen, The Mono Lake Case, the Public Trust Doctrine, and the Administrative State, 45 U.C. DAVIS L. REV. 1099, 1111 (2012).

¹⁰⁹ See, e.g., Craig, supra note 103, at 93-197.

¹¹⁰ Id. at 69-70, 93-197; see generally Illinois Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892).

¹¹¹ See Craig, supra note 104, at 69-70, 93-197.

¹¹² See id. at 93-197; see also Craig, supra note 105, at 818-19; Joseph J. Kalo, "It's Navigable in Fact So I Can Fish in It": The Public Right to Use Man-Made, Navigable-in-Fact Waters of Coastal North Carolina, 89 N.C. L. REV. 2095, 2112-13 (2011) (noting that North Carolina courts have established that public trust principles extend to artificial waters).

with modest expansions. 113 For example, Alaskan caselaw largely mirrors Illinois Central's minimums, 114 despite the fact that Alaska enacted far-reaching statutory language suggesting that the public has broad rights in all sorts of water bodies. 115 Arizona, 116 Idaho, 117 and Kansas similarly limit their trust duties, to name a few states.118

Then you have Colorado, which has narrowed the scope of the doctrine to nothingness. The Colorado Supreme Court has declared most streams in Colorado non-navigable: "the natural streams of this state are, in fact, nonnavigable within its territorial limits, and practically all of them have their sources within its own boundaries, and [] no stream of any importance whose source is without those boundaries, flows into or through this state."119 This, again, is despite legislation and constitutional language suggesting that water is at least partially public property. 120

Colorado is instructive about the potential costs of big gaps in public trust protections for water resources. Like many arid western states, Colorado is slated to see rising temperatures, less rainfall, and increasing threats to its water resources. 121 Failures to incorporate a robust public interest in water management may have resulted in needed preventative measures racking up, now totaling a projected \$20 billion in needed investment to address state water requirements. 122 Colorado's "Fraser River got down to 4 cfs in 2002, [t]he Crystal River got down to 1 cfs in 2012[,] [t]he Roaring Fork River got down to 5 cfs in 2012[,] [and] [t]he Dolores River regularly dries up."123 The Colorado River stopped regularly reaching its end

¹¹³ Robin Kundis Craig, A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries, 16 PENN ST. ENVTL. L. REV. 1, 24 (2007) ("Alabama has a poorly developed public trust doctrine that has never been expanded beyond the basic federal doctrine. Similarly, while recognizing log floatation, Missouri has not otherwise expanded its public trust doctrine beyond the federal test. Finally, although West Virginia has barely developed its public trust doctrine, it is clearly and strongly based on the federal public trust doctrine. In addition, West Virginia views the public trust properties as public lands and manages them as such . . . "); Craig, supra note 104, at 76 ("Among the western states, Colorado and Idaho have most clearly adhered to the strict and limited traditional view of public rights in their public trust doctrines. Relying on the federal test of navigability, the Colorado Supreme Court has declared almost all streams in Colorado to be non-navigable").

¹¹⁴ See City of St. Paul v. Alaska Dep't of Nat. Res., 137 P.3d 261, 263 n.8 (Alaska 2006).

¹¹⁵ ALASKA STAT. § 38.04.910(5) (2019).

¹¹⁶ Defs. of Wildlife v. Hull, 18 P.3d 722, 729–31 (Ariz. Ct. App. 2001) (applying the federal navigability test). 117 Kootenai Envtl. All., Inc. v. Panhandle Yacht Club, Inc., 671 P.2d 1085, 1088 (Idaho 1983).

¹¹⁸ State ex rel. Meek v. Hays, 785 P.2d 1356, 1363-65 (Kan. 1990); see also Montana v. United States, 450 U.S. 544, 553-57 (1981) (Montana); State Eng'r v. Cowles Bros., Inc., 478 P.2d 159, 160 (Nev. 1970).

¹¹⁹ Stockman v. Leddy, 129 P. 220, 222 (Colo. 1912), overruled on other grounds by Denver Ass'n for Retarded Children, Inc. v. Sch. Dist. No. 1, 535 P.2d 200 (Colo. 1975); see also United States v. Dist. Court ex rel. Eagle Cty., 458 P.2d 760,762 (Colo. 1969); Ozark-Mahoning Co. v. State, 37 N.W.2d 488, 491 (N.D. 1949) (showing a similar determination of the navigability of a lake in North Dakota); State ex rel. Comm'rs of Land Office v. Warden, 198 P.2d 402, 406-07 (Okla. 1948) (evaluating the characterization of a river under Oklahoma law).

¹²⁰ COLO, CONST. art. XVI, § 5 (2018).

¹²¹ JEFF LUKAS ET AL., CLIMATE CHANGE IN COLORADO: A SYNTHESIS TO SUPPORT WATER RESOURCES MANAGEMENT AND ADAPTATION 1 (2d ed. 2014).

¹²² COLO. WATER CONSERVATION BD., COLORADO'S WATER PLAN 1-1 (2015).

¹²³ Brent Gardner-Smith, Colorado's Instream Flow Program is Lauded, Challenged, ASPEN JOURNALISM (Jan. 21, 2014), http://aspenjournalism.org/2014/01/21/state-of-colorados-instream-flowprogram-is-lauded-challenged/ [https://perma.cc/47CC-9B4X] (quoting attorney Ken Ransford, a

in the Gulf of California for over fifty years because of over-appropriation—until 2014 when the federal government stepped in. 124

The high-water mark for incorporation of the public trust in prior appropriation systems in the West is California¹²⁵ and Hawaii. ¹²⁶ For example, in California, "[t]he state's right to protect fish is not limited to navigable or otherwise public waters but extends to any waters where fish are habitated or accustomed to resort and through which they have the freedom of passage to and from the public fishing grounds of the state."¹²⁷ Hawaii's trust is as expansive.¹²⁸

But even in those states, the public trust is limited—not by the effect on public interest in water, but by historic and legislative definitions of what waters the trust attaches to.¹²⁹ So trust duties do not extend to some non-navigable waters or groundwater.¹³⁰ Both of these states, like others, interpret the contours of the public trust in the shadow of legislative intent. As one Hawaiian court explained, the trust applies expansively only when the legislature has allowed it to:

The public trust in the water resources of this state, like the navigable waters trust, has its genesis in the common law. . . . The [State Water] Code does not evince any legislative intent to abolish the common law public trust doctrine. To the contrary, . . . the legislature appears to have engrafted the doctrine wholesale in the Code. 131

Scholars seem to agree that to change the status quo, the legislature or executive must step in and voluntarily agree to a new, more robust standard for water management. 132

In the end, you may start to question how much the public trust really matters. States that politically want to protect water resources have recognized a robust public trust doctrine; states that prefer to protect private rights have limited the doctrine. ¹³³ Presumably, these states could have legislated to achieve the same ends. Robin Craig, in her authoritative guide to the public trust doctrine, explains this point:

member of the Colorado River Basin Roundtable) ("These are some of our biggest rivers in the state and they all but dry up.").

¹²⁴ Sarah Zielinski, *The Colorado River Delta Turned Green After a Historic Water Pulse*, SMITHSONIAN.COM (Dec. 18, 2014), http://www.smithsonianmag.com/science-nature/colorado-river-delta-turned-green-after-historic-water-pulse-180953670/?no-ist [https://perma.cc/43PR-PW8X].

¹²⁵ See, e.g., State v. Super. Ct. of Placer Cty., 625 P.2d 256, 257-58 (Cal. 1981).

¹²⁶ See Craig, supra note 104, at 118, 122-24.

¹²⁷ Golden Feather Cmty. Ass'n v. Thermalito Irrigation Dist., 257 Cal. Rptr. 836, 840 (Cal. Ct. App. 1989).

¹²⁸ See In re Water Use Permit Applications, 9 P.3d 409, 441 (Haw. 2000); see also Robinson v. Ariyoshi, 658 P.2d 287, 310 (Haw. 1982).

¹²⁹ See, e.g., Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 719 (Cal. 1983) (noting the historical basis of the navigability doctrine).

¹³⁰ Santa Teresa Citizen Action Grp. v. City of San Jose, 7 Cal. Rptr. 3d 868, 884 (Cal. Ct. App. 2003); Golden Feather, 257 Cal. Rptr. at 841-42.

¹³¹ In re Water, 9 P.3d at 442 (citations omitted).

¹³² See, e.g., Larry Myers, To Have Our Water and Use It Too: Why Colorado Water Law Needs a Public Interest Standard, 87 U. Colo. L. Rev. 1041, 1059 (2016) (opining that to incorporate public trust principles "would require, at a minimum, amending the Colorado Constitution").

¹³³ Craig, supra note 104, at 71-72.

In states where these larger public policies include recognition of actual or potential loss of the public values of fresh water, more robust public trust doctrines are often the result. In contrast, in states where public policies favor private rights, more restricted public trust doctrines have been the norm.¹³⁴

Arizona, for example, limits the public trust by statute to reach the very minimum defined under federal law. ¹³⁵ Contrast Arizona with Hawaii, which as a public policy matter advocates for much stronger resource protections—and thus adopts a farther-reaching public trust doctrine. ¹³⁶ So, unsurprisingly: Arizona's courts have interpreted the public trust narrowly, while the trust has been interpreted much broader in California and Hawaii. ¹³⁷

Even in states that recognize some broader reach to the public trust, the impact of the trust is varied. That's because states disagree about how much weight to afford the public interest element. Some states view the public trust as an option for state legislatures and administrators: if they want to consider it, they can. ¹³⁸ Some states do a bit better in requiring water administrators to at least consider the public trust as one factor in the water allocation analysis. ¹³⁹ Then some states accord extra weight to the public interest, recognizing that infringing public rights is of paramount importance. ¹⁴⁰

There are other gaps in the states' adoption of public trust principles. One is deferential standards of review. 141 Take California, one of the more progressive states in protecting public interests in water. Courts there have held that both legislative and adjudicative actions over water deserve deference. 142 As of 2012, no other state "has set aside an agency decision on public trust grounds, or has ordered the reexamination of an existing (or applied-for) water right. "143 "Rather, California courts show a prevailing trend of deference to [agencies] on public trust issues." 144

Ultimately, a couple of states have heavily narrowed or outright abdicated their public trust duties, including Arizona and Colorado. ¹⁴⁵ In these states, legislatures and water agencies are largely unbound by any fundamental sovereign or other

¹³⁴ Id.

¹³⁵ See Defs. of Wildlife v. Hull, 18 P.3d 722, 727 (Ariz. Ct. App. 2001); San Carlos Apache Tribe v. Super. Ct. ex rel. Cty. of Maricopa, 972 P.2d 179, 199 (Ariz. 1999); see also Calmat of Ariz. v. State ex rel. Miller, 836 P.2d 1010, 1020–21 (Ariz. Ct. App. 1992); Ariz. Ctr. for Law in the Pub. Interest v. Hassell, 837 P.2d 158, 162–73 (Ariz. Ct. App. 1991).

¹³⁶ See Robinson v. Ariyoshi, 658 P.2d 287, 310 (Haw. 1982).

¹³⁷ See Craig, supra note 103, at 101, 108-09, 122.

¹³⁸ See Douglas L. Grant, Public Interest Review of Water Right Allocation and Transfer in the West: Recognition of Public Values, 19 ARIZ. ST. L.J. 681, 689–90 (1987) (discussing varying approaches to what weight public interest plays in state water management systems).

¹³⁹ See id.

 ¹⁴⁰ See id. at 689.
 141 Ronald B. Robie, Effective Implementation of the Public Trust Doctrine in California Water Resources Decision-Making: A View from the Bench, 45 U.C. DAVIS L. REV. 1155, 1167-69 (2012).

¹⁴² Id. at 1167-68.

¹⁴³ Owen, supra note 108, at 1122-23.

¹⁴⁴ Leonhardt & Spuhler, supra note 42, at 77.

¹⁴⁵ See ARIZ. REV. STAT. § 37–1130 (2019); Craig, supra note 104, at 101–02, 117–18.

public trust obligation.¹⁴⁶ And even in states with more robust versions of the doctrine, the view that the public trust doctrine stems from legislative prerogative or other historic or static precepts bogs the doctrine down in the courts.¹⁴⁷

Problems like these likely derive from states' belief that the legislature and executive branches have final say in interpreting the contours of the public trust. They also stem from state courts feeling hamstrung by their legislatures and executive branches, and no easy avenue open for federal review. We will return to these topics soon.

C. These gaps in the state public trust compound the shortcomings in water management policy generally.

The water resource crisis is pressing. Scholars and researchers generally agree that to meet these crises, the legal response must be aggressive and adaptive to local needs. 148

At the outset, some suggest that public trust principles are already protected in many states via statute or administrative process. To be sure, many states have enacted statutes, water permitting schemes, and constitutional provisions that say they favor public-trust-like principles.¹⁴⁹ But as explained in the prior section, these directives have often remained disconnected from states' views about which waters and which uses are shielded by the public trust doctrine.¹⁵⁰ In other words: states trumpet public interests in water, but they don't necessarily extend public trust duties as far as their proclamations would suggest.¹⁵¹

There is also a big difference between the binding obligations of trust duties and the open-ended mandates of positive law protections for the public interest. In other words, we simply look at water subject to trust differently than we do water which is not:

When 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. ¹⁵²

Most courts view state proclamations of public interest in water akin to general welfare language: a basis to challenge the state, if at all, only in the most extreme

¹⁴⁶ See Craig, supra note 104, at 101-02, 117-18.

¹⁴⁷ See, e.g., Santa Teresa Citizen Action Grp. v. City of San Jose, 7 Cal. Rptr. 3d 868, 884 (Cal. Ct. App. 2003). ¹⁴⁸ See Craig, supra note 105, at 796–97.

¹⁴⁹ See CAL CONST. art. X, § 4 (codifying public trust doctrine); HAW. CONST. art. XI, §§ 1, 7; MONT. CONST. art. IX, § 3; PA. CONST. art. I, § 27; WASH. CONST. art. XVII, § 1; WIS. CONST. art. IX, § 1; CAL. PUB. RES. CODE § 6307 (West 2005); MICH. COMP. LAWS SERV. § 324.32501 et seq. (LexisNexis 2012); see also Hall & Regalia, supra note 47, at 166–86 (discussing various state proclamations of public water rights).

¹⁵⁰ See Hall & Regalia, supra note 47, 166-86.

¹⁵¹ See id.

¹⁵² Sax, supra note 50, at 490.

cases where a state has ignored basic limitations on its police powers. 153 For example, in Arizona, at least one statute requires water applications to be rejected if they are "against the interests and welfare of the public." ¹⁵⁴ But to date, there are no recorded cases suggesting that the public's interest has been used to challenge a water application. Colorado offers a more stark example. 155

And some states have gone so far as to expressly disavow that these public interest proclamations have any force, writing in specific standards for their water management that ignore public trust principles altogether. 156 Montana's standards for granting private water permits merely require consideration of the available water and whether other private users will be impacted. 157 Water agencies have also often been criticized as captured by private interests. 158

Perhaps most obviously, we cannot rely on legislative and executive action alone, as those standards can be changed because of short-term political motivations, ignoring the long-term nature of the rights protected by the public trust. 159 Carol Rose has deftly explained the problems with legislative responses to water resource problems: legislatures are vulnerable to the well-funded developers of natural resources—especially when opposition is "large and diffuse," say, when some interests are held by future members of the public. 161 When certain groups gain rights to these resources, the "endowment effect" comes into play, which says that it is much harder to take away rights once they are given. 162 The value of the judiciary in the water resources space starts to make some sense.

There is also a practical side to these legislative and executive shortcomings. Hope Babcock points out that "[t]he impacts of climate change are way beyond what little adaptive capacity natural resources laws have."163 And "a 'fundamental

From the beginning, these were captured agencies in the fullest sense: publicly-funded bodies whose mission was to protect and promote a limited class of private rights. Despite improvements in western water administration during the last decade or so, the interests that created the agencies in the first place, and served as the agencies' sole constituency, had already locked in well over a century of private uses.

¹⁵³ See Douglas L. Grant, Two Models of Public Interest Review of Water Allocation in the West, 9 U. DENV. WATER L. REV. 485, 486 nn.1-3 (2006).

¹⁵⁴ ARIZ. REV. STAT. ANN. § 45-153(A) (2019).

¹⁵⁵ See supra text accompanying note 119.

¹⁵⁶ See, e.g., ARIZ. REV. STAT. ANN. § 45-153 (considering "conflicts with vested rights"); NEV. REV. STAT. ANN. § 533.370 (LexisNexis 2019) (considering "conflicts with existing rights").

¹⁵⁷ MONT, CODE, ANN. § 85-2-311 (2019).

¹⁵⁸ Western state water codes and the agencies implementing them were simply not designed to protect the public trust:

Wilkinson, supra note 26, at 470.

¹⁵⁹ See Michelle Bryan Mudd, Hitching Our Wagon to a Dim Star: Why Outmoded Water Codes and "Public Interest" Review Cannot Protect the Public Trust in Western Water Law, 32 STAN. ENVTL. L.J.

¹⁶⁰ Carol M. Rose, A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation, 53 WASH. & LEE L. REV. 265, 294 (1996).

¹⁶¹ See id. at 294-95.

¹⁶³ Hope M. Babcock, Using the Federal Public Trust Doctrine to Fill Gaps in the Legal Systems Protecting Migrating Wildlife from the Effects of Climate Change, 95 NEB. L. REV. 649, 667 (2017).

re-envisioning' of environmental and natural resources law seems unlikely because of the rigidity of the laws themselves, constraining all but the most modest of expansions, and the low probability that Congress will enact new laws or even amend old ones in the current political environment." ¹⁶⁴

Robin Craig agrees, explaining that the "extent and severity of specific climate change impacts in specific states and localities are likely to remain uncertain for some time yet," and that adaptations will be required into the future. And perhaps more important, there will often be a divergence of interests between political plans for current future water needs and future interests in water—the holders of which have no voice in the legislature.

In short, positive law offers only so much help when it comes to water resources, particularly given how much deference is paid to the states when it comes to water management.¹⁶⁷ Private conservation is a drop in the bucket.¹⁶⁸

On top of that, as explained in the prior section, states have compounded the problem by creating large gaps in water resource management, and state legislatures and agencies that don't want to fill them are not voluntarily adopting a robust public trust doctrine. State legislatures and agencies are thus often not required to consider wide-ranging current and future public interests in water when making resource decisions. Mary Christina Wood summed up the problem of failing to include any sort of background limiting principle on state governments when it comes to resource management: "Under the system of environmental statutory laws . . . over the past three decades, agencies at every jurisdictional level have gained nearly unlimited authority to manage natural resources and allow their destruction by private interests through permit systems." 171

Courts—state and federal—have no alternative, adaptive legal doctrine to address these concerns.

¹⁶⁴ Id. at 667-68 (first quoting Robin Kundis Craig, "Stationarity Is Dead"—Long Live Transformation: Five Principles for Climate Change Adaptation Law, 34 HARV. ENVTL L. REV. 9, 30 (2010); then citing Todd S. Aagaard, Using Non-Environmental Law to Accomplish Environmental Objectives, 30 J. LAND USE & ENVTL. L. 35 (2014)).

¹⁶⁵ Craig, supra note 105, at 807.

¹⁶⁶ See generally id.

¹⁶⁷ See Jamison Colburn, Habitat Reserve Problem-Solving: Desperately Seeking Sophisticated Intermediaries, 41 ENVTL. L. 619, 629 (2011) ("The major federal public lands systems and the statutes governing them have been shaped to fit other priorities, and the potential connectivity between public lands as habitat is, as a rule, very low."). The exception is the Clean Water Act, which is of limited use. Id. at 625–26 n.38.

¹⁶⁸ See Jessica Owley, The Increasing Privatization of Environmental Permitting, 46 AKRON L. REV. 1091, 1113–15 (2013).

¹⁶⁹ See supra Section II.B.

¹⁷⁰ Mary Christina Wood, Advancing the Sovereign Trust of Government to Safeguard the Environment for Present and Future Generations (Part I): Ecological Realism and the Need for a Pardigm Shift, 39 ENVTL. L. 43, 65–84 (2009).

¹⁷¹ Id. at 44.

III. THE SOURCE AND DEFINITION OF THE PUBLIC TRUST

A. The doctrine derives from the public conferring to their government their wholesale rights and interests in water—not from a notion of government title or interest in commerce.

The public trust operates on the theory that citizens have entrusted some of their rights and interests in water to the government, usually the states, for safekeeping. ¹⁷² As explained later, this trust theory is emblematic of fundamental constitutional principles embedded in American democracy. ¹⁷³ Thus, whatever the public gave the sovereign, the sovereign still has—and presumably, because of those trust obligations, cannot freely give away. ¹⁷⁴ The question, then, is what exactly did the public give into their sovereigns' hands?

Some have suggested that the public trust doctrine was intended to protect commerce or travel.¹⁷⁵ Others have suggested it is best viewed as a byproduct of states owning certain water under the equal-footing doctrine.¹⁷⁶ If either were so, then limiting the public trust at its source to certain major navigable waterways or uses may make some sense. But the underpinnings of the public trust doctrine may be better seen as deriving from the public's transfer of its natural interests and rights to flowing water, not some court-defined subset of rights to big waterbodies or navigable waterways.¹⁷⁷ Court after court, scholar after scholar: all have cited general public-right principles as the basis of the doctrine.¹⁷⁸

¹⁷² See Charles River Bridge v. Warren Bridge, 36 U.S. 420, 169 (1837) (Baldwin, J., concurring) (found in Baldwin's Constitutional Views, 134–69) (explaining that "[b]y the common law, it is clear, that all arms of the sea, coves, creeks, etc. where the tide ebbs and flows, are the property of the sovereign," but that this title is held on behalf of U.S. citizens); St. Croix Waterway Ass'n v. Meyer, 178 F.3d 515, 521 (8th Cir. 1999); Stockton v. Baltimore & N.Y.R. Co., 32 F. 9, 19–20 (D.N.J. 1887) ("[A]fter the conquest, the said lands were held by the state, as they were by the king, in trust for the public uses of navigation and fishery, and the erection thereon of wharves, piers, lighthouses, beacons, and other facilities of navigation and commerce.") (emphasis added); El Dorado Irr. Dist. v. State Water Res. Control Bd., 48 Cal. Rptr. 3d 468, 490–91 (Cal. Ct. App. 2006); Brannon v. Boldt, 958 So. 2d 367, 372–73 (Fla. Dist. Ct. App. 2007); Bauman v. Woodlake Partners, LLC, 681 S.E.2d 819, 824 (N.C. Ct. App. 2009).

¹⁷³ See infra Section III.C.

¹⁷⁴ See generally Osherenko, supra note 47.

¹⁷⁵ To be fair, early decisions often referred to the public trust doctrine in terms of navigation, describing important waterways as "public highways." See, e.g., N. Transp. Co. v. City of Chicago, 99 U.S. 635, 643–44 (1878); Daniels v. Carney, 42 So. 452, 453 (Ala. 1906); Colberg, Inc. v. State ex rel. Dep't of Pub. Works, 432 P.2d 3, 9 (Cal. 1967); Town of Orange v. Resnick, 109 A. 864, 867 (Conn. 1920); Ferry Pass Inspectors' & Shippers' Ass'n v. White's River Inspectors' & Shippers' Ass'n, 48 So. 643, 644–45 (Fla. 1909) (discussing navigation); State ex rel. Wilcox v. T. O. L., Inc., 206 So. 2d 69, 71 (Fla. Dist. Ct. App. 1968); Parsons v. E.I. Du Pont De Nemours Powder Co., 164 N.W. 413, 414 (Mich. 1917) (quoting Woodman v. Pitman, 10 A. 321, 327 (Me. 1887) (Haskell, J., concurring)); Gaither v. Albemarle Hosp., Inc., 70 S.E.2d 680, 691 (N.C. 1952); Macrum v. Hawkins, 184 N.E. 817, 819 (N.Y. 1933); see also Maureen E. Brady, Defining "Navigability": Balancing State-Court Flexibility and Private Rights in Waterways, 36 CARDOZO L. REV. 1415, 1431 (2015).

¹⁷⁶ Kramer v. City of Lake Oswego, 395 P.3d. 592, 604 (Or. Ct. App. 2017) (suggesting an ownership theory of public trust).

¹⁷⁷ See J. INST. 2.1.1 (discussing the public's right to flowing water).

¹⁷⁸ See, e.g., Juliana v. United States, 217 F. Supp. 3d 1224, 1252–53 (D. Or. 2016); Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 724 (Cal. 1983); Lance Noel & Jeremy Firestone, Public

The idea that public trust turns on state title to underlying beds has been largely debunked. 179 Ownership of the corpus of water has never been given much shrift. 180 And while courts have occasionally tethered the public trust to ownership of underlying land—particularly in early America 181—courts and scholars have consistently shied away from these ownership principles over the last century. 182 Both state and federal courts have clarified that the public trust doctrine does not rely on states owning certain land under the equal footing doctrine. 183 Indeed, the U.S. Supreme Court disconnected public trust duties from ownership as far back as the late 1800s. 184

As to the theory that the public trust is borne out of a concern about commerce (which may suggest that the doctrine stems from federal law and the commerce power, or a state version of those principles)—that theory does not bear out well either. Instead, as we will see shortly, commerce just happened to be the public interest of the day, but that does not mean commerce is the definition of the public's interest for all time. At bottom, the public trust doctrine arises out of a much more fundamental public right and interest in flowing water itself. Is 6

Those principles begin at least with Roman law and the Code of Justinian. ¹⁸⁷ Many scholars have quoted and analyzed the relevant language at length, but the consensus is that this is at least one of the earliest and foundational sources of the public trust. ¹⁸⁸ The Code stands for the proposition that "air, running water, the sea,

179 Indeed, this has long been the case. See SAMUEL C. WIEL, WATER RIGHTS IN THE WESTERN STATES 11-13 (3d ed. 1911).

180 See Hall & Regalia, supra note 47, at 167-68.

181 See, e.g., Martin v. Waddell's Lessee, 41 U.S. 367, 410–11 (1842) (stating that states "hold the absolute right to all their navigable waters, and the soils under them").

182 See id. at 389–95 (tracing the history of the U.S. Supreme Court's treatment of water as property in the context of state vs. state and state vs. federal water disputes, and concluding that the ownership theory has been firmly debunked); see also, e.g., Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co., 429 U.S. 363, 378 (1977) (recognizing that public trust is not necessarily connected to title).

¹⁸³ See, e.g., Corvallis Sand, 429 U.S. at 371–72; Martin, 41 U.S. at 389–95; Nat'l Audubon Soc'y v. Superior Court, 33 Cal. 3d 419, 428, 658 P.2d 709, 714 (1983).

184 See Geer v. Connecticut, 161 U.S. 519, 525–26 (1896), overruled by Hughes v. Oklahoma, 441 U.S. 322 (1979).

¹⁸⁵ The Commerce Clause and other alternative are discussed more *infra* Section III.C.

186 See Bryant Walker Smith, Water as a Public Good: The Status of Water Under the General Agreement on Tariffs and Trade, 17 CARDOZO J. INT'L & COMP. L. 291, 301 (2009) ("Today, water is unambiguously a public good. A survey of current domestic water laws identified forty-four countries in which significant water resources belong to the state, the nation, or the people; it identified no countries that disavowed such public ownership.").

¹⁸⁷ Hall & Regalia, *supra* note 47, at 167-68.

188 Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 718 (Cal. 1983); Mont. Coal. for Stream Access, Inc. v. Curran, 682 P.2d 163, 167 (Mont. 1984) ("The theory underlying this doctrine can be traced from Roman Law through Magna Carta to present day decisions."); State v. Cent. Vt. Ry., Inc., 571 A.2d 1128, 1130 (Vt. 1989) ("The public trust doctrine is an ancient one, having its roots in the Justinian Institutes of Roman law."); Caminiti v. Boyle, 732 P.2d 989, 994 (Wash. 1987) ("The principle that the public has an overriding interest in navigable waterways and lands under them is at least as old as the Code of Justinian"); Michael C. Blumm & Thea Schwartz, Mono Lake and the Evolving Public Trust in Western Water, 37 ARIZ. L. REV. 701, 713 (1995) ("The trust doctrine's common law origins can, in fact, be traced back to medieval England and ultimately to Roman law. Consequently, there are sound historical and conceptual reasons for grounding the public trust in common law."

Trust Doctrine Implications of Electricity Production, 5 Mich. J. Envtl. & Admin. L. 169, 189 (2015) (noting that "[s]cholarly commentary" suggests the public trust serves to "basic public interests").

and consequently the shores of the sea" are "common to [all] mankind." One scholar describes this commons approach as: :

Roman law did not distinguish among the many forms of fresh water in nature: clouds, rain, diffused surface water, stream flow, river underflow, percolating groundwater, vapor, lakes, flood water, seepage, etc. Because of the fugitive and fluctuating character of water in its natural state, Roman law denied the existence of property in water altogether— including running water—and held the use of rivers and lakes to be the common right of everyone, like the sea and the air. 190

The Code thus made clear that the public has a common right to "running water" generally—separate from an interest in the sea. 191 All have a right and interest to use flowing water, whether that be "rivers" or "ports." Even prior to that, in ancient China, there was a strong recognition of public interests in water. 193 At the public trust's true source, therefore, there is no clear distinction about the public's interest in certain types of water or uses of water—the public's interests is protected as to all "flowing water." 194

⁽footnote omitted)); Allan Kanner, The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources, 16 DUKE ENVIL. L. & POL'Y F. 57, 62–63 (2005); Cynthia L. Koehler, Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy, 22 ECOLOGY L.Q. 541, 544–45 (1995); Richard J. Lazarus, Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine, 71 IOWA L. REV. 631, 633–34 (1986); Eric Nelson, The Public Trust Doctrine and the Great Lakes: Glass v. Goeckel, 11 ALB. L. ENVIL. OUTLOOK J. 131, 136–38 (2006); George P. Smith II & Michael W. Sweeney, The Public Trust Doctrine and Natural Law: Emanations within a Penumbra, 33 B.C. ENVIL. AFF. L. REV. 307, 310–13 (2006); Barton H. Thompson, Jr., The Public Trust Doctrine: A Conservative Reconstruction & Defense, 15 SE. ENVIL. L.J. 47, 56–57 (2006).

¹⁸⁹ J. INST. 2.1.1-4; see also Deveney, supra note 60, at 23 (quoting J. INST. 2.1.1-5).

¹⁹⁰ David B. Anderson, Water Rights as Property in Tulare v. United States, 38 McGeorge L. Rev. 461, 475 (2007); see also Geer v. Connecticut, 161 U.S. 519, 525 (1896) ("The first of mankind had in common all those things which God had given to the human race. This community was not a positive community of interest, like that which exists between several persons who have the ownership of a thing in which each has his particular portion. It was a ... negative community, which resulted from the fact that those things which were common to all belonged no more to one than to the others ... That which fell to each one among them commenced to belong to him in private ownership, and this process is the origin of the right of property. Some things, however, did not enter into this division, and remain therefore to this day in the condition of the ancient and negative community. ... 'These things are those which the jurisconsults called res communes the air, the water which runs in the rivers, the sea, and its shores." (quoting R.J. Pothier's treatise on property)), overruled by Hughes v. Oklahoma, 441 U.S. 322 (1979); Frank J. Trelease, Government Ownership and Trusteeship of Water, 45 CAL. L. Rev. 638, 640 (1957).

¹⁹¹ See J. INST. 2.1.1.

¹⁹² Id. at 2.1.1-2.

¹⁹³ U.N. Econ. Comm'n for Asia and the Far East, Water Legislation in Asia and the Far East, Part 1, U.N. Sales No. 67.II.F.11, at 25–36 (1967) ("[P]rivate water ownership in China was never mentioned in Chinese water laws until very recently, and □ everyone's compliance with their duties in the use, distribution and control of water, and waterworks construction and maintenance would correspond to, and enhance, the public welfare.").

Roman law did mention the importance of the public's ability to navigate on waterbodies, but there is no suggestion that the use was meant as a limitation on the public's interests. See Kanner, supra note 188, at 63.

There are many other pre-American hints that the true guiding principle of the public trust is protection of a wide-ranging public interest in water.¹⁹⁵ In the 1600s, the *Commonwealth of Oceana* was published, a text that would prove pivotal in the evolution of water-trust principles.¹⁹⁶ This text emphasized that trust principles were tethered to a fundamental public interest in the water resources held by the government, not a particular type of body of water.¹⁹⁷ Spanish and French law agree.¹⁹⁸

English common law, although sometimes offering conflicting descriptions of the public right to water, often emphasized that the public interest stemmed from flowing water:

[F]lowing water is publici juris, not in the sense that it is bonum vacans, to which the first occupant may acquire an exclusive right, but that it is public and common in this sense only, that all may reasonably use it who have a right of access to it, that none can have any property in the water itself, except in the particular portion which he may choose to abstract from the stream and take into his possession, and that during the time of possession only. 199

At the end of the American Revolution, public trust principles were incorporated in Article III of the 1783 Peace Treaty between Britain and the United States, when the parties "agreed[] [t]hat the People of the United States shall continue to enjoy unmolested the Right to take Fish" and "also on the Coasts, Bays and Creeks of all other of His *Britannick* Majesty's Dominions in *America*."²⁰⁰

In early America, courts consistently characterized the public trust as protecting the public's interest in water at large—since the very earliest adoptions of the doctrine. ²⁰¹ Take *Illinois Central Railroad Company v. Illinois*, ²⁰² the single most influential public trust case in U.S. history. ²⁰³ Illinois had attempted to transfer a big chunk of the Lake Michigan shoreline to a private company for economic development. ²⁰⁴ The Supreme Court struck down the giveaway of water resources based on the public trust doctrine, holding that a state cannot divest itself of these

¹⁹⁵ See MARC BLOCH, FRENCH RURAL HISTORY: AN ESSAY ON ITS BASIC CHARACTERISTICS 183 (Janet Sondheimer trans., 1966); MICHAEL C. MEYER, WATER IN THE HISPANIC SOUTHWEST: A SOCIAL AND LEGAL HISTORY 1550–1850 117–19 (1984); see also JAMES HARRINGTON, THE COMMONWEALTH OF OCEANA AND A SYSTEM OF POLITICS 171 (J.G.A. Pocock ed., 1992) ("As an estate in trust becomes a man's own if he be not answerable for it, so, the power of a magistracy not accountable unto the people from whom it was received becoming of private use, the commonwealth loses her liberty.").

¹⁹⁶ Robert G. Natelson, *The Constitution and the Public Trust*, 52 BUFFALO L. REV. 1077, 1111–12 (2004); see generally HARRINGTON, supra note 195.

¹⁹⁷ See generally HARRINGTON, supra note 195.

¹⁹⁸ See BLOCH, supra note 195, at 183; MEYER, supra note 195, at 117–19.

¹⁹⁹ Embrey v. Owen (1851) 155 Eng. Rep. 579, 585; 6 Ex. 353, 369 (emphasis added).

²⁰⁰ The Definitive Treaty of Peace and Friendship, between His Britannick Majesty and the United States of America, Gr. Brit.-U.S., art. III, Sept. 3, 1783, 8 Stat. 80.

²⁰¹ See, e.g., Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 435 (1892) (referring to the right at issue as "the interest of the public in [] waters").

²⁰² See generally id.

²⁰³ Lazarus, supra note 188, at 640.

²⁰⁴ See Ill. Cent. R.R., 146 U.S. at 433-34.

water resources if there was "substantial impairment of the *interest of the public* in the waters." 205

The Supreme Court tethered every aspect of its analysis of the public trust on concepts of the "public interest" in water. ²⁰⁶ Indeed, the majority decision uses some permutation of the phrase "public interest" in water sixteen times. ²⁰⁷

The Court, in other words, implies that the interest protected by the public trust is the public's interest in "water" as a whole, not only commerce. The Court considered that the "public [has an] interest[] in the use of such waters." The Court framed the inquiry as one to "insure freedom in their use so far as consistent with the public interest." On and on, the Court tied all of its reasoning to the "[t]he interest of the people"; whether actions would "substantially impair the public interest in the lands and waters"; and "improvement of . . . the public interest."

Indeed, the Court's premise for expanding the definition of navigability (and thus expanding the waters covered by the doctrine) was that the public trust should be based on the current "condition" of the United States and its waterbodies.²¹² The Supreme Court thus hints that the public trust's definition turns on a flexible analysis of the condition—or need—of the public interest.

Over a decade later, Justice Holmes made this fundamental notion of public interest in water more explicit:

[F]ew public interests are more obvious, indisputable and independent of particular theory than the interest of the public of a State to maintain the rivers that are wholly within it substantially undiminished, except by such drafts upon them as the guardian of the public welfare may permit for the purpose of turning them to a more perfect use. This public interest is omnipresent wherever there is a State, and grows more pressing as population grows. . . . The private right to appropriate is subject . . . to the initial limitation that it may not substantially diminish one of the great foundations of public welfare and health. 213

Courts have historically stepped in to eradicate water rights to support the "public interest." For example, in *United States v. Rio Grande Dam & Irrigation Co.*, the U.S. Supreme Court prevented the complete diversion of the Rio Grande River in New Mexico because it would interfere with important public interests in water.²¹⁴

Another illustrative case is a Minnesota Supreme Court case from the late 1800s, Lamprey v. Metcalf.²¹⁵ The court called out other judges for suggesting that the

²⁰⁵ Id. at 435, 463-64 (emphasis added).

²⁰⁶ See id. at 433-63.

²⁰⁷ Id.

²⁰⁸ Id. at 452-453.

²⁰⁹ Id. at 436.

²¹⁰ *Id*.

²¹¹ Id. at 452-53.

²¹² San id at 436

²¹³ Hudson Cty. Water Co. v. McCarter, 209 U.S. 349, 356 (1908).

²¹⁴ United States v. Rio Grande Dam & Irrigation Co., 174 U.S. 690, 696, 703 (1899); see also Cal. Or. Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 158–59 (1935).

^{215 53} N.W. 1139 (Minn. 1893).

touchstone for all public trust duties is whether waterways can support commerce: "we fail to see why [noncommercial waters] ought not to be held to be public waters, or navigable waters." Highlighting the basic public-interest principle that animates public trust principles, the court reasoned: "we do not see why boating or sailing for pleasure should not be considered navigation, as well as boating for mere pecuniary profit." Over the last hundred years, many courts have echoed this sentiment, defining the scope of public trust by looking to various public interest considerations. 218

Likewise, the public trust has extended to non-commerce *uses* since its early conceptions. The most obvious examples are hunting and fishing.²¹⁹ Courts have not generally required that plaintiffs prove that their use of water or wild game was for "commercial" purposes.²²⁰ As early as the late 1800s, courts were protecting recreational uses like boating and bathing.²²¹

True, cases, including *Illinois Central*, have often discussed the public's interest in navigating water or using water for commercial purposes and referred to state title—but given the historical context, it makes much more sense that these were simply the particular interests that members of the public were pressing at the time, which we will turn to next.²²²

B. That the public trust doctrine is based on protecting wholesale public interests in all waters aligns with its history: it has evolved to meet changing threats to water resources at large.

So we have this longtime recognition that the public—current and future—has a fundamental interest and right to water. And we have a response: this trust principle that requires governments to protect the public's interests and rights. One might expect that the contours of the public trust would thus reflect the threat to the public's

²¹⁶ Id. at 1143.

²¹⁷ Id.

²¹⁸ See, e.g., People ex rel. Baker v. Mack, 97 Cal. Rptr. 448, 451–53 (Cal. Ct. App. 1971); Hillebrand v. Knapp, 274 N.W. 821, 822 (S.D. 1937); Flisrand v. Madson, 152 N.W. 796, 800 (S.D. 1915); see also Mineral Cty. v. State, 20 P.3d 800, 808–09 (Nev. 2001) (Rose, J., concurring) ("If the current law governing the water engineer does not clearly direct the engineer to continuously consider in the course of his work the public's interest in Nevada's natural water resources, then the law is deficient. It is then appropriate, if not our constitutional duty, to expressly reaffirm the engineer's continuing responsibility as a public trustee to allocate and supervise water rights so that the appropriations do not 'substantially impair the public interest in the lands and waters remaining.' . . . '[T]he public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust.' Our dwindling natural resources deserve no less." (footnotes omitted)); Lawrence v. Clark Cty., 254 P.3d 606, 611 (Nev. 2011) (quoting Justice Rose's concurrence approvingly).

²¹⁹ Geer v. Connecticut, 161 U.S. 519, 533–34 (1896), overruled by Hughes v. Oklahoma, 441 U.S. 322 (1979).

²²⁰ See, e.g., id. at 530.

²²¹ E.g., Lamprey, 53 N.W. at 1143-44.

²²² See, e.g., III. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 452 (1892); see also JAMES RASBAND ET AL., NATURAL RESOURCES LAW AND POLICY 384–85 (3d ed. 2016) (discussing that water is generally a public resource that is uncapable of being owned in its natural state).

interest in water at large—as the threat grows, so does the reach and force of the state's trust obligations.

And it turns out, in broad strokes, that this relationship indeed explains the evolution of the trust doctrine in the United States. Courts have been notoriously confusing about the contours of the trust—both about what waters it covers and what uses it protects. ²²³ But there is an unmistakable progression in lockstep through the evolution of the doctrine. As threats to water have increased in number and kind, the public trust has usually expanded to keep pace.

In early America, particularly in the East before the Western Expansion—where water resources were plentiful and the threats to them few—the public trust doctrine served a relatively narrow role. After all, the public's rights and interests in water faced very different threats than those faced today. We had not yet realized the nature of threats imposed by overdrawing our water resources, much less climate change. The public's interest in water centered on travel and fishing: "waterways being the principal transportation arteries of early days, and for fishing, an important source of food." 225

This meant that large, arterial waterways were what concerned people, and their government:

In an era before widespread highways and railroads, the farms and industries of the Midwest poured their goods downriver to markets around the world. The boomtowns of the century—New Orleans, St. Louis, Cincinnati, and many others—thrived and grew on this waterborne commerce. Waterways were so valuable that the nation began building them. The Erie Canal was one. 226

Large waterways of commerce were clogged with traffic.²²⁷ This was a problem that England had faced as well.²²⁸ So, like England, the brunt of early America's use of the public trust doctrine was related to major "navigable" waterways that were "highways of commerce."²²⁹ Our ports were where trade happened; major rivers were America's transport hubs.²³⁰ And so all of the early caselaw was concerned with (1) major navigable waterways and (2) uses related to navigation and commerce.²³¹

²²³ Cf. RASBAND ET AL., supra note 222, at 384–85 (discussing the changes and confusion surrounding the public trust doctrine in relation to wildlife).

²²⁴ This is reflective of the nation's interests during eighteenth and early nineteenth century America. See Brown v. Maryland, 25 U.S. (12 Wheat.) 419, 446-47 (1827) (noting the importance of navigation's role in commerce to early America).

²²⁵ Borough of Neptune City v. Borough of Avon-By-The-Sea, 294 A.2d 47, 52 (N.J. 1972).

²²⁶ On The Water—Inland Waterways, 1820–1940: River Towns, River Networks, SMITHSONIAN NAT'L MUSEUM OF HISTORY, http://americanhistory.si.edu/onthewater/exhibition/4_4.html [https://perma.cc/P4FQ-N7PZ].

²²⁷ See Wilkinson, supra note 26, at 437 (discussing the importance of navigation on major bodies of water in early America).

²²⁸ See id. at 430-31.

²²⁹ Id. at 430, 433, 447-48 n.95.

²³⁰ See id. at 426, 434-35, 437.

²³¹ See supra Part I.

Tellingly, the very early historic caselaw is relatively silent on any concerted efforts to protect other non-commercial or non-navigable public interests in water. And that silence is telling. The interests motivating challenges usually concerned individuals who wanted to commercially fish or commercially navigate water. Alter, it was commercial mining, then agriculture. This was true prior to America's adoption of the doctrine as well.

The best view of this evolution may thus be one of practicalities: the nature of the threats to the public's interests in water were largely commercial and involved large waterways, so the caselaw developed to pay particular attention to commercial interests early in its evolution.²³⁶ Waterbodies were not so inundated with uses that members of the public's aesthetic or other interests in water were seriously threatened, or at least not to the extent that they are today.²³⁷ Commerce happened to be the public's main interest in water that was in jeopardy in these historical periods, so these interests were litigated regularly.²³⁸ A lack of standing to sue for other interests may have also contributed.²³⁹

None of this is to suggest that there is no caselaw or authority suggesting that a touchstone of the public trust doctrine is commercial navigability or state title to beds, surely there is. The point is that this story does not align with either the fundamental theory of the public trust—which does not emerge from commerce, but water itself—nor with how courts have treated the public trust in non-commercial contexts over the last 100 years.

If you accept that the public trust stems from the public conferring wholesale natural rights to water to their government, then as explained next, the constitutional rationale of this doctrine starts to become clear.

C. The doctrine is about protecting public rights vis-a-vis the government, thus, it is constitutional in force.

The public trust doctrine does not appear in the text of the U.S. Constitution.²⁴⁰ Nor does it expressly appear in most state constitutions.²⁴¹ Many courts have called the public trust a "common law" rule, and indeed, its application and evolution

²³² Caselaw is rife with examples of commercial challenges related to public trust principles, but largely silent otherwise. *See, e.g.*, Charles River Bridge v. Warren Bridge, 36 U.S. 420, 445 (1837); WIEL, *supra* note 179, at 11–12 (reviewing various commercial disputes over water).

²³³ See, e.g., Arnold v. Mundy, 6 N.J.L. 1, 1–2, 8 (N.J. 1821) (addressing commercial oyster farming).
²³⁴ See Charles F. Wilkinson, Western Water Law in Transition, 56 U. Colo. L. Rev. 317, 318–20 (1985).

²³⁵ See Natelson, supra note 196, at 1087 (explaining how the founders viewed a fiduciary government).

²³⁶ In other words, I suggest the more sensible interpretation of the caselaw in the precise opposite of scholars like Maureen E. Brady—who suggests that the public trust was only ever protecting federal or other interests in commerce. See Brady, supra note 175, at 1419.

²³⁷ See supra Section II.A (discussing evolution of threats to water resources in America).

²³⁸ See supra note 175 and accompanying text.

²³⁹ Standing to sue for public interests in resources has only developed in recent decades. *See* Turnipseed et al., *supra* note 89, at 13, 51–53 (discussing the changes surrounding standing in the context of the public trust doctrine).

²⁴⁰ See McGlothlin & Slater, supra note 24, at 60-61.

²⁴¹ See, e.g., ARIZ. CONST. art. XVII, § 1.

appear common-law-like.²⁴² The doctrine has evolved over time, case by case, and some of the earliest decisions call it a common law rule.²⁴³ As mentioned in prior sections, early American courts often framed the public trust in terms of property: when states owned beds underneath water that came with an attendant obligation to care for the water above them.²⁴⁴ And the true source of the public trust has been a hot topic in water law scholarship and jurisprudence for quite some time.²⁴⁵

But on balance, given the prior section's conclusion that the public trust protects public interests and rights in water—coupled with the weight of historic and legal authority—the true source of the public trust doctrine is constitutional.

i. History suggests that the public trust doctrine reflects a basic constitutional or sovereign limitation on government authority.

Under the purely common-law view, state legislatures can abrogate the public trust, just as they can abrogate any common law rule.²⁴⁶ And courts similarly can interpret the public trust into nonexistence.²⁴⁷ But as it turns out, the best evidence points to the public trust doctrine's roots in fundamental notions of sovereignty and constitutional principles.²⁴⁸ Some of that evidence is the role of trust principles and what those principles reflect—namely, a limitation on sovereign authority.²⁴⁹ Given that we have seen how the trust doctrine derives from the public conferring general rights to flowing water on the government, a constitutional source of the doctrine seems a foregone conclusion.²⁵⁰

"The Social Contract theory, which heavily influenced Thomas Jefferson and other Founding Fathers, provides that people possess certain inalienable lights and that governments were established by consent of the governed for the purpose of securing those rights." Trust principles are fundamental to our system of a limited government—and they reflect a basic restraint on sovereign authority that is

²⁴² See, e.g., PPL Mont., LLC v. Montana, 565 U.S. 576, 603 (2012); Alec L. v. Jackson, 863 F. Supp. 2d 11, 15-16 (D.C. Cir. 2012) (holding that that the public trust doctrine can be displaced by the Clean Air Act); see also McGlothlin & Slater, supra note 24, at 60; John Wood, Easier Said than Done: Displacing Public Nuisance When States Sue for Climate Change Damages, 41 ENVIL. L. REP. NEWS & ANALYSIS 10316, 10321 (2011).

²⁴³ See McGlothlin & Slater, supra note 24, at 58-61.

²⁴⁴ See, e.g., Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 435 (1892).

²⁴⁵ See generally McGlothlin & Slater, supra note 24 (arguing against the use of the public trust doctrine because of its irregular development).

²⁴⁶ See Brady, supra note 175, at 1433, 1440 (criticizing the contention that the public trust comes from any constitutional principles); Henry P. Monaghan, Foreword: Constitutional Common Law, 89 HARV. L. REV. 1, 10–11 (1975).

²⁴⁷ See Brady, supra note 175, at 1433 (arguing that judges did not view the Constitution as a limit on their authority in relation to navigability).

²⁴⁸ See Michael C. Blumm & Lynn S. Schaffer, The Federal Public Trust Doctrine: Misinterpreting Justice Kennedy and Illinois Central Railroad, 45 ENVTL. L. 399, 411, 419 (2015) (describing the doctrine as inherent in sovereignty and part of a state's reserved powers).

²⁴⁹ See, e.g., JOHN LOCKE, OF CIVIL GOVERNMENT: SECOND TREATISE 102, 184 (Gateway 1955) (1690).

²⁵⁰ See supra Section III.A.

²⁵¹ Juliana v. United States, 217 F. Supp. 3d 1224, 1260 (D. Or. 2016).

constitutional at least in force.²⁵² The public trust doctrine is analogous to the many trust principles baked into our U.S. Constitution and sovereign structure.

The seminal *Oceana* text was published in the 1600s, a text that would prove pivotal in the evolution of water-trust principles.²⁵³ This text emphasized that trust principles reflect a *limitation* on government authority: "an estate in trust becomes a man's own if he be not answerable for it, so, the power of a magistracy not accountable unto the people from whom it was received becoming of private use, the commonwealth loses her liberty."²⁵⁴

In the late 1600s, Charles II granted a charter to the "Governor and Company of the English colony of Connecticut, in New-England, in America." This proclamation clarified that the grant was "upon trust, and for the use and benefit of themselves, and their associates, freemen of the said colony, their heirs and assigns"—in other words, the governor was to serve as trustees for current and future members of the colonies. 256

John Locke's foundational Second Treatise on Civil Government analyzed public trust principles at length, emphasizing that the government's trust duties reflect a limitation on government authority vis-a-vis the people:

Executive officers were also trustees: "The power of assembling and dismissing the legislative, placed in the executive, gives not the executive a superiority over it, but is [a] fiduciary trust placed in him, for the safety of the people"²⁵⁸

At bottom, Locke was convinced that government trust principles reflect the basic sovereign relationship between ruler and ruled: the trust's point is to prevent governments from self-dealing or squandering resources—and puts the power of enforcement in the hands of the people.²⁵⁹ According to Locke, public officials should not engage self-dealing:

[G]overnment . . . being . . . entrusted with this condition, and for this end, that men might have and secure their properties, the prince, or senate, however it may have power to make laws for the regulating of property

²⁵² See Robinson Twp. v. Commonwealth, 83 A.3d 901, 947 (Pa. 2013) (discussing state constitution's limitation on government authority).

²⁵³ Natelson, *supra* note 198, at 1111–12.

²⁵⁴ HARRINGTON, supra note 195, at 171.

²⁵⁵ Charter of the Colony of Conn. (1662). The earlier charters of Virginia and Massachusetts contain no such trust language. *See* First Charter of Va. (1606); Second Charter of Va. (1609); Third Charter of Va. (1612); First Charter of Mass. (1629).

²⁵⁶ Charter of the Colony of Conn. (1662).

²⁵⁷ LOCKE, *supra* note 249, at 124.

²⁵⁸ Id. at 129.

²⁵⁹ See id. at 116.

between the subjects one amongst another, yet can never have a power to take to themselves the whole or any part of the subject's property without their own consent. For this would be in effect to leave them no property at all.260

All this early focus on trust principles as fundamental limitations on governments carried over to the states at the founding of America. Indeed, many states went so far as to incorporate express trust principles in their constitutions.²⁶¹ For example, the constitution of Maryland states as follows:

> That all persons invested with the legislative or executive powers of government are the trustees of the public, and, as such, accountable for their conduct; wherefore, whenever the ends of government are perverted, and public liberty manifestly endangered, and all other means of redress are ineffectual, the people may, and of right ought, to reform the old or establish a new government.262

This concept of public trust principles acting as a fundamental limitation on government authority is baked into the U.S. Constitution, as well.²⁶³ The Constitution limits the legislature's powers to collect taxes by the "general [w]elfare" of the public.²⁶⁴ Although the Supreme Court has since interpreted this limitation broadly, the phrase "general welfare" was meant to be a trust-related principle at the nation's founding. 265 Trust principles are part of other portions of the Constitution, too-like the Necessary and Proper Clause and the Impeachment Clause.²⁶⁶

History also suggests that protection of minority interests is essential to the government's trust obligations. That is because fundamental to trust principles is the duty of impartiality: a minority group's interests cannot give way to another's interests just because it constitutes a bigger share—a trustee is trustee as to all beneficiaries.²⁶⁷

²⁶¹ See, e.g., DEL. CONST. of 1776, art. IV; GA. CONST. of 1777, arts. XI, XV; MD. CONST. of 1776, arts. XXXI, XXXII, XXXV, XXXIX, LII-LV; MASS. CONST. of 1780, Part the Second, ch. VI, arts. I, II, IX; N.C. CONST. of 1776, arts. XII, XXXII; N.J. CONST. of 1776, art. XIX; N.Y. CONST. of 1777, art. XXXIII; S.C. CONST. of 1778, art. XXXVI.

²⁶² MD. CONST. of 1776, art. IV.

²⁶³ U.S. CONST. art. I, § 3, cl. VII; id. art. I, § 9, cl. VIII; id. art. II, § 1, cl. II; id. art. VI, cl. 3.

²⁶⁴ U.S. CONST. art. I, § 8, cl. 1.

²⁶⁵ See Natelson, supra note 196, at 1169 ("The Supreme Court... has ruled that the Clause grants Congress open-ended authority to spend for what Congress deems the 'general welfare.' We have seen, however, that at the time the Constitution was adopted, the phrase 'general welfare' was associated with a trust-style restriction on government power."); see also Robert G. Natelson, The General Welfare Clause and the Public Trust: An Essay in Original Understanding, 52 U. KAN. L. REV. 1, 54-55 (2003).

²⁶⁶ Natelson, *supra* note 196, at 1171–74.

²⁶⁷ See NOAH WEBSTER, AN EXAMINATION INTO THE LEADING PRINCIPLES OF THE FEDERAL CONSTITUTION PROPOSED BY THE LATE CONVENTION HELD AT PHILADELPHIA: WITH ANSWERS TO THE PRINCIPAL OBJECTIONS THAT HAVE BEEN RAISED AGAINST THE SYSTEM 20 (1787); Letter from James Madison to George Washington (Oct. 18, 1787) (on file with the Library of Virginia) (suggesting that granting monopolies would be a breach of trust and outside of Congress's enumerated powers).

Trust principles as applied to our government have always been categorized as constitutional, so it follows that the public trust doctrine is, too.

The very nature of the public trust doctrine reveals that it has always operated and been intended to operate as a reflection of sovereign authority over water. *Illinois Central* made these limitations clear. ²⁶⁸ The U.S. Supreme Court has never suggested that legislatures can abdicate public trust duties—indeed, in *Illinois Central*, it said the opposite. ²⁶⁹ And given that the Court there never once mentioned Illinois law, it could not have been operating on the presumption that Illinois was silent about whether it wanted to be bound by the trust's limitations.

The public trust doctrine's similarity to constitutional police powers is also telling. The Supreme Court made this connection itself in *Illinois Central*: "[t]he State can no more abdicate its trust over property in which the whole people are interested, . . . than it can abdicate its police powers in the administration of government and the preservation of the peace."

The reserved powers doctrine confirms this view: the Supreme Court has recognized that this doctrine prevents legislatures from abdicating sovereign authority—and a line of authority applying this doctrine was cited in *Illinois Central*.²⁷¹ As explained later, the reserved powers doctrine also supports a Due Process source for the public trust.²⁷² Similar to the reserved powers doctrine, a long line of cases (dating back to English common law) holds that legislatures cannot bind future sitting legislatures, which suggests that no legislature can *constitutionally* abdicate trust responsibilities.²⁷³

Courts have often expressly recognized the inherent sovereign limitations imposed by the public trust doctrine.²⁷⁴ Justice Douglas in *Palmer v. Thompson*

²⁶⁸ See Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 435, 457-58 (1892).

²⁶⁹ Id. at 453.

²⁷⁰ Id. at 453.

²⁷¹ See United States v. Winstar Corp., 518 U.S. 839, 888 (1996); Ill. Cent. R.R. Co., 146 U.S. at 453, 459 (discussing Newton v. Comm'rs, 100 U.S. 548 (1879) and noting "that there could be no contract and no irrepealable law upon governmental subjects . . . that every succeeding legislature possesses the same jurisdiction and power as its predecessor; that the latter have the same power of repeal and modification which the former had of enactment . . . and that a different result would be fraught with evil"); see also Newton v. Comm'rs, 100 U.S. at 559 (recognizing the reserved powers doctrine and explaining that "[e]very succeeding legislature possesses the same jurisdiction and power with respect to them as its predecessors. The latter have the same power of repeal and modification which the former had of enactment, neither more nor less").

²⁷² See infra Section III.C.ii.

²⁷³ See Nat'l Audubon Soc'y v. Sup. Ct. of Alpine Cty., 658 P.2d 709, 721–22 (Cal. 1983). The case discusses the concept that "trusts by which the property was held by the State can be resumed at anytime." *Id.* (quoting *Ill. Cent. R.R. Co.*, 146 U.S. at 455–56). This concept, however, dates back much farther.

²⁷⁴ See, e.g., San Carlos Apache Tribe v. Super. Ct. ex rel. Cty. of Maricopa, 972 P.2d 179, 199 (Ariz. 1999) (explaining that the doctrine is a constitutional limitation on the legislature); In re Water Use Permit Applications, 9 P.3d 409, 443 (Haw. 2000) (noting that the doctrine comes from inherent sovereign authority); Lawrence v. Clark Cty., 254 P.3d 606, 613 (Nev. 2011) (noting that the "doctrine arises from the inherent limitations on the state's sovereign power"); Robinson Twp. v. Commonwealth, 83 A.3d 901, 948 (Pa. 2013) (saying that the public trust rights are preserved rather than created by the state constitution); see also Karl S. Coplan, Public Trust Limits on Greenhouse Gas Trading Schemes: A Sustainable Middle Ground?, 35 COLUM. J. ENVTL. L. 287, 311 (2010) ("Public trust principles have been described as an essential attribute of sovereignty across cultures and across millennia." (footnotes

advocated that the rights protected by the Ninth Amendment should include water. ²⁷⁵ But one of the most thorough cases on this point is *Robinson Township* v. *Commonwealth*. ²⁷⁶ The Court explained that the public trust derives from "the concept that certain rights are inherent to mankind, and thus are secured rather than bestowed by the Constitution" and that this principle "has a long pedigree in Pennsylvania that goes back at least to the founding of the Republic." ²⁷⁷ International law supports this constitutional or sovereign source as well. ²⁷⁸ Other courts and commentators have long emphasized the fundamental sovereign notion of the public trust doctrine. ²⁷⁹

The public trust doctrine, therefore, makes most sense as a trust limitation on sovereign authority: a reflection of the government's limited rights to interfere with the public's interest in water resources. Like other trust principles underpinning U.S. sovereignty and the Constitution's writing, the public trust doctrine is fundamental. Under this view, both the state and federal government would be bound by the public trust. After all, both are limited by the public's rights.²⁸⁰

ii. The best theoretical (and practical) home for the doctrine sits in the due process clause.

Acknowledging that the public trust doctrine stems from constitutional and sovereign limitations on the government is an important first step. But we need some more flesh on those bones. What are the character of those limitations?

Scholars who agree that there is a constitutional or fundamental sovereign hook to the doctrine have proposed a few sources. Those include the Commerce Clause, the Due Process Clause, the Ninth Amendment, and the Union Clause" (among others). But given that the doctrine's core tenet is protecting the public's broad interest in water rights, its intrinsic flexibility, and the public trust's similarity to police powers and its focus on the public's concrete rights to water resources—the Due Process Clause makes particular sense.

omitted)); Gerald Torres & Nathan Bellinger, *The Public Trust: The Law's DNA*, 4 WAKE FOREST J.L. & POL'Y 281, 291–92 (2014).

²⁷⁵ Palmer v. Thompson, 403 U.S. 217, 233–34 (1971) (Douglas, J., dissenting).

²⁷⁶ See Robinson Twp., 83 A.3d at 948-49.

²⁷⁷ Id. at 948 n.36 (quoting Driscoll v. Corbett, 69 A.3d 197, 208 (Pa. 2013)).

²⁷⁸ See generally Michael C. Blumm & Rachel D. Guthrie, Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory Approaches to Fulfilling the Saxion Vision, 45 U.C. DAVIS L. REV. 741 (2012).

²⁷⁹ See, e.g., United States v. 1.58 Acres of Land, 523 F. Supp. 120, 124 (D. Mass. 1981) (saying neither the federal nor state governments can convey trust lands free of the sovereign's *jus publicum*); supra note 277.

²⁸⁰ See Blumm & Schaffer, supra note 248, at 411 (describing the doctrine as inherent in sovereignty and part of the state's reserved powers).

²⁸¹ Cf. William D. Araiza, The Public Trust Doctrine as an Interpretive Canon, 45 U.C. DAVIS L. REV. 693, 711 (2012) (discussing the importance of determining the legal source of the public trust doctrine); Blumm & Schwartz, supra note 188, at 713–15.

²⁸² "One of the most effective ways of diluting or expanding a constitutionally guaranteed right is to substitute for the crucial word or words of a constitutional guarantee another word or words, more or less flexible " Griswold v. Connecticut, 381 U.S. 479, 509 (1965).

The Due Process Clause incorporates unenumerated rights against the federal and state governments. ²⁸³ Whether a particular unenumerated right or limitation qualifies depends on "whether the right . . . is fundamental to *our* scheme of ordered liberty or . . . whether this right is 'deeply rooted in this Nation's history and tradition." ²⁸⁴ When identifying fundamental rights that merit protection under substantive due process, courts look to tradition and the nation's history. ²⁸⁵

Importantly, the Supreme Court has had no trouble recognizing new fundamental rights when evolving threats to our rights manifest themselves. As Justice Kennedy explained in the *Obergefell v. Hodges* decision:

The generations that wrote and ratified the Bill of Rights . . . did not presume to know the extent of freedom in all of its dimensions, and so they entrusted to future generations a charter protecting the right of all persons to enjoy liberty as we learn its meaning. When new insight reveals discord between the Constitution's central protections and a received legal stricture, a claim to liberty must be addressed.²⁸⁶

As explained above, overwhelming authority recognizes a public interest and right in water that predates America's founding.²⁸⁷ That this right is important is hard to argue.²⁸⁸ Many states themselves have declared public interests and rights in water.²⁸⁹ These concrete, tangible expectations in public water interests predate America's founding.²⁹⁰

Since the earliest conceptions of the doctrine, courts have named these rights as a public "ownership" or "title" in water.²⁹¹ Although a true ownership theory in the simple property sense has been debunked, this property language reinforces the principle that the public has concrete, protectable interests in water resources.²⁹² Perhaps most telling is that courts have widely agreed that the public trust doctrine confers standing.²⁹³ The Supreme Court has not yet expressly recognized fundamental rights to water resources, but it has been inching closer in its standing cases.²⁹⁴

In the past, there was little need to recognize that the Due Process Clause protects the public's interests in natural water, but that does not mean the protections were

²⁸³ See, e.g., Roe v. Wade, 410 U.S. 113, 152-53 (1973) (discussing the unenumerated right of privacy).

²⁸⁴ See McDonald v. City of Chicago, 561 U.S. 742, 767 (2010) (citation omitted).

²⁸⁵ See, e.g., Moore v. City of E. Cleveland, 431 U.S. 494, 503 (1977); Loving v. Virginia, 388 U.S., 12 (1967).

²⁸⁶ Obergefell v. Hodges, 135 S. Ct. 2584, 2598 (2015).

²⁸⁷ See supra Section III.A.

²⁸⁸ See generally Blumm & Schaffer, supra note 248.

²⁸⁹ Hall & Regalia, supra note 47, at 178–79 (comparing state proclamations on water ownership).
²⁹⁰ See Donna Jalbert Patalano, Police Power and the Public Trust: Prescriptive Zoning through the

Conflation of Two Ancient Doctrines, 28 B.C. ENVTL. AFF. L. REV. 683, 705–06 (2001).

²⁹¹ See, e.g., Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 457–58 (1892) (noting that the state holds title to resources for the public).

²⁹² See Hall & Regalia, supra note 47, at 184-86.

²⁹³ E.g., Paepcke v. Pub. Bldg. Comm'n, 263 N.E.2d 11, 18 (III. 1970); Kanuk ex rel. Kanuk v. State, Dep't of Nat. Res., 335 P.3d 1088, 1096 (Alaska 2014).

²⁹⁴ See, e.g., Sierra Club v. Morton, 405 U.S. 727, 751–52 (1972).

not there. As threats to water resources have reached a peak, "we learn [the Constitution's] meaning" in this space. 295

The due process theory dovetails nicely with the Ninth Amendment, too. That the public has unalienable rights that the government cannot infringe upon is a backdrop to the Constitution, as well as the basis for the Ninth Amendment.²⁹⁶ After all: "[The Ninth Amendment] was proffered to quiet expressed fears that a bill of specifically enumerated rights could not be sufficiently broad to cover all essential rights and that the specific mention of certain rights would be interpreted as a denial that others were protected."²⁹⁷ The public right to water fits the definition of an "essential" right that did not—at the time of the founding perhaps—warrant enumeration. But those rights are no less effective and no less protectable under Due Process.

A Due Process or sovereignty principle makes particular sense given the limiting nature of the public trust doctrine. After all, the doctrine is a "trust"—it has always been a limitation on what sovereigns can do with resources.²⁹⁸ If the sovereign could shed its trustee duties on a whim, there would be little force to the doctrine.²⁹⁹

The public trust's similarity to state's police powers (in conjunction with the reserved powers doctrine) also supports the Due Process view. The *Illinois Central* court explicitly compared the public trust doctrine to a state's police powers. ³⁰⁰ Both doctrines also stem from the relationship between states and their citizens. ³⁰¹ And courts frequently consider challenges to police powers under the Due Process Clause. ³⁰²

Process of elimination is also helpful. The main alternative constitutional home for the public trust doctrine is the Commerce Clause. But for one, the Commerce Clause butts up against the consistent mandate that state law defines the contours of the public trust doctrine. For example, the Supreme Court explained in *PPL Montana, LLC v. Montana* that "the contours of [the] public trust do not depend upon the Constitution" because "[u]nder accepted principles of federalism, the States retain residual power to determine the scope of the public trust over waters within their borders." This language suggests that the federal Commerce Clause is not the real source of the doctrine. The Commerce Clause would also suggest that the public trust doctrine concerns the relationship between the federal government and the states—and it never has.

The Due Process Clause fits much better on this point. If the doctrine stems from the government protecting public interests—and those public interests turn on the

²⁹⁵ See Obergefell v. Hodges, 135 S. Ct. 2584, 2598 (2015).

²⁹⁶ Griswold v. Connecticut, 381 U.S. 479, 488-89 (1965) (Goldberg, J., concurring).

²⁹⁷ Id

²⁹⁸ See supra Section III.C.i.

²⁹⁹ See infra Part V.

³⁰⁰ Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 453, 459 (1892).

³⁰¹ Compare Vill. of Euclid v. Ambler Realty Co., 272 U.S. 365, 395, 397 (1926) (describing the due process relationship), with Ill. Cent. R.R. Co., 146 U.S. at 453.

³⁰² E.g., Lingle v. Chevron U.S.A. Inc., 544 U.S. 528, 541–42 (2005), Vill. of Euclid, 272 U.S. at 386–87.

³⁰³ PPL Montana, LLC v. Montana, 565 U.S. 576, 604 (2012).

³⁰⁴ See Crystal S. Chase, The Illinois Central Public Trust Doctrine and Federal Common Law: An Unconventional View, 16 HASTINGS W.-N.W. J. ENVTL. L. & POL'Y 113, 134–35 (2010).

nature of state waters themselves—then it would make sense that state law, not federal law, governs the initial question (with federal public trust law, as I will explain later, playing a role in addressing remedies). 305

The recent case of *Juliana v. United States* signals a potential sea change in courts' appetite for recognizing substantive due process claims based on the public's collective interest in natural resources. ³⁰⁶ *Juliana* has been called "the most important lawsuit on the planet right now." ³⁰⁷

In *Juliana*, twenty-one young people, ranging in age from eight to nineteen, alleged, among other things, that the federal government violated its public trust duties by failing to stop climate change.³⁰⁸ The plaintiffs called for the government to "phase out fossil fuel emissions and draw down excess atmospheric [carbon dioxide]."³⁰⁹ Their theory was that the government has infringed their fundamental rights by allowing climate change to run rampant.³¹⁰

The court ultimately held that the plaintiffs had a fundamental right to a stable climate.³¹¹ The court also held that the public trust doctrine applied, based on the theory that the federal government had abdicated its duties over the tidal lands it owns (not its or the states' duties over water).³¹² The court analyzed and rejected the argument of whether the political question doctrine prevents courts from recognizing these public trust rights.³¹³ But as we will see, the political question doctrine is entirely inapplicable given that the point of the public trust doctrine is to limit the political branches' powers.³¹⁴

The *Juliana* decision, and its reception, signals a growing acceptance of challenges based on the public's interests in natural resources. The Court's reliance on the Due Process Clause is in line with the constitutional underpinnings suggested in this article.

But the strong opposition that has met the *Juliana* case tees up an important problem of scope: if everyone has a generalized fundamental right to natural resources, are there no limits on challenges to environmental challenges?³¹⁵ Indeed, courts are already inundated with challenges under federal statutes like the National Environmental Policy Act.³¹⁶

³⁰⁵ But that would not prevent one from challenging a deprivation of Due Process under the U.S. Constitution. See, e.g., Ill. Cent. R.R. Co., 146 U.S. at 435.

³⁰⁶ See Juliana v. United States, 217 F. Supp. 3d 1224, 1250 (D. Or. 2016).

Press Release, Our Children's Trust, Judge Coffin to U.S. Government: 'Are You Robbing Peter to Pay Paul?' (Mar. 10, 2016), https://www.ourchildrenstrust.org/press-releases [https://perma.cc/389T-RWXL] (quoting Bill McKibben and Naomi Klein) (scroll down and click on the release's hyperlink).

³⁰⁸ Juliana, 217 F. Supp. 3d at 1233-34.

³⁰⁹ Id. at 1239.

³¹⁰ See id. at 1233.

³¹¹ Id. at 1250.

³¹² Id. at 1256-61.

³¹³ See infra Part IV.

³¹⁴ See infra Part IV.

³¹⁵ The *Juliana* court attempted to cabin its decision by narrowing its decision to climate change, which presents an unusually dangerous threat to resources. *See Juliana*, 217 F. Supp. 3d at 1250, 1265–67.

³¹⁶ See, e.g., Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1213-14 (9th Cir. 2008).

The *Juliana* court also went much farther than recognizing that the public trust over water is rooted in the U.S. and state constitutions and fundamental notions of state sovereignty—which allows both federal and state courts to determine the reach of the doctrine, as this article proposes. Instead, *Juliana* recognized a basic fundamental right to a stable climate under the Due Process Clause, predicated on a generalized harm to the environment.³¹⁷ It also grounded these rights in federal land-ownership, which would be of little help to members of the public seeking to enforce the states' public trust duties to additional state waters where there is no land ownership hook.

Before leaving this section, a couple counterpoints to a constitutional framework should be aired. The public trust doctrine is unique in that it protects public interests, not private ones. The doctrine's purpose is to craft a means for challenging the state's abdicating of its authority. So, the existing substantive Due Process framework is not implicated.³¹⁸

A final counterpoint is that the U.S. Supreme Court has, a couple of times now, characterized the public trust doctrine as "a matter of state law." It could follow that this implies that the U.S. Constitution can't be implicated at all. At the outset, statements like this are, at best, dicta. The Supreme Court has never actually taken up the question of whether the public trust doctrine is *solely* a matter of state law. Nor could it: no accepted case has presented the question whether a state has abdicated its sovereign duties by infringing on the public's general interest in water. That is, except *Illinois Central*. And recall, in *Illinois Central*, the Supreme Court enforced the public trust without a single cite to Illinois law. 320

But more importantly, there are several reasons that these dicta statements are consistent with a constitutional view of the public trust doctrine. For one, as we have seen, state law is central to the public trust doctrine, because it is the states who hold most of the water potentially subject to the trust.³²¹ It is also state sovereignty duties that are enforced under the public trust doctrine. And, so, we look to state law to determine whether certain waters have been accepted into that trust and whether the trust has been breached. But that does not mean that the federal courts cannot play a role in determining when states have abdicated their sovereign duties by infringing upon the public's right to water (which can, eventually, deprive the public of their fundamental rights to water).

For another, state constitutions usually contain due process clauses, which form an additional check on the states' abdication of their water-trust duties. 322 Thus, even if the public trust doctrine were a matter of "state law," that would not undermine

³¹⁷ Juliana, 217 F. Supp. 3d at 1248-50.

³¹⁸ See Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 712, 721 (Cal. 1983) (discussing the "public interest" protected by the doctrine).

³¹⁹ E.g., PPL Mont., LLC v. Montana, 565 U.S. 576, 603 (2012); Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co., 429 U.S. 363, 372 (1977).

³²⁰ See generally Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387 (1892).

³²¹ See supra Sections III.A-B.

³²² See, e.g., Zachary Bray, Texas Groundwater and Tragically Stable "Crossovers," 2014 BYU L. REV. 1283, 1295, 1306–07 (discussing the addition of the "Conservation Amendment" to Texas's constitution).

the theory that the doctrine reflects a limit on sovereign authority vis-a-vis the citizenry.

With the doctrine firmly rooted in constitutional principles, particularly the Due Process Clause, the question is: so what?

- IV. WHEN COURTS FIND THAT A STATE INFRINGES THE PUBLIC'S INTERESTS IN WATER, EXPANDING THE PUBLIC TRUST'S REACH IS THE REMEDY

 —AND A JOB FOR THE JUDICIARY ALONE.
- A. Interpreting when states exceed their authority and infringe on the public's general right to water is a unique job for the judiciary

With the public trust doctrine firmly entrenched in constitutional and sovereign principles, the judiciary's role becomes clear. The public trust doctrine simply reflects the states' limited authority over water vis-a-vis the people. When states allow too much water to be privatized or harmed, thus infringing on the public interest, those states have exceeded their authority. And interpreting the bounds of that authority is a classic judicial function—both state and federal.

Like the interpretation of any other constitutional doctrine, this is a job for the courts alone. 323 Although this means that legislative and executive decisions about water can be overruled, that is proper. After all: "while democracy may seem subverted when a court overrules the acts of elected officials, such judicial acts in fact serve democracy by preserving rights invested in all the people."324 "Courts act as 'an intermediate body between the people and the legislature, in order, among other things, to keep the latter within the limits assigned to their authority."325 "Because the duty to 'say what the law is' is vested entirely and exclusively in the judicial branch, the Court has made plain that Congress may not interfere with the federal courts' independent process of adjudication and interpretation."326

First, interpreting the public trust doctrine is at the core of judicial function.³²⁷ Following prior sections above, courts are merely redressing the wrong of states infringing on the public interest in water.³²⁸ The application of the public trust doctrine has been the job of the judiciary since its inception.³²⁹ The judiciary's role makes sense when you remember that the public trust is about protecting tangible

³²³ This is not a controversial point: Alexander Hamilton famously said that "[t]he interpretation of the laws is the proper and peculiar province of the courts"—and that has remained the case. Perez v. Mortg. Bankers Ass'n, 135 S. Ct. 1199, 1217 (2015) (quoting THE FEDERALIST NO. 78, at 467 (Alexander Hamilton)).

³²⁴ David Takacs, *The Public Trust Doctrine, Environmental Human Rights, and the Future of Private Property*, 16 N.Y.U. ENVTL. L.J. 711, 715 (2008).

³²⁵ Perez, 135 S. Ct. at 1219 (quoting THE FEDERALIST No. 78, at 467 (Alexander Hamilton)).

³²⁶ Crater v. Galaza, 508 F.3d 1261, 1264 (9th Cir. 2007) (Reinhardt, J., dissenting).

³²⁷ See id. at 1264 ("[T]he federal courts are charged with interpreting the Constitution and ensuring that the statutory law is consistent with it—a determination that is, in the words of Chief Justice John Marshall, the 'very essence of judicial duty." (quoting Marbury v. Madison, 5 U.S. 137, 178 (1803))).

³²⁸ See supra Part III.

³²⁹ See supra Part I.

current and future rights in water. Some scholars have even analogized these future rights to a future property interest being protected by courts.³³⁰

Second, separation of powers principles dictate that the judiciary alone must be the final arbiter of the reach of the public trust doctrine—and thus the limits of the other branches' authority vis-a-vis the people. "[E]ver since Marbury," the Supreme Court "has remained the ultimate expositor of the [C]onstitution[]." "Many decisions . . . have unequivocally reaffirmed the holding of Marbury v. Madison that '[i]t is emphatically the province and duty of the judicial department to say what the law is." "332 And the public trust doctrine requires us to consider the appropriate role of the legislature in infringing on the substantive rights of the public to water.

Separation of powers is fundamental to our system of government, known "[e]ven before the birth of this country . . . to be a defense against tyranny."³³³ It is "a basic principle of our constitutional scheme that one branch of the Government may not intrude upon the central prerogatives of another."³³⁴ We learn about the value of checks and balances in law school (if not long before). As Arizona courts have noted, the public trust doctrine is rooted in our system of checks and balances and applies with equal force to sovereign authority over water.³³⁵

That's because, as explained above, the public trust doctrine at its heart is a reflection of the limitations placed on states in harming the water resources that the public entrusted to them. To give the state political branches the keys to the limits of their own powers would undermine the limitation itself.³³⁶

Third, the reserved powers doctrine further supports the judiciary's role. Under this theory, powers not expressly or impliedly given to the government are retained by the people.³³⁷ In addition to this doctrine, it has been recognized that powers conferred to the state "can neither be abdicated nor bargained away, and [are] inalienable by express grant.": "338 When one accepts that the public's interest in water as a whole was conferred in trust on the states, the reserved powers doctrine requires that states not abdicate that right. And the judiciary is in the best position to determine that question.

One follow-up question is: whose separation of powers, state or federal? The answer is likely both. State constitutions typically provide for the same tripartite structure as at the federal level.³³⁹ And scholars have explained at length why state separation of powers principles are just as supportive of a limited legislative and

³³⁰ See, e.g., Margaret E. Peloso & Margaret R. Caldwell, Dynamic Property Rights: The Public Trust Doctrine and Takings in a Changing Climate, 30 STAN. ENVIL. L.J. 51, 83–85 (2011).

³³¹ United States v. Morrison, 529 U.S. 598, 617 n.7 (2000).

³³² United States v. Nixon, 418 U.S. 683, 703 (1974) (citation omitted).

³³³ Loving v. United States, 517 U.S. 748, 756–57 (1996).

³³⁴ Id. at 757.

³³⁵ E.g., San Carlos Apache Tribe v. Super. Ct. ex rel. Cty. of Maricopa, 972 P.2d 179, 199 (Ariz. 1999); Ariz. Ctr. for Law in Pub. Interest v. Hassell, 837 P.2d 158, 168–69 (Ariz. Ct. App. 1991).

³³⁶ See NORMAN SINGER & SHAMBIE SINGER, SUTHERLAND STATUTORY CONSTRUCTION § 3:4 (7th ed. 2018). ³³⁷ Walter F. Dodd, *The Function of a State Constitution*, 30 Pol. Sci. Q. 201, 201–03 (1915).

³³⁸ See Atl. Coast Line R.R. v. City of Goldsboro, 232 U.S. 548, 558 (1914).

 $^{^{339}}$ E.g., ARIZ. CONST. art. VI, § 1; *id.* art. IV, pt. 1, § 1; *id.* art. V, § 4; ILL. CONST. art. VI, § 1; NEB. CONST. art. V, § 1; *id.* art. III, § 1; *id.* art. IV, § 6.

executive branch as the federal government are—regardless of whether particular states have constitutionally instituted express separation of powers principles.³⁴⁰ And when the public's fundamental rights to water are infringed, the U.S. and state constitutions are implicated. So, challenges in either court should be proper.

One obvious counter is that public rights are typically protected through the political process, not the judicial one.³⁴¹ Public right cases are often dismissed on political question grounds or as general grievances.³⁴² But the political question doctrine should be no barrier to the view that the reach of the public trust doctrine is constitutional and the province of the courts. This doctrine instructs that certain questions should be left to the political branches of government.³⁴³ The doctrine is a narrow one.³⁴⁴ The core factors are (1) a commitment of the question to a non-judicial branch of government; (2) a lack of judicially manageable standards for resolving an issue; and (3) the impossibility of deciding the dispute without a policy choice clearly appropriate for non-judicial discretion.³⁴⁵

At the outset, interpretation of the bounds of the public trust doctrine is an interpretation of the political branches' powers—not traditionally a political question.³⁴⁶ Interpreting whether and when states have violated their constitutional or sovereign duties does not touch on the sorts of political questions this doctrine is concerned about.³⁴⁷ Instead, interpreting whether the other branches have exceeded their powers is at the heart of the judicial role.³⁴⁸ As demonstrated in the *Juliana* decision: determining the remedy to redress harm is the judiciary's function.³⁴⁹ And as the Ninth Circuit recently explained: claiming that review of legislative or

³⁴⁰ See, e.g., Julian N. Eule, Temporal Limits on the Legislative Mandate: Entrenchment and Retroactivity, 1987 Am. B. FOUND. RES. J. 379, 395–96; see also Dodd, supra note 337, at 203–04.

³⁴¹ See Ashwander v. Tenn. Valley Auth., 297 U.S. 288, 341 (1936) (Brandeis, J., concurring).

³⁴² See, e.g., Flast v. Cohen, 392 U.S. 83, 119 (1968). The standard, however, has varied considerably over time. Compare United States v. Students Challenging Regulatory Agency Procedures, 412 U.S. 669, 688–90 (1973), with Warth v. Seldin, 422 U.S. 490, 499, 502 (1975) (discussing standard in different terms).

³⁴³ Baker v. Carr, 369 U.S. 186, 216–17 (1962) ("Prominent on the surface of any case held to involve a political question is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question.").

³⁴⁴ See id. at 217.

³⁴⁵ *Id*.

³⁴⁶ See Flast, 392 U.S. at 95 (noting that courts should adjudicate disputes in a "form historically viewed as capable of resolution through the judicial process").

³⁴⁷ Robinson Twp. v. Commonwealth, 83 A.3d 901, 927-28 (Pa. 2013).

³⁴⁸ Cf. Lynn S. Schaffer, Pulled from Thin Air: The (Mis)Application of Statutory Displacement to a Public Trust Claim in Alec L. v. Jackson, 19 LEWIS & CLARK L. REV. 169, 192 (2015) ("The limits placed on the sovereign body represent the true power of the trust, especially when the government violates fiduciary duties to protect trust property from impairment, damage, or waste.").

³⁴⁹ Juliana v. United States, 217 F. Supp. 3d 1224, 1239 (D. Or. 2016). The court stated there that the "plaintiffs do not ask this Court to pinpoint the 'best' emissions level; they ask this Court to determine what emissions level would be sufficient to redress their injuries. That question can be answered without any consideration of competing interests." *Id.*

executive actions is outside of its authority "runs contrary to the fundamental structure of our constitutional democracy" and is "beyond question" a province in the judiciary.³⁵⁰

There is no real theory that the question of the reach of sovereign authority under constitutional or sovereign principles would be one for the other branches.³⁵¹ There are also judicially manageable standards for resolving these questions—the existing and specific threats to public interests in local waters.³⁵²

Another common argument against the public trust doctrine as a judicially enforceable, constitutional doctrine is that it displaces the common law.³⁵³ But, as explained above, that view simply misconstrues the doctrine as one of mere common law, rather than a limitation on sovereign authority.³⁵⁴ Not to mention that even if the common law theory were accepted, rights granted at common law cannot be abrogated without an adequate substitute,³⁵⁵ and there isn't one here. At bottom, the reason courts have considered public rights squarely aligns with the entire purpose of the public trust doctrine: democratic failure.³⁵⁶ And legislatures and executive agencies are failing.³⁵⁷

And it is not entirely clear that this is a generalized grievance issue in the first place: public interests in water define the scope of the public trust doctrine—but not the private interests that form standing to sue. The two seem like separate questions. State authority over water comes from fundamental sovereignty principles—and all water was charged with a trust at the nation's founding. Another important point is that although the public trust grants rights to all members of the public to protect public interests, it is also based on private rights to those interests. The public nature concerns how the public trust should be interpreted, not so much the individual member of the public's rights to redress wrongs against them.

³⁵⁰ Washington v. Trump, 847 F.3d 1151, 1161, 1164 (9th Cir. 2017).

³⁵¹ Id. at 1161.

³⁵² See Juliana, 217 F. Supp. 3d at 1239 ("Plaintiffs could have brought a lawsuit predicated on technical regulatory violations, but they chose a different path. . . . Every day, federal courts apply the legal standards governing due process claims to new sets of facts.").

³⁵³ See Schaffer, supra note 348, at 175.

³⁵⁴ See Albert C. Lin, Public Trust and Public Nuisance: Common Law Peas in a Pod?, 45 U.C. DAVIS L. REV. 1075, 1095 (2012) ("[T]he public trust doctrine functions in a quasi-constitutional way: it establishes overarching fiduciary principles regarding trust resources that may not be overridden by legislative or executive action.").

³⁵⁵ Bland v. Scott, 112 P.3d 941, 949-50 (Kan. 2005).

³⁵⁶ Professor Ely makes the general case for judicial review based upon democratic failure. JOHN HART ELY, DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW 4 (1980).

https://www.newyorker.com/magazine/2010/10/11/as-the-world-burns [https://perma.cc/6GP8-TE2Z] (describing the failure of Congress to pass climate change legislation in 2010); Ryan Lizza, *The President and the Pipeline*, NEW YORKER (Sept. 9, 2013), https://www.newyorker.com/magazine/2013/09/16/the-president-and-the-pipeline [https://perma.cc/4HEU-AZTC]; supra Sections II.A and II.B.

³⁵⁸ Indeed, the Illinois Central decision was about protecting individual rights in use of the Chicago waterfront. Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 421–22 (1892).

B. The court's role in the public trust doctrine is best viewed as one of deciding remedies: because courts are requiring states to take trust duties over the waters needed to redress a public wrong.

But saying that the judiciary can defeat legislative decisions with the public trust is not enough. Because the more important question is: which aspects of the public trust doctrine should the judiciary be interpreting and imposing on the other branches?

We've seen that there are wide gaps in water resource management laws and, despite some states' best efforts, the public trust doctrine. Many of these gaps, at least when it comes to the public trust, are because of a misapprehension about where the trust comes from—and, more importantly, where its limitations come from. Even the state that clearly sits at the progressive end of the public trust spectrum, California, still reasons that the reach of the public trust turns on historic concepts of navigability, and that always, the ultimate definition of the public trust can be defined by the other branches. The public trust can be defined by the other branches.

In the historic Mono Lake decision, the California Supreme Court explained *en banc* that the reach of the waters infused with public trust obligations turns on historic concepts of navigation.³⁶¹ More importantly, the court suggested that beyond the traditional minimum, legislatures had the power to define the reach of the doctrine, noting that the California legislature had "implicitly acknowledged" expansions to the trust.³⁶² The problem remains more fundamental.

Some scholars and courts have already suggested that legislatures cannot abdicate their public trust duties over a certain subset of waters, ³⁶³ but as we have seen that is of only limited use because states can simply narrow the scope of the doctrine with impunity. ³⁶⁴ Instead, we should consider the view that the reach of the public trust itself—in terms of which waters, which uses, and how effective—is a constitutional question, too. This view makes sense because the public trust doctrine is a means of determining when states have abdicated their constitutional duties by failing to protect public water interests as a whole. To remedy those harms, states will often need to take additional waters and uses into trust.

The judiciary's most important job should be interpreting what scope of public trust obligations will satisfy the state's duties to protect the public interest in flowing

³⁵⁹ See supra Part II.

³⁶⁰ See Nat'l Audubon Soc'y v. Super. Ct. of Alpine Cty., 658 P.2d 709, 712 (Cal. 1983).

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³⁶² Id. at 713.

³⁶³ E.g., Takacs, supra note 324, at 714–15 (citing the *Illinois Central Railroad* court) ("While other common law doctrines may be undone by explicit legislation, the Public Trust Doctrine seems sacrosanct, holding a power beyond modification or revocation by legislative action."); see also James L. Huffman, A Fish Out of Water: The Public Trust Doctrine in a Constitutional Democracy, 19 ENVTL. L. 527, 565–68 (1989) (discussing how the public trust doctrine results in nondemocratic courts setting aside decisions of democratic legislatures).

³⁶⁴ See Leonhardt & Spuhler, supra note 42, at 80-81.

water as a whole. This follows if you accept the conclusions I've touched on in prior sections:

- First, we accept that the public trust protects the public's basic interest in water at large. 365
- Second, we accept that the public trust derives from the public entrusting the entire corpus of natural waters to their governments.³⁶⁶
- Third, we accept that the public trust doctrine concerns when states have violated their duties over these waters by allowing the public's interest to be harmed—and is thus constitutional in nature.³⁶⁷
- The conclusion is that the judiciary's main role here is determining which waters and which interests the states need to take trust obligations over to remedy the harm wrought on the public's interest in flowing water.

In other words: the reach of the public trust doctrine—in terms of which waters are covered, what uses are protected, and how much force the doctrine must play in allocation decisions—all turns on the nature of the threat or harm to the public's interest in water, and what will remedy those threats and harms.

A helpful framing theory is the law of constructive and resulting trusts. The Restatement of Trusts discusses constructive trusts,³⁶⁸ which are remedies for when property is acquired and retaining that property would be unjust.³⁶⁹ A resulting trust similarly involves a trust that arises because the original owner of property did not intend for the recipient to have all legal rights to it.³⁷⁰

In the public trust context, we effectively have states sitting on water and failing to prevent them from being harmed. Courts are stepping in and imposing a constructive trust on the state's water resources to redress this wrong or recognizing a resulting trust inherent in the public's original conferring of its interests to the states.³⁷¹ Determining the bounds of what water assets need to be put into the trust is a classic judicial function.

On the other hand, separation of powers principles and the nature of the trust doctrine suggest that courts should not be wading into questions about what particular steps the other branches should be taking to preserve water resources.³⁷² Instead, courts should be doing three things: (1) deciding which waters and which uses should be folded into the trust, (2) deciding whether threats to water are so dire that public interest principles will override competing interests in water,³⁷³ and (3) deciding when the other branches have abdicated their trust duties entirely.

Section III.C.i.

³⁶⁵ See supra Section III.A.

³⁶⁶ See supra Sections III.A-III.B.

³⁶⁷ See supra Section III.C.

³⁶⁸ See generally RESTATEMENT (SECOND) OF TRUSTS §1 (AM. LAW. INST. 1959).

³⁶⁹ Id. §1 cmts. d-e.

³⁷⁰ Id

³⁷¹ See Huffman, supra note 363, at 569 (discussing resulting trust theories).

A full discussion of this point is outside of the scope of this article, and likely ripe for another article entirely.
 Recall that states give differing weights to the public trust factor when making allocation decisions.
 See supra Section II.B. But allowing legislatures or agencies to effectively ignore public trust obligations would amount to an abdication of the trust duty—and thus remains a question for the judiciary.

Each of these determinations require courts to interpret the nature of the other branches' obligations to protect public interests in water—and are thus well suited for the courts.

V. THE JUDICIAL FRAMEWORK FOR THE PUBLIC TRUST DOCTRINE

How might this all look in practice? Most importantly, this framework will plug up the public trust holes that several states have created. This includes the legislative, executive, and judicial holes. Because the courts are interpreting the boundaries of sovereign authority, 374 courts can no longer relegate the public trust to merely a common law rule that can be overruled on a whim. Even better, the court's role would now include interpreting the reach of the doctrine.

This version of the public trust doctrine is also simply more robust than others. With the view that states have obligations to protect trust duties as to all flowing waters—only at the point that public trust interests are seriously threatened—states are not merely required to "consider" the public trust, instead, they are required to preserve it.³⁷⁵

Another key advantage is that if we recognize that the public interest and rights in the entire corpus of flowing water predated our nation's founding—and that those interests and rights were conferred in trust to the states—then challenges to state water decisions under the Takings Clause will have less force.³⁷⁶

Other scholars and states have done admirable jobs at proposing how legislative and executive branches should practically carry out their trust duties.³⁷⁷ Some important fundamentals include requiring that every allocation of water touching on judicially determined trust waters must include a public interest consideration.

Presumably, if courts determine that expanding public trust waters and uses is warranted, then the public interest factor should be given extra, if not dispositive weight in water management decisions. In other words, states act within their constitutional authority only if they determine that the public interest is not impacted by a particular water allocation.

Determining what waters need to be brought into the trust as a remedy for harms to the public interest should be no problem for courts. Nor should determining when states have failed to consider the right factors and thus abdicated their trust duties to

³⁷⁴ See supra Section III.C.ii.

³⁷⁵ The problem is that the entire point of a trust is that the trustee cannot extinguish it. See Ill. Cent. R.R. Co. v. Illinois, 146 U.S. 387, 453 (1892). And allowing states to merely "consider" the trust undermines its constitutional and sovereign notion of limiting state authority to infringe on the public interest. See supra Section III.C.i. But see John D. Echeverria, The Public Trust Doctrine as a Background Principles Defense in Takings Litigation, 45 U.C. DAVIS L. REV. 931, 951–55 (2012) (accurately explaining the history of courts often recognizing that states need only consider the public trust interest).

³⁷⁶ See Peloso & Caldwell, supra note 330, at 83–85 (discussing how the public trust doctrine interacts with takings law).

³⁷⁷ See, e.g., Alejandro E. Camacho & Robert L. Glicksman, Legal Adaptive Capacity: How Program Goals and Processes Shape Federal Land Adaptation to Climate Change, 87 U. COLO. L. REV. 711, 729–31 (2016).

consider the public interest.³⁷⁸ Courts conduct a similar analysis all the time under various environmental statutes.³⁷⁹

This judicial-based approach will also free up courts in even the most progressive states to further embrace the flexible public trust approach to water management. That may be of some value. As mentioned above, the water crisis is quick-moving and dire. A flexible public trust doctrine offers the adaptiveness states need to protect their diminishing water resources. The legislative approach to water law has a lot of shortcomings that an even more robust judicial approach can fill. As a few other scholars have explained at length, the public trust doctrine's common law character makes it a much better answer to many water problems today. After all:

The Anglo-American common law system, for example, is in some ways more procedurally adaptive than the legislative process. A common law court has the capacity to distinguish previous cases when addressing new factual circumstances. If Congress wants to amend a statute to address a new situation not covered by existing law, or because changed circumstances have undercut the effectiveness of existing law, it must follow the constitutionally prescribed method for changing the law—adoption of the same bill by both houses of Congress and either presidential signature or legislative override of a presidential veto by a two-thirds vote. ³⁸²

As Robin Craig explains at length, the shortcomings of many legislative answers to water law problems align quite nicely with a common law approach.³⁸³ This includes:

- The localized nature of water management needs; 384
- The threats to water are ever-changing;³⁸⁵
- Experimentation is needed to find the best approaches to water management;³⁸⁶
- A flexible common-law approach will allow the doctrine to evolve.³⁸⁷

³⁷⁸ For states like Washington and Montana that have statutes requiring some form of environmental impact assessment, it should be easy to add a public interest review. See States and Local Jurisdictions with NEPA-like Environmental Planning Requirements, NAT'L ENVTL. POLICY ACT, https://ceq.doe.gov/laws-regulations/states.html [https://perma.cc/658A-XWGC].

³⁷⁹ See Citizens for Smart Growth v. Sec'y of Dep't Transp., 669 F.3d 1203, 1211 (11th Cir. 2012); Suffolk Cty. v. Sec'y of Interior, 562 F.2d 1368, 1375–76 (2d Cir. 1977); see also National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370(h) (2018).

³⁸⁰ See Camacho & Glicksman, supra note 377, at 729-30; J.B. Ruhl, General Design Principles for Resilience and Adaptive Capacity in Legal Systems—With Applications to Climate Change Adaptation, 89 N.C. L. REV. 1373, 1381-82 (2011).

³⁸¹ See, e.g., Babcock, supra note 163, at 676–78; Craig, supra note 88, at 412–13.

³⁸² Camacho & Glicksman, *supra* note 377, at 729; *see also* Ruhl, *supra* note 380, at 1381 (making the same argument).

³⁸³ See Craig, supra note 105, at 806-07.

³⁸⁴ See id. at 807.

³⁸⁵ Id. at 795-96.

³⁸⁶ See id. at 846-50.

³⁸⁷ Id.

VI. CONCLUSION

We should consider a framework that fully empowers the federal and state judiciary to determine the scope of the public trust in all of our nation's waters. This framework acknowledges the basic relationship between threats to water and the contours of the public trust. When courts determine that the public's interest requires an extension of trust obligations to a new set of waterways or uses—then it can say so. The court is declaring the bounds of the state's authority over water. With those boundaries set, the other branches decide what to do on the ground.

The implications for this framework are many. State courts can now extend the reach and force of the public trust doctrine, even in the face of the political branches refusing to act. As important, federal courts can enforce the public's right to water to ensure that states protecting the public's basic rights to water. The public, in other words, can hold its government accountable to the social contract it signed when the nation was founded—a contract to protect the public's natural resources today and for future generations.