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Reconciling Police Power Prerogatives, Public Trust Interests, and Private Property Rights Along Laurentian Great Lakes Shores

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RECONCILING POLICE POWER PREROGATIVES, PUBLIC TRUST INTERESTS, AND PRIVATE PROPERTY RIGHTS ALONG LAURENTIAN GREAT LAKES SHORES

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ABSTRACT

The United States has a north coast along its 'inland seas'—the Laurentian Great Lakes. The country enjoys more than 4,500 miles of Great Lakes coastal shoreline, almost as much as its ocean coastal shorelines combined, excluding Alaska. The Great Lakes states are experiencing continued shorefront development and redevelopment, and there are growing calls to better manage shorelands for enhanced resiliency in the face of global climate change. The problem is that the most pleasant, fragile, and dangerous places are in high demand among coastal property owners, such that coastal development often yields the most tenacious of conflicts between public interests and private property rights. Indeed, those conflicts implicate fundamental debates over the state's authorities and prerogatives to regulate privately owned shoreland (the police power), the public's interest in coastal resources (the public trust doctrine), and private property owners' rights to use and to exclude others from their shorelands (referred to collectively here as the private property doctrine).

While not tidal, standing water levels of the Great Lakes fluctuate over time substantially. As a result, the lakes have beaches much like ocean coasts, and the public trust doctrine is aptly applied to them, albeit awkwardly. All of the eight Great Lakes states have long acknowledged the applicability of the public trust doctrine to their Great Lakes bottomlands and shorelands. In doing so, they have accepted the now-conventional understanding that the doctrine originated in ancient Roman law.

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Even so, recent critiques of the public trust doctrine assert that it has been misinterpreted, and that its historical pedigree is not so strong or aptly applied to American coasts, especially along Great Lakes coasts. These critiques do not address the historical pedigree and robustness of the police power doctrine, or, more importantly, the pedigree and robustness of contemporary notions of private property rights. If the public trust doctrine is indeed lacking upon reconsideration, how does it fare in comparison to these other doctrines?

This Article lays the foundation for an extended study of the public trust doctrine as it applies to Great Lakes shores. We provide an overview of the public trust doctrines of all eight Great Lakes states, noting for illustration and, where appropriate, particulars for the State of Michigan, which enjoys more than 60% of the combined U.S. Great Lakes coastline. To explain our motivations in undertaking this study, the Article first briefly reviews the importance of the lakes to the State of Michigan and the other Great Lakes states more broadly and then frames shoreland management as one of the resource management imperatives those states face. The Article then reviews the historical origins, the contemporary contours, and the ongoing debates surrounding the police power, public trust, and private property doctrines separately. Building on that foundation, we then analyze how courts and legislatures have reconciled those doctrines through application in coastal settings broadly.

First, we find that the public trust doctrines of the Great Lakes states fall well within the boundaries of the origins and application of that doctrine throughout the nation's history, even though the Lakes are not tidal. Second, we find that the concept of a 'moveable freehold' inherent in the public trust doctrine—that the boundary separating state-owned submerged public trust land from privately owned upland along the shore—reflects natural dynamic shoreline processes, not arbitrary governmental rulemaking, and is well established and accepted by all Great Lakes states.

Finally, and most importantly for the purposes of this Article, we find that all three doctrines—public trust, police powers, and private property rights—trace their roots to English common law and even ancient Roman law, but all are in fact distinctly American doctrines. All three doctrines were first fully articulated in the context of unique American institutions, values, and conflicts. Each has evolved over time as American institutions, values, and conflicts have similarly evolved. Thus, despite detractors' assertions to the contrary, the public trust doctrine is no less robust or aptly applied to Great Lakes coasts than is either the police power or private property rights doctrine. In fact, despite case law and commentary rhetoric that can be dogmatically extreme, efforts to understand and reconcile these doctrines in practice generally strike a pragmatic balance between the private rights inherent in shoreland property ownership and the public interest in common access to and use of submerged lands and the foreshore.

Following our analysis of these doctrines from a broad perspective, we conclude by providing a brief overview of the several public trust doctrines as adapted by all of the Great Lakes states and finally identifying a number of questions for further study.

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INTRODUCTION

The United States has a north coast along its ‘inland seas,’ the Laurentian Great Lakes. Because these freshwater inland seas drain to the Atlantic Ocean

through the Gulf of St. Lawrence, they are referred to as the ‘Laurentian’ Great Lakes by great lakes researchers to distinguish them from other great lakes globally.¹ The five Laurentian Great Lakes, which include Lakes Superior, Michigan, Huron, Erie, and Ontario, and the St. Lawrence Seaway altogether touch eight U.S. states and two Canadian provinces, including the States of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York and the Provinces of Ontario and Quebec.

Taken together, the five Great Lakes extend some 750 miles from west to east and cover a combined surface area of about 95,000 square miles, roughly the same size as the United Kingdom.² U.S. Great Lakes’ shorelines combined, not including connecting waters, total more than 4,500 miles, making the U.S. Great Lakes coast almost as long as the U.S. Pacific, Gulf of Mexico, and Atlantic coasts combined, excluding Alaska.³ Of the eight states bordering the Laurentian Great Lakes, the State of Michigan is *the* self-proclaimed “Great Lakes State.”⁴ It is unique among them in that its two peninsulas touch four of the five Great Lakes (Superior, Michigan, Huron, and Erie). In addition, Michigan’s Lower Peninsula touches an additional large (but not ‘Great’) lake that is part of the same system—Lake St. Clair;⁵ while the entire land area of the state, save for a tiny sliver at its southwest corner, drains to the Great Lakes Basin.

For all of the Great Lakes states, the lakes have served historically as a major waterborne avenue for commerce,⁶ the source of vibrant freshwater commercial and recreational fishing industries,⁷ and the locus for shorefront industries.⁸ They

1. *Laurentian Great Lakes*, GLOBAL GREAT LAKES, <http://www.globalgreatlakes.org/lgl/> (last visited Nov. 27, 2018).

2. *About Our Great Lakes: Great Lakes Basin Facts*, U.S. GREAT LAKES ENVTL. RESEARCH LABORATORY, <https://www.glerl.noaa.gov/education/ourlakes/facts.html> (last visited Aug. 15, 2018); *The Great Lakes*, U.S. ENVTL. PROTECTION AGENCY, <https://www.epa.gov/greatlakes> (last visited Aug. 15, 2018).

3. Andrew D. Gronewold, et al., *Coasts, Water Levels, and Climate Change: A Great Lakes Perspective*, 120 CLIMATE CHANGE 697, 697-99 (2013).

4. Michigan’s official state motto is “Si quaeris peninsulam amoenam circumspice,” or “If you seek a pleasant peninsula, look about you.” *State Motto*, MICHIGAN.GOV, https://www.michigan.gov/som/0,4669,7-192-29938_30245-2606—,00.html (last visited Nov. 27, 2018).

5. Lake St. Clair separates Lakes Huron and Erie along the St. Clair and Detroit Rivers but is not considered by convention to be one of the ‘Great’ lakes, even though Lake St. Clair bottomlands are regulated by Michigan as Great Lakes bottomlands. *See infra* Appendix A.

6. GOV’T. OF CAN. & U.S. ENVTL. PROT. AGENCY, THE GREAT LAKES: AN ENVIRONMENTAL ATLAS AND RESOURCE BOOK 17-18 (3rd ed. 1995), <https://nepis.epa.gov/Exe/ZyPDF.cgi/P1004ICU.PDF?Dockkey=P1004ICU.PDF> [hereinafter GREAT LAKES ATLAS] (“The development of the Great Lakes region proceeded along several lines that took advantage of the many resources within the basin. The waterways became major highways of trade and were exploited for their fish.”).

7. *Id.*; DANIEL R. TALHELM, ECONOMICS OF GREAT LAKES FISHERIES: A 1985 ASSESSMENT 3 (Great Lakes Fishery Comm’n, Tech. Report No. 54, 1988); *see* Kristin M. Szylyvian,

also offer abundant recreational opportunities for the state's broader citizenry and vacationing visitors within federal, state, and local parks, as well as for the owners and tenants of privately held shorefront properties.⁹ It has been estimated that about 80% of the U.S. Great Lakes shoreline is privately owned, much of which was developed for shorefront homes, ranging from cottages to mansions.¹⁰ Within the past several decades, as industrial uses have declined, and recreational activities have increased, Great Lakes shorelines have become increasingly important to a tourism-based economy, both through the tourist-oriented reinvigoration of small coastal communities and through a robust shorefront rental home economy.¹¹

Management of the Great Lakes has created three broad legal issues. These include: first, water quantity concerns, especially uses of Great Lakes water that

Transforming Lake Michigan into the 'World's Greatest Fishing Hole': The Environmental Politics of Michigan's Great Lakes Sport Fishing, 1965-1985, 9 ENVTL. HIST. 102, 102 (2002) [hereinafter *Transforming Lake Michigan*] (accounting of the fishing industry's effects on the State of Michigan).

8. GREAT LAKES ATLAS, *supra* note 6, at 24:

Nearly all the settlements that grew into cities in the Great Lakes region were established on the waterways that transported people, raw materials and goods. The largest urban areas developed at the mouths of tributaries because of transportation advantages and the apparently inexhaustible supply of fresh water for domestic and industrial use. Historically, the major industries in the Great Lakes region have produced steel, paper, chemicals, automobiles and other manufactured goods.

9. A quick review of Michigan's Great Lakes shoreline, for example, reveals eighteen different state and national parks along the Lower Peninsula's Lake Michigan Shoreline alone. *Recreation Search*, MICH. DEP'T OF NAT. RESOURCES, <http://www.michigandnr.com/parksandtrails/#map-tab> (last visited Nov. 7, 2018).

10. Terry Gibb, *Lakes Appreciation Month: The Great Lakes Facts and Features*, MICH. ST. U. EXTENSION (July 20, 2015), http://msue.anr.msu.edu/news/lakes_appreciation_month_the_great_lakes_facts_and_features; OFFICE OF THE GREAT LAKES, MICH. DEP'T. OF ENVTL. QUALITY, MI-GREAT LAKES PLAN: OUR PATH TO PROTECT, RESTORE, AND SUSTAIN MICHIGAN'S NATURAL TREASURES 29 (2009), https://www.michigan.gov/documents/deq/MI-GLPlan_262388_7.pdf.

11. There appear to be no systematic studies that analyze the tourist-oriented reinvigoration of small coastal communities along the Great Lakes shorelines or the shorefront rental home economy. However, there are studies that establish that people value riparian areas, like the Great Lakes, as a source for recreation and tourism. See HERBERT W. SCHROEDER, USDA FOREST SERV., VOICES FROM MICHIGAN'S BLACK RIVER: OBTAINING INFORMATION ON "SPECIAL PLACES" FOR NATURAL RESOURCE PLANNING 4-10 (1996), https://www.nrs.fs.fed.us/pubs/gtr/gtr_nc184.pdf; Larry W. Tombaugh, *Factors Influencing Vacation Home Locations*, 2 J. LEISURE RES., Winter 1970 at 54, 56. Studies have also found that Michigan had more than 223,000 seasonal homes in 1997, almost six percent of all housing units in the state. DANIEL J. STYNES ET AL., SEASONAL HOMES AND NATURAL RESOURCES: PATTERNS OF USE AND IMPACT IN MICHIGAN 1 (1997), https://www.nrs.fs.fed.us/pubs/gtr/gtr_nc194.pdf. This phenomenon is not exclusive to Michigan. Pamela J. Jakes et al., *A Framework for Profiling a Lake's Riparian Area Development Potential*, 69 J. ENVTL. MGMT. 391, 391 (2003). In fact, government officials from the State of Michigan have sought to redevelop the state's Great Lakes shores in order to foster economic development and recreation as early as 1955. *Transforming Lake Michigan*, *supra* note 7, at 107-08.

involve exporting it from the basin;¹² second, water quality concerns, such as the pollution of the lakes from a variety of toxic substances,¹³ thermal pollution (e.g., power plant cooling water discharge),¹⁴ and biological contamination (e.g., invasive

12. A prominent and controversial concern regarding the Great Lakes over the past half-century has been the potential diversion of Great Lakes water to slake the thirst of other regions of the U.S. and Canada, which is not out of the question technologically. Indeed, there have been grand proposals for substantial diversions from the Great Lakes to serve the Midwest, the arid Southwest, and other regions of the U.S. since at least the 1950s, while Canada has already engineered substantial cross-basin diversions elsewhere in the country. Frédéric Lasserre, *Continental Bulk-Water Transfers: Chimera or Real Possibility?*, in *WATER WITHOUT BORDERS? CANADA, THE UNITED STATES, AND SHARED WATERS* 88, 88-112 (Emma S. Norman, Alice Cohen & Karen Bakker eds., 2013); Ralph Pentland, *Key Challenges in Canada-US Water Governance*, in *WATER WITHOUT BORDERS? CANADA, THE UNITED STATES, AND SHARED WATERS* 119, 122 (Emma S. Norman, Alice Cohen & Karen Bakker eds., 2013). Nonetheless, major diversions are not likely to occur at this time because of the creation of the Great Lakes-St. Lawrence River Basin Water Resources Council and the enactment of legislation in all 10 Great Lakes states and provinces that greatly strengthened regional and bi-national control over the use and potential diversion of Great Lakes water, subsequently ratified in the U.S. by Congress and in Canada by parallel provincial legislation. Jamie Linton & Noah Hall, *The Great Lakes: A Model of Transboundary Cooperation*, in *WATER WITHOUT BORDERS? CANADA, THE UNITED STATES, AND SHARED WATERS* 221, 231-35 (Emma S. Norman, Alice Cohen & Karen Bakker eds., 2013).

13. The U.S.-Canada Great Lakes Water Quality Agreement (GLWQA) is a commitment “to restore and maintain the chemical, physical, and biological integrity of the Waters of the Great Lakes,” and “provides a framework for identifying binational priorities and implementing actions that improve water quality,” such as designating Areas of Concern (AOCs). *Great Lakes Water Quality Agreement (GLWA)*, U.S. ENVTL. PROTECTION AGENCY, <https://www.epa.gov/glwqa> (last visited Sept. 11, 2018). The Great Lakes National Program Office (GLNPO) helps coordinate the efforts of the GLWQA by bringing together federal, state, tribal, local, and industry partners under the strategic framework of the Great Lakes Restoration Initiative (GLRI), which fulfills the aims of the GLWQA. *Great Lakes National Program Office (GLNPO)*, U.S. ENVTL. PROTECTION AGENCY, <https://www.epa.gov/aboutepa/about-great-lakes-national-program-office-glnpo> (last visited Nov. 1, 2018). The GLRI seeks to address five “urgent” issues, including cleaning up toxic substances and areas of concern and promoting near-shore health by protecting watersheds from polluted run-off. *Great Lakes Restoration Initiative (GLRI)*, U.S. ENVTL. PROTECTION AGENCY., <https://www.epa.gov/great-lakes-funding/great-lakes-restoration-initiative-glri> (last visited Nov. 1, 2018).

14. “Thermal pollution occurs when humans change the temperature of a body of water . . . and can result in significant changes to the aquatic environment.” MICH. DEP’T OF ENVTL. QUALITY, *WATER QUALITY PARAMETERS: BACTERIA, BIOCHEMICAL OXYGEN DEMAND, DISSOLVED OXYGEN, PH, PHOSPHORUS, TEMPERATURE, TOTAL SUSPENDED SOLIDS* 10, https://www.michigan.gov/documents/deq/wrd-npdes-water-quality_570237_7.pdf. Some causes of thermal pollution include: cooling water to prevent machinery from overheating; stormwater runoff from warm surfaces; soil erosion, which can cause cloudy conditions in a water body; and the removal of trees and vegetation, which normally shade water. *Id.* Cooling water discharge from old lake-side power plants is a major source of thermal pollution as well. Not only does the water intake process at such power plants pull through and kill fish, the discharged water is “pumped back into Lake Michigan and other Great Lakes up to 30 degrees hotter, encouraging the growth of oxygen-depleting algae that kills fish and fouls beaches.” Michael Hawthorne, *Millions of Great Lakes Fish Killed in Power Plant Intakes*, CHI. TRIB. (June 17, 2011), <http://www.chicagotribune.com/g00/news/ct-met-great-lakes-fish-kills-20110614-story.html?i10c.referrer=http%3A%2F%2Fwww.chicagotribune.com%2Fnews%2Fct-met-great-lakes-fish-kills-20110614-story.html>.

fish and wetlands plant species);¹⁵ and finally, shoreland area management concerns. The focus of this Article is on the latter, including Great Lakes submerged lands and foreshore subject to the public trust doctrine, along with additional shorelands—foreshore and beyond—subject to state and local police power prerogatives.

Merriam-Webster provides as a second definition of the word foreshore: “the part of the seashore between high-water and low-water marks.”¹⁶ The foreshore properly defines the reach of coastal lands subject to state and local authorities emanating from the public trust doctrine, while both the foreshore and other shorelands further landward are subject to state and coastal regulations emanating from the state’s police power authorities, as discussed in more detail below.¹⁷ For this reason, this Article addresses land management authorities over “shorelands” more broadly—*i.e.*, the foreshore plus additional nearshore coastal lands beyond the foreshore, noting where public trust authorities are constrained specifically to the foreshore as appropriate.

There are good reasons to focus on Great Lakes shorelands, especially Michigan’s Great Lakes shorelands. These reasons include continued development and redevelopment of shorefront properties throughout the state’s Great Lakes shores¹⁸ and growing calls for more state and local efforts to manage shorelands for enhanced resiliency in the face of global climate change.¹⁹ Moreover, all eight of the

15. There are more than 180 exotic species in the Great Lakes, such as green algae, sea lamprey, alewife, Eurasian watermilfoil, and zebra mussel. WILLIAM RAPAI, LAKE INVADERS: INVASIVE SPECIES AND THE BATTLE FOR THE FUTURE OF THE GREAT LAKES 1 (2016), <https://muse.jhu.edu/chapter/1803963/pdf>. These invasive species have changed the populations of native fish, water clarity, and water chemistry, and the food web and nutrient cycle of the Great Lakes region. *Id.*

16. *Foreshore*, MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY (10th ed. 2002).

17. *See infra* Part II.

18. Focusing on, and planning wisely for, the continued development and redevelopment along Michigan’s Great Lakes shoreline is important because land use decisions (especially at the local level) can adversely affect the aquatic ecosystems that Michigan relies on, and also expose community infrastructure and other investments to unnecessary risks like extreme weather events (*i.e.*, coastal flooding and erosion). *See* MICH. OFFICE OF THE GREAT LAKES ET AL., SUSTAINING MICHIGAN’S WATER HERITAGE: A STRATEGY FOR THE NEXT GENERATION 20-21 (2016). Land use management along riparian systems, in particular the maintenance of natural buffers between development and the water features, can help reduce the amount of pollutants entering waterways, protect against erosion and flood damage to infrastructure, provide habitats for native species, and serve as recreation corridors. *Id.* at 21.

19. As discussed in more detail below, managing Great Lakes shorelands in the face of global climate change is complicated because of the unique dynamics of the Great Lakes system, especially with regard to fluctuating standing water levels. *See infra* notes 38-39 and accompanying text. *See, e.g.*, LIVING ON THE COAST: PROTECTING INVESTMENTS IN SHORE PROPERTY ON THE GREAT LAKES (Philip Keillor, ed., 2003), http://greatlakesresilience.org/sites/default/files/library_reference_2003_UWSeaGrant-USACE_LivingontheCoastProtectingInvestmentsinShorePropertyontheGreatLakes.pdf; Richard K. Norton, Guy A. Meadows & Lorelle A. Meadows, *The Deceptively Complicated “Elevation Ordinary High Water Mark” and the Problem With Using on a Laurentian Great Lakes Shore*, 39 J. GREAT LAKES RES. 527 (2013). Given global climate change and the challenges it poses, the

Great Lakes states have applied the public trust doctrines to their Great Lakes shores, and the U.S. Supreme Court has also acknowledged the applicability of that doctrine in the Great Lakes.²⁰ Even so, there are physical attributes of the Great Lakes and their shores that have only recently become well-understood and that make application of legal doctrines drawn from other settings (*i.e.*, particularly the public trust doctrine) appropriate but less than straightforward. Most relevant for purposes here, the Great Lakes are not tidal. The standing water levels of all of the Great Lakes do fluctuate substantially over the course of years and decades, however, such that there are elevations to which lake waters ‘ordinarily’ reach periodically over time, and correspondingly ‘ordinary high water marks’ that lake waters leave along the shore accordingly (*i.e.*, marks lakeward of which the shoreline is alternatively submerged and exposed for extended periods of time).²¹ Finally, despite case law stretching back to the incorporation of the Great Lakes states,²² as well as state legislation speaking to the Great Lakes specifically,²³ there has been limited on-point litigation or legislation that might provide clarification for resolving shoreland disputes that could arise in the foreseeable future.

Perhaps more profoundly, the most pleasant, fragile, and dangerous places are highly prized by coastal shoreline property owners, such that coastal shoreland development often yields the most tenacious of conflicts between public interests and private property rights.²⁴ Indeed, conflicts over the development and use of shorelands on a Great Lake implicate timeless debates over the public interest in coastal resources, private property owners’ rights to use and to exclude others from their shorelands, and the authorities and prerogatives of the state to own public

Michigan Coastal Zone Management Program (MCZMP) has focused on supporting efforts by coastal localities to adopt plans and policies designed to make them more resilient communities environmentally, socially, and economically. In support of those efforts, a multi-disciplinary team of planners and researchers from the University of Michigan, Michigan Technological University, and the non-profit Land Information Access Association (LIAA) have been working with selected coastal communities to better integrate scientific knowledge and best management practices to better identify and analyze coastal hazard areas, and to fold those analyses and corresponding resiliency policies into their local master plans, zoning codes, capital improvement programs, and so on. See RESILIENT GREAT LAKES COAST, <http://resilientgreatlakescoast.org> (last visited Nov. 1, 2018) (providing more information on the work to increase Great Lake shoreland’s resiliency and products from it).

20. See *infra* Section II.B & Appendix A.

21. See, e.g., Norton et al., *supra* note 19 (describing the seasonal and decadal fluctuations of Great Lakes standing water levels and the difficulties that phenomenon creates in terms of determining appropriately the ordinary high-water mark on Great Lakes shores).

22. See *infra* Part IV.

23. See *infra* Part IV.

24. See, e.g., Dan Carden & Doug Ross, *Battle Over Lakeshore Access Escalates in Long Beach Despite Indiana Supreme Court Ruling*, NORTHWEST IND. TIMES (Aug. 9, 2018), https://www.nwitimes.com/news/local/laporte/battle-over-lakeshore-access-escalates-in-long-beach-despite-indiana/article_cfc96587-8b64-5282-b863-f956c57e49eb.html (describing controversy along Indiana’s Great Lakes shores between private ownership and public use, prompting an Indiana Supreme Court decision appealed to the U.S. Supreme Court).

shoreland and to regulate privately owned shoreland, along with various constraints on those powers. These conflicts reflect ongoing efforts to reconcile the state's interests in its coastal shorelands, embodied through the police power and public trust doctrines,²⁵ against private shoreland owners' property rights, safeguarded primarily through the substantive due process and regulatory takings doctrines.²⁶ Great Lakes shoreland disputes, especially, exemplify the tensions and difficulties of these broader debates because the histories of the doctrines are so nuanced and rich, and because shoreline settings are valuable in so many ways.

Reflecting those debates, several prominent critiques of the public trust doctrine assert that doctrine in particular has been misinterpreted—that its historical pedigree is not so strong or aptly applied to American coasts as either the doctrine's proponents or the courts take it to be, especially along Great Lakes coasts.²⁷ These critiques, made first in the early 1970s and relied on more recently, were based primarily on historical analyses of ancient Roman, medieval English, and early American texts. Other scholars have since contested critics' assertions with their own historical analyses using the same and related sources.²⁸

Any ancient doctrine can be critiqued for its applicability today in isolation of other considerations. Rather than asking whether ancient Roman doctrine perfectly justifies contemporary doctrine taken by itself, the more germane question is whether the historical origins of the public trust doctrine and its evolution over time are sufficiently sound and apt for providing meaningful guidance today in the context of the other doctrines we look to for resolving disputes at the coast. Neither early nor more recent critics of the public trust doctrine address the historical pedigree and robustness of those other relevant doctrines at play on a coastal shore—the police power doctrine, or, more importantly, contemporary notions of private property rights. If the public trust doctrine is lacking upon reconsideration, how does it fare in comparison to these other doctrines? Or conversely, are those other doctrines, in terms of their historical pedigree and applicability today, any more compelling or controlling than is the public trust doctrine in comparison?

To provide a foundation for more extended analysis of specific legal disputes likely to arise along Great Lakes shores, and to assess in particular the applicability of the public trust doctrine to those shores, we first analyze through juxtaposition these three key American legal doctrines as they intersect along Great Lakes coastal shorelands—police power prerogatives, public trust doctrines, and private property rights. To do so, we review the history of each doctrine and synthesize, compare, and contrast them; summarize critiques of them, including especially cri-

25. As discussed below, the “police power doctrine” is not conventionally referred to as such, but it arguably qualifies as a doctrine by definition and we use that label for ease of reference here. *See infra* Section II.A.

26. *See infra* Section II.C.

27. *See infra* Section II.B.4; *see also infra* note 121.

28. *See infra* Section II.B.5.

tique of the public trust doctrine; and then present our own assessment regarding those critiques. The Article concludes with an overview summary of the public trust doctrines of the several Great Lakes States.

This Article will hopefully provide guidance to state and local governmental officials as they contemplate Great Lakes shoreland management efforts; private property owners as they contemplate development or use their shorefront properties otherwise; and the courts as they adjudicate disputes as may arise. The Article should be of interest broadly in all of the Great Lakes coastal states, and even ocean coastal states, given similarities in the legal doctrines they have engaged and the physical dynamics of the coastal shorelines they enjoy.²⁹

The Article is organized into four parts. The key powers and doctrines at issue on coastal shorelines arose in English and American common law, and they have since been clarified and modified by constitutional and positive law. Given that progression, Part I offers some initial observations on the challenges of deciphering and justifying the origins and evolution of such powers and doctrines over time, challenges clearly evident along Great Lakes shorelines. Part II provides an historical exposition of these powers and doctrines separately as they have taken shape in general, focusing especially on the public trust doctrine and its origins in ocean coastal settings. Part III offers some initial thoughts on reconciling powers, interests, rights, and doctrines along coastal shores in general. Part IV concludes by summarizing and contemplating briefly the public trust doctrines of the several Great Lakes states based on review of the current statutory and case law of those states, and then finally identifies a number of questions for further study—questions that are best addressed in a state-specific context.

I. A CONFLUENCE OF AMERICAN LEGAL DOCTRINES IN COASTAL SETTINGS

The coastlines of oceans and large inland lakes, given their special ecological, economic, and aesthetic attributes, implicate conflicts between communal or collective interests and concerns and individual interests and rights. In coastal settings especially, collective concerns take shape primarily through the state's prerogatives³⁰ under the police powers doctrine,³¹ and its duties and interests under the

29. Great Lakes differ from oceans in that, while not tidal, their standing water levels fluctuate over time. Even so, during periods of rising standing water levels, Great Lakes coasts are similar to ocean coasts currently facing rising sea levels. *See, e.g.*, Norton et al., *supra* note 19, at 527.

30. Black's defines "prerogative" as an "exclusive or peculiar right or privilege. The special power . . . vested in an official person . . . or in an official body, as a court or legislature." *Prerogative*, BLACK'S LAW DICTIONARY (Deluxe 6th ed., 1990). Merriam-Webster similarly defines prerogative, first, as "an exclusive or special . . . power . . . belonging to an office or an official body . . . [or] . . . one possessed by a nation as an attribute of sovereignty," and second, as "the discretionary power inhering in the British Crown." *Prerogative*, MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 2002). Black's alternatively describes "right" as a "power, privilege, or immunity guaranteed under a constitution, statutes or decisional laws, or claimed as a result of long usage. . . . In a narrower signification, an

public trust doctrine. The police powers doctrine speaks to the special or unique prerogatives of a state as sovereign (or its local units of government enabled through delegation) to enact laws for the benefit of society. The public trust doctrine speaks to communal interests in submerged lands and foreshores of oceans and large lakes, held in trust by the state as sovereign.³²

Set in tension with these collectively-oriented doctrines are interests of the individual, which take form along a coastal shore primarily as private property rights. The protections of rights inherent in private property are not conventionally conceived of as a single discrete or coherent doctrine, but rather are vindicated largely through the due process and regulatory takings doctrines.³³ Taken altogether, they speak to a private shoreland property owner's reasonable expectations that his or her interests will not be abused by the arbitrary or tyrannical exercise of governmental powers.³⁴ Because all of these doctrines originate in the common law and have evolved through constitutional and positive law, it is helpful to consider first two distinct challenges that arise in deciphering and justifying the evolution of these common law doctrines, especially in coastal settings.

interest in an object of property. . . . A legally enforceable claim of one person against another. . . . That which one person ought to have or receive from another. . . ." *Right*, BLACK'S LAW DICTIONARY (Deluxe 6th ed., 1990). As discussed in more detail below, the police power has been conflated with the concept of "states' rights" as derived from the 10th Amendment of the U.S. Constitution, and "rights" in that context is used to distinguish state authorities as against federal authorities. *See infra* Section II.A.2. In addition, the concept of rights, especially in contemporary use, has evolved to encompass broadly a claim to do something unhindered or to receive some benefit, both as against some other individual or governmental entity. MARY ANN GLENDON, RIGHTS TALK: THE IMPOVERISHMENT OF POLITICAL DISCOURSE 1-17 (1991). The concept that states' rights originated from the U.S. Constitution is not quite correct historically, however, and our consideration of the authorities a state deploys along coastal shorelands is based on its special role or privilege as a sovereign, acting through its legislature, to promote the public welfare, rather than merely or necessarily claims of authority a state makes vis-à-vis the federal government. Moreover, a state does not have a *right* to regulate private property so much as a valid authority to do so, while a property owner may claim his or her right to be treated fairly by the state but not so much the authority to do so. We adopt the term *prerogative*, therefore, to describe the authorities that states deploy in managing their coastal shorelines under their police powers, particularly as juxtaposed with a shoreland property owner's *right* to be treated fairly when thus regulated.

31. Black's defines "doctrine" as "a rule, principle, theory, or tenet of the law." It further defines "doctrinal interpretation" as interpretation based upon the "intrinsic reasonableness" of the statement of law, as distinguished from "legal interpretation" or that based upon the statement of law itself (*e.g.*, statutory interpretation where the meaning is expressly stated). *Doctrine*, BLACK'S LAW DICTIONARY (Deluxe 6th ed., 1990). As discussed in more detail below, coherent—if contestable—rules, theories, or tenets of law can be articulated around concepts of a state's unique police power prerogatives, and the exercise of those prerogatives can be evaluated in terms of their intrinsic reasonableness. While not conventionally referred to as such, we adopt the terms police power doctrine and police power prerogatives for the sake of exposition here. *See infra* Section II.A.

32. Police power prerogatives are regularly and extensively delegated by states to their local units. *Infra* Section II.A. Public trust authorities, however, appear not to be. *Infra* Section II.B.

33. *Infra* Section II.C.

34. *See infra* Part II.

The first challenge speaks to the difficulty of making claims to authority when stating factual propositions about the world or legal propositions about our relationships to the world and to one another, along with the need to account for the relationships between facts and law. Scientists justify factual propositions by reference to the rigor of the scientific methods used to develop those propositions and by the logic or internal coherence embodied within them, where both methods and logic are filtered by scientists' evolving expectations over time.³⁵ Contemporary debates about global climate change—whether it is happening, what is causing it, and how it will manifest itself over time—provide a remarkable illustration of this process. Indeed, climate change highlights the added challenge of moving scientifically-accepted knowledge into popular awareness when accepting that knowledge implies, in turn, accepting the need to change our way of life.³⁶

In contrast, legal scholars and jurists justify legal propositions by reference to the historical pedigree of those propositions and by the logic or internal coherence embodied within those propositions, where both pedigree and logic are filtered by expectations about what the law should be and how it should operate. Those expectations similarly evolve over time. This process is well illustrated by the evolution of concepts of police power prerogatives, public trust interests, and private property rights along a coastal shoreline.

Both scientific and legal claims are ultimately bound by physical reality. One may make scientific claims about the realities or myths of climate change or adopt legal fictions about private property rights within dynamic natural systems, but Nature cares nothing for human expectations, aspirations, or legal doctrines and will proceed remorselessly. A shorefront home perched high upon an eroding bluff will surely be lost to erosion, regardless of how strenuously the homeowner claims a constitutional right to possess and reside in her home. The point is that physical realities, scientific knowledge, and legal theorizing are inseparable in a way that cannot be avoided in dynamic settings like coastal shorelines, a phenomenon especially evident as Great Lakes state courts and legislatures have attempted to demarcate boundaries between public and private interests along constantly shifting Great Lakes shores.³⁷

A second challenge relates to the role of expectations in evaluating the historical pedigree of common law doctrines. As noted, much of the doctrinal law at issue in disputes along Great Lakes shores emanates from English and American com-

35. See, e.g., Karl Popper's seminal description of the hypothetico-deductive scientific method employed for contemporary scientific research. KARL R. POPPER, *THE LOGIC OF SCIENTIFIC DISCOVERY* (Hutchinson & Co. ed., 1959). See also Thomas Kuhn's seminal discussion of how paradigms shape scientists' thinking within and about their research. THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (1996).

36. See, e.g., Richard K. Norton, *Agenda 21 and Its Discontents: Is Sustainable Development a Global Imperative or Globalizing Conspiracy?*, 46 URB. LAW. 325 (2014).

37. See *infra* Part IV.

mon law.³⁸ American common law is conventionally understood as the “state statutory and case law background of England and the American colonies before the American revolution.”³⁹ While American common law is often discussed and invoked as if it were a body of static and timeless rules or principles, it has never been conceived strictly as either of those things.

Rather, like state and federal constitutional doctrines, common law evolves over time casuistically, reflecting the context of place and time and balancing the precedential benefits of certainty and consistency in the law with the need for the law to adapt to extant conditions and expectations. The notion of a ‘regulatory taking,’ for example, was not originally understood as emanating from the U.S. Constitution’s takings clause, but it has become accepted constitutional doctrine today.⁴⁰ Similarly, the state-specific refinement of the public trust doctrine as applied to Great Lakes shorelines, described in more detail below, provides a notable example of evolving doctrine in both theory and application.⁴¹ The role of expectations in this evolutionary process, especially harking back to the historical pedigree of common law doctrine, is problematic in a compound way; that is, expectations in a pluralistic society are and never have been uniform at any given time, and they inevitably change over time.

As well-illustrated by evolving public trust and regulatory takings doctrines, for example, jurists, legal commentators, and private citizens today hold dramatically different views on what public trust interests and private property rights are, as well as what the origins of those rights and interests were. There is no reason to think that jurists, commentators, or citizens in earlier times were any more agreeable or unified in their understanding of what the law was then compared to how it is characterized today—especially when the law in question is the common law. This is true as well with regard to contemporary attempts to decipher the original meaning of constitutional provisions, such as the Takings Clause of the U.S. Constitution, in order to understand and justify its application today.⁴²

Thus, strong statements on what police power prerogatives, public trust interests, or private property rights are today based on dogmatic characterizations of what they were at some point in the past should be read carefully and in full context. More importantly, such statements should be read with full recognition that the thinking of jurists and treatise writers, as recorded when ancient common law was first laid down, was surely more nuanced and contested than how it is typically

38. See *infra* Section II.B.

39. *Common Law*, BLACK’S LAW DICTIONARY (Deluxe 6th ed., 1990).

40. See, e.g., Michael Allan Wolf, *Supreme Court Roadblocks to Responsive Coastal Management in the Wake of Lucas*, 53 REAL PROP., TR. & EST. L.J. 59, 64-73 (2018).

41. See *infra* Section II.B.

42. The Fifth Amendment of the U.S. Constitution reads, in part, “nor shall private property be taken for public use, without just compensation.” U.S. CONST. amend. V. See *infra* Section II.C for discussion of attempts to decipher the original meaning of this clause.

represented today, particularly when characterized through argumentative writings. The importance of this exhortation becomes evident when attempting to reconcile the tensions between public and private interests along coastal shores.

II. POLICE POWER PREROGATIVES, PUBLIC TRUST INTERESTS, AND PRIVATE PROPERTY RIGHTS IN COASTAL SETTINGS GENERALLY

Reconciling public and private interests along a coastal shore is a multi-dimensional endeavor. It requires first reconciling the ancient-to-contemporary understandings of the different doctrines at play along a coastal shore within those doctrines themselves, and then reconciling those doctrines as against one another. We first discuss briefly the origins and meanings of the police powers and public trust doctrines, and then the origins and meanings of concepts of private property rights in the American context, especially along coastal shores. We then offer some thoughts on reconciling those doctrines in coastal settings generally.

A. Police Power Prerogatives over Coastal Shorelands (and Beyond)

While the ‘police power’ essentially originated in common law, it was first recognized and modified by federal constitutional law and then given more concrete form through state constitutions and legislation.⁴³ Its common law origins come from the notion that the colonies, after separating from the English constitutional monarchy, inherited the governmental powers that the English crown and parliament taken together had enjoyed.⁴⁴ The police power represents a unique American concept that manifested because of the relationship forged between the states and the new national government through the adoption of the U.S. Constitution. It is today widely recognized and cited as a concept (if not a doctrine), but it has not been discussed much by legal theorists, at least compared to related doctrines like due process and regulatory takings.⁴⁵ Nonetheless, the term and concept

43. See generally D. Benjamin Barros, *The Police Power and the Takings Clause*, 58 U. MIAMI L. REV. 471 (2004). Barros’ analysis of the police power doctrine is thorough and well-reasoned, and we draw from it heavily for our summary here.

44. Washington State Supreme Court Justice Philip A. Talmadge traces the exercise of the police power from the ancient Greeks, through English common law, and then to American common law, but he notes that ancient history is not cited extensively. Philip A. Talmadge, *The Myth of Property Absolutism and Modern Government: The Interaction of Police Power and Property Rights*, 75 WASH. L. REV. 857, 861-64 (2000). In any case, as observed by Chief Justice Redfield of the Vermont Supreme Court in an early influential decision addressing the police power, “It has never been questioned, so far as I know, that the American legislatures have the same unlimited power in regard to legislation which resided in the British parliament, except where they are retrained by written constitutions.” *Thorpe v. Rutland & Burlington R.R.*, 27 Vt. 140, 142 (1855).

45. See Barros, *supra* note 43, which analyzes comprehensively the history, meaning, and implications of the police power doctrine for the purpose of interpreting the history, meaning, and implications of the regulatory takings doctrine. He notes that relatively little scholarly attention has been given to the origins and development of the police power doctrine, *id.* at 472, but analyzes at length several

serve to articulate the authorities that a state has to enact laws that advance the general welfare. In this section, we briefly review its history and implications for managing coastal shorelands.

1. Historical Origins

The concept of police power appears to have been first introduced by the U.S. Supreme Court in early federalism cases as the Court struggled to clarify the relationships between the powers of the national government and the powers of the states. Chief Justice Marshall in *Gibbons v. Ogden* discussed the powers of the state “using the term ‘police’ several times, at one point referring to ‘[t]he acknowledged power of a State to regulate its police, its domestic trade, and to govern its own citizens.’”⁴⁶ At that time, the word ‘police’ itself had multiple meanings, “used to refer broadly to civilization or civil organization, [such that] ‘public police’ meant the equivalent of public policy.”⁴⁷ Justice Marshall subsequently used the term “police power” in *Brown v. Maryland*,⁴⁸ an early decision interpreting the meaning of the import-export and commerce clauses of the U.S. Constitution.

influential works, all written around the turn of the twentieth century, including: THOMAS M. COOLEY, A TREATISE ON THE CONSTITUTIONAL LIMITATIONS WHICH REST UPON THE LEGISLATIVE POWER OF THE STATES OF THE AMERICAN UNION (7th ed. 1903) (arguing in response to aggressive state regulation of trade in liquor in the mid-1800s that the police power should be limited to regulations addressing nuisance-like harms); CHRISTOPHER G. TIEDEMAN, A TREATISE ON THE LIMITATIONS OF THE POLICE POWER IN THE UNITED STATES (1886) (arguing that the police power should be limited to regulations preventing nuisance-like harms based on a *laissez faire* legal philosophy and drawing from the Social Darwinist philosophy of Herbert Spencer); JOHN W. BURGESS, POLITICAL SCIENCE AND COMPARATIVE CONSTITUTIONAL LAW (1890) (drawing from political theory to argue that the police power should be conceived as a narrow and local administrative authority only); ERNST FREUND, THE POLICE POWER: PUBLIC POLICY AND CONSTITUTIONAL RIGHTS § 405 (1904) (an analysis published in a legal treatise but based primarily on political theory, concluding that the police power should be limited to regulations addressing nuisance-like harms); W.G. Hastings, *The Development of Law as Illustrated by the Decisions Relating to the Police Power of the State*, 39 PROC. AM. PHIL. SOC'Y 359 (1900) (an analysis published in a non-legal journal but based primarily on legal analysis, concluding that the police power is coterminous with the expansive and supreme powers of a state as sovereign); Walter Wheeler Cook, *What is the Police Power?*, 7 COLUM. L. REV. 322 (1907) (concluding that Hastings' analysis was correct and that, because the police power is so broad, it cannot be defined or enumerated by what it encompasses but rather by determining when and how it is limited); *id.*, in *passim*.

46. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 208 (1824) (establishing that the national government has exclusive power over interstate commerce as provided by the commerce and supremacy clauses) quoted in Barros, *supra* note 43, at 474. Even so, in the process of making that declaration, the Supreme Court also began to delineate the powers of the states in juxtaposition to the national government. *Id.*

47. Barros, *supra* note 43, at 475 (citations omitted). Barros further cites as an influential example of this understanding “Blackstone’s widely quoted description of the public police as ‘the due regulation and domestic order of the kingdom.’” *Id.* (quoting 4 WILLIAM BLACKSTONE, COMMENTARIES 162 (1769)).

48. *Brown v. Maryland*, 25 U.S. (12 Wheat.) 419, 443 (1827).

Given these early cases, a state's police power is sometimes characterized as having originated in the U.S. Constitution, but that characterization is not quite accurate. The Constitution did not create the power so much as acknowledge its existence. Early U.S. Supreme Court decisions did not explicate its reach and limits for the sake of doing so *per se* but rather for the purpose of delimiting it relative to the enumerated powers of the federal government. In his review of the doctrine, Barros⁴⁹ concluded that the process of defining the meaning of the police power from that federalism perspective was resolved by the mid-1800s by two commerce clause cases—the *License Cases*⁵⁰ and *Passenger Cases*.⁵¹ These decisions differed on whether the Commerce Clause and police power were overlapping or mutually exclusive, but the cases agreed that the police power was an expansive power coterminous with state sovereignty. In the words of Chief Justice Taney, writing in the *License Cases*:

But what are the police powers of a State? They are nothing more or less than the powers of government inherent in every sovereignty to the extent of its dominions. And whether a State passes a quarantine law, or a law to punish offences, or to establish courts of justice, or requiring certain instruments to be recorded, or to regulate commerce within its own limits, in every case it exercises the same powers; that is to say, the power of sovereignty, the power to govern men and things within the limits of its dominion.⁵²

The cases that have more fully explored the reach and limits of the police power beyond the question of its relationship to enumerated federal powers have been state supreme court decisions. Chief among these was the early Massachusetts case of *Commonwealth v. Alger*,⁵³ decided in 1851. *Alger* was a coastal case involving a dispute over whether the State of Massachusetts had the power to regulate a shoreland property owner's construction of a wharf out into Boston Harbor. In addition to discussing the applicability and reach of the public trust doctrine, the case addressed the question of how expansive a state's police power prerogatives are (*i.e.*, as opposed to the question of the extent to which they are constrained by the Federal Constitution).⁵⁴ The debate in this case, one subsequently continued by commentators, has split between the argument that the police power should be interpreted broadly, essentially constrained only by state and federal constitutional protections (or legislatively adopted limitations), and the alternative argument that the police power should be interpreted very narrowly, essentially encompassing

49. Barros, *supra* note 43, at 476-77.

50. Thurlow v. Massachusetts (*The License Cases*), 46 U.S. (5 How.) 504 (1847).

51. Smith v. Turner (*The Passenger Cases*), 48 U.S. (7 How.) 283 (1849).

52. *The License Cases*, 46 U.S. (5 How.) at 583.

53. *Commonwealth v. Alger*, 61 Mass. (7 Cush.) 53 (1851).

54. *Id.* at 65.

only the power to impose police-force-like regulations on activities that cause nuisance-like harms.⁵⁵

As first and most clearly articulated by this Massachusetts decision, the scope of the police power *per se* (*i.e.*, as opposed to its relationship to federal powers), was “simply the government’s power to enact such regulations for the good and welfare of the community as it sees fit, subject to the limitations that the regulations be both reasonable and constitutional.”⁵⁶ Chief Justice Shaw, writing for the Massachusetts Supreme Court, decided *Alger* in a way that adopted the former, expansive interpretation.⁵⁷ Moreover, *Alger* arguably marked a turning point in the transition of the police power from its more common law origins to one of constitutionally enabled legislative authority, in that the decision acknowledged that a state exercises its police powers through the legislature and duly enabled administrative agencies, not the state courts.⁵⁸

The difficulty with this conceptualization comes with attempts to describe all of the things a state might do under such broad authority, as opposed to determining when the exercise of that authority has somehow become unreasonable or unconstitutional. Early formulations that attempted to describe the police power have now become a routine recitation, such that the police power is generally described as the power of the state to regulate individuals or private property for the purpose of promoting public health, safety, morals, and the general welfare.⁵⁹ The point to take here is that this recitation should be read as illustrative of the authorities states enjoy, and not a limitation confining those authorities to these specific ends.⁶⁰ Indeed, both federal courts⁶¹ and state courts⁶² have consistently acknowledged such a broad interpretation since these early cases were decided.

55. *Id.* at 57-64; *see also* Barros, *supra* note 43, at 481-82, and following citations.

56. Barros, *supra* note 43, at 479-80 (citations omitted); *see Alger*, 61 Mass. at 85.

57. *Alger*, 61 Mass. at 84-85.

58. *Id.* at 85.

59. *See, e.g.*, JULIAN C. JUERGENSMEYER & THOMAS E. ROBERTS, LAND USE PLANNING AND DEVELOPMENT REGULATION LAW 43 (3rd ed. 2013).

60. *See* Barros, *supra* note 43, at 487-88.

61. This expansive interpretation of the meaning and reach of the police power has been recognized consistently by the U.S. Supreme Court over time—*see, e.g.*, *Berman v. Parker*, 348 U.S. 26, 32 (1954) (“Public safety, public health, morality, peace and quiet, law and order—these are some of the more conspicuous examples of the traditional application of the police power to municipal affairs. Yet they merely illustrate the scope of the power and do not delimit it.”)—except for a brief period during the early 1900s bookended by *Lochner v. New York*, 198 U.S. 45 (1905) (striking down a New York State law regulating bakeries for being beyond the state’s police powers) and *Nebbia v. New York*, 291 U.S. 502 (1934) (upholding a New York state law regulating the price of milk for being within the ambit of the state’s police powers and marking the end of the *Lochner* era).

62. In a seminal Michigan Supreme Court decision addressing the authority of home-rule cities in Michigan to enact zoning regulations, *Clements v. McCabe*, 210 Mich. 207, 215 177 N.W. 722, 725 (1920), for example, the Court explained that:

2. Police Powers as Prerogative

Thus, the authorities that states enjoy as sovereigns under the police power doctrine are unique. The police power creates plenary authorities, circumscribed by particularized constitutional and legislative constraints imposed by states themselves rather than expounded by exhaustive recitations of what they encompass. These authorities are also unique to state governments in that the federal government does not enjoy similar powers under the U.S. Constitution.⁶³ Local units of government also cannot hold police powers except through delegation.⁶⁴ As such, these authorities are appropriately thought of as prerogatives of the state, in the full sense of what that term implies.⁶⁵

Even so, there have been instances over time when the states have aggressively asserted authority in ways that have prompted pushback. Sometimes the result of doing so has led to more constraint of state powers. Mid-nineteenth century claims of “states’ rights,” pushed to the point of safeguarding private property

The governmental authority known as the “police power” is concededly an inherent attribute of State sovereignty. . . . As generally understood it operates in a conceded sphere relating to public safety, order and morals for the protection of health, person and property, which is never questioned; but with changing conditions and requirements of our modern civilization, increasing regulatory and restrictive legislation has expanded its application to new subjects and demands presenting a debatable sphere where compulsory control borders the line of claimed constitutional rights and private freedom of action.

The Court concluded that while the police power authorities the state enjoys and implements through its legislature are broad, the full reach of those authorities as exercised by its local units of government, particularly with regard to the regulation of private property, must be clearly and specifically delegated. *Id.*

63. While there are ongoing debates about whether the broad reach of U.S. law enacted especially under the commerce clause has gone too far, the U.S. Supreme Court has made clear nonetheless that the federal government is a government of enumerated powers and that it does not enjoy broad authorities to promote the general welfare; it has no inherent police power authority. *See* United States v. Morrison, 529 U.S. 598, 618-19 (2000) (reaffirming that there is no federal police power).

64. *See, e.g.,* JUERGENSMEYER & ROBERTS, *supra* note 59, at 43-48. Although advocates for local control may object, it is well-settled law that local units of government, including both municipal corporations like cities chartered under state constitutions and local units legally considered extensions of the state like counties, are “creatures, mere political subdivisions, of the state, for the purpose of exercising a part of its powers. . . . They may be created, or, having been created, their powers may be restricted or enlarged, or altogether withdrawn at the will of the legislature. . . .” *Atkins v. Kansas*, 191 U.S. 207, 220-21 (1903).

65. *See supra* note 30. These authorities are consistent with a state’s powers of eminent domain, representing parallel powers that states enjoy as the original sovereigns. *See, e.g.,* JUERGENSMEYER & ROBERTS, *supra* note 59, at 598-606. Indeed, reflecting the very broad reach of authority that states enjoy under the police power prerogative to promote the general welfare, the power of eminent domain might be thought of as emanating from the police power, or perhaps as a special application of that power specifically constrained by federal and state constitutional protections, although that characterization is not commonly made. *See* Barros, *supra* note 43, at 477. In any event, state or local condemnations of privately owned shoreland on Michigan’s Great Lakes do not appear to be a pressing concern, and we do not address this doctrine directly for purposes here.

rights to own slaves through state law, were nullified by the Civil War and the 13th and 14th Amendments to the U.S. Constitution. Similarly, aggressive increases in state efforts to regulate the trade in liquor under police power prerogatives were incorporated into the U.S. Constitution but then ultimately turned back by popular demand.⁶⁶

In contrast, when contemplating the police power regulation of coastal shorelands, states have steadily (if not aggressively) exercised police power prerogatives in new ways to adopt a host of so-called economic regulations, including especially those affecting the use of private property, in order to address a broad array of worker safety, public health, and environmental concerns from the late nineteenth century on.⁶⁷ States have similarly exercised the police power to promote the productive use of resources and enhance commercial activity.⁶⁸ States have also used regulations, along with the adoption of nuisance-like prohibitions, to protect and increase the asset values of private property.⁶⁹

Indeed, aside from limited early writings that argued for a narrow interpretation of the police power doctrine,⁷⁰ and some contemporary legal academic and advocacy writings arguing for the same,⁷¹ there has been no discernable diminishment in acceptance by the courts or by other legal commentators that the police power doctrine speaks to broad prerogatives to enact laws to promote the general welfare.⁷² This ability to promote the general welfare includes, but is not limited to, police-force-like regulations that address merely the abatement of nuisance-like harms, again subject only to the limitation that those regulations be reasonable and constitutional. For example, state-enabled local zoning regulations are widely used to effect multiple harm-preventing and benefit-enhancing goals, often simultaneously, such as: protecting neighboring properties from generating nuisance-like harms;⁷³ preventing development within high-hazard zones both to prevent property damage and to minimize public disaster recovery expenditures following a

66. See U.S. CONST. amend. XVIII, *repealed by* U.S. CONST. amend. XXI.

67. The state delegation of police power authorities to local units of government to regulate private land use for the general welfare, through enabling acts specifically authorizing local planning and zoning, represents a prominent example of this phenomenon. See JUERGENSEMEYER & ROBERTS, *supra* note 59, at 39-48.

68. *Id.* at 48-55.

69. *Id.* at 50-51.

70. See Barros *supra* note 43 at 491-95.

71. See, e.g., RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 107-45 (1985) (arguing that the police power test should focus exclusively on the need to maintain peace and good order); ELLEN FRANKEL PAUL, PROPERTY RIGHTS AND EMINENT DOMAIN 37 (1987).

72. See Barros, *supra* note 43 at 490.

73. The leading U.S. Supreme Court decision upholding the constitutionality of zoning, *Village of Euclid v. Ambler Realty, Co.*, 272 U.S. 365, 387-88 (1926), looked especially to this concern.

storm;⁷⁴ regulating development densities in ways that preserve property values;⁷⁵ and regulating the form, location, and design of structures in ways that enhance the aesthetic and environmental quality of an area.⁷⁶

In fact, the real concern is not the limitation of the police power prerogatives of the state *per se* but rather ensuring that state actions are not abusive or tyrannical.⁷⁷ Thus the primary focus of both the courts and commentators in response to public safety, health, environmental, and other general welfare regulations since the late nineteenth century, and especially since the latter half of the twentieth century, has been on discerning in what ways state and federal constitutional protections constrain police power prerogatives.⁷⁸ When contemplating state police power prerogatives vis-à-vis private property in particular, those constraints have taken form, in turn, primarily through the evolution of the due process, takings, and regulatory takings doctrines.⁷⁹

The origins and meaning of private property rights and the evolution of these doctrines to safeguard them are discussed in more detail below. Before engaging in that discussion, it is important to emphasize that the regulation of persons and property was not uncommon before the late nineteenth century.⁸⁰ In fact, police

74. This may be accomplished, for example, through the adoption of setback requirements away from high-risk flood zones or the imposition of extra-ordinary structural requirements like elevation for buildings sited within them. *See, e.g.*, TIMOTHY BEATLEY, DAVID J. BROWER & ANN K. SCHWAB, AN INTRODUCTION TO COASTAL ZONE MANAGEMENT 137-46 (2d ed. 2002).

75. Low-density zoning, for example, is often used as a way to preserve property values, interpreted benignly, while also often serving more problematically to effect racial and/or socio-economic segregation. *See* JUERGENSMEYER & ROBERTS, *supra* note 59, at 205-32; RICHARD ROTHSTEIN, THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA (2017).

76. Regulating for aesthetic purposes like environmental enhancement or historic preservation, which often both constrains property owners' liberty to do what they want with their properties while increasing their property values, has long been acknowledged as a valid purpose of zoning. *See, e.g.*, Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104 (1978); JUERGENSMEYER & ROBERTS, *supra* note 59, at 513-29.

77. *See* Barros *supra* note 43, at 485-86. *See also, e.g.*, Joseph L. Sax, *Takings and the Police Power*, 74 YALE L.J. 38, 57 (1964), writing on the original understanding of the purpose of the takings clause of the 5th Amendment to the U.S. Constitution and asserting that:

What seemed to concern the early writers was not the fact of loss (i.e., that the state had the authority to regulate private property in a way that diminished its economic value) but the imposition of loss by unjust means. It was the exercise of arbitrary or tyrannical powers that were sought to be controlled.

78. *See infra* Section II.C.

79. *See infra* Section II.C.

80. *See* ERIC T. FREYFOGLE, THE LAND WE SHARE: PRIVATE PROPERTY AND THE COMMON GOOD (2003) (providing an explication of extensive regulation of land use throughout the course of American history). *See* JUERGENSMEYER & ROBERTS, *supra* note 59, at 40-43, for a discussion of the rise of forward-looking and prophylactic zoning regulations in lieu of back-ward looking and reactive of nuisance law.

power regulations were common throughout the colonies, and subsequently the states, from the very origins of the country.⁸¹ These regulations existed to address a variety of ends that included both the prevention of nuisance-like harms and the promotion of the public welfare.⁸² Moreover, the continued development of the regulatory state since then does not represent a unique or unwarranted divergence from either history or common expectations. Rather, regulations and other public programs to promote public welfare have evolved in both kind and degree as we have learned to better anticipate potential harms that come from various economic activities, enhanced our abilities to generate new harms, and grown so populous as to require more formal governmental policy and administration.⁸³ Moreover, those programs have shifted from more local to state and to federal levels as we have worked to better address multi-jurisdictional harms (*e.g.*, water pollution) and promote multi-jurisdictional benefits (*e.g.*, interstate commerce).⁸⁴

3. Summary

In sum, the police power prerogatives of a state, as original sovereign, to enact regulations and adopt other programs for the prevention of harms *and* the promotion of the general welfare are expansive, appropriately conceptualized more in terms of constraints put upon the state rather than in terms of enumerating the various actions the state can take. Contemporary commentators arguing explicitly or implicitly for a narrow read of what a state's police power prerogatives encompass, perhaps most avidly conveyed by contemporary free-market and limited government advocates,⁸⁵ make arguments that comport neither with a fair reading of American history nor with well-settled doctrinal interpretation of the courts. Rather, both state and federal courts generally adopt, tacitly if not expressly, a broad interpretation of the police power, specifically not limiting that power to police-force-like regulation of nuisance-like harm alone. These prerogatives are every bit as much in force along a coastal shoreline, including a Great Lakes coastal shoreline, as in any other setting. As a reminder, the purpose of this Article is to assess the pedigree and aptness of key doctrines as they play themselves out along Great Lakes shores through juxtaposition. Before engaging discussion of constitutional constraints on the police power, we look to the second key power at play along a coastal shore and the primary focus of this assessment—the public trust doctrine.

81. JUERGENSMEYER & ROBERTS, *supra* note 59 at 40-43.

82. *Id.* at 573-75.

83. *See, e.g.*, FREYFOGLE, *supra* note 80.

84. *See, e.g., id.* at 265.

85. *See, e.g.*, EPSTEIN, *supra* note 71, at 108-09; BERNARD H. SIEGAN, PROPERTY AND FREEDOM: THE CONSTITUTION, THE COURTS, AND LAND-USE REGULATION 1-3 (1997).

B. *The Public Trust Doctrine over Coastal Shorelands in General*

The public trust doctrine is commonly presented as a doctrine first articulated under ancient Roman law, subsequently incorporated into English common law, and then adapted to American common law.⁸⁶ Intertwined with the navigability and the equal footing doctrines,⁸⁷ the public trust doctrine is recognized today primarily as a state-specific doctrine comprised of a hybrid of common, constitutional, and statutory law. The doctrine places classes of natural resources or areas into a special protected status, where some title or use interests are held, in trust, by the state for the benefit of the people.⁸⁸ It appeared early in American history and is generally considered now to be well settled, at least in coastal settings, although it has been contested more recently nonetheless.⁸⁹ While the doctrine is still

86. See, e.g., DAVID C. SLADE ET AL., PUTTING THE PUBLIC TRUST DOCTRINE TO WORK 3-9 (1990); ROBERT W. ADLER, ROBIN K. CRAIG & NOAH D. HALL, MODERN WATER LAW ch. 7 (2nd ed., 2018) [hereinafter MODERN WATER LAW].

87. See MODERN WATER LAW, *supra* note 86, ch. 6. Navigability relates to the public trust doctrine along several dimensions. Article III, Section 2 of the U.S. Constitution establishes federal jurisdiction over “all Cases of admiralty and maritime Jurisdiction.” U.S. CONST. art. III, § 2. In the case of *Propeller Genesee Chief v. Fitzhugh*, the U.S. Supreme Court ruled that this authority extends to all navigable waters in fact, not just those waters subject to tidal ebb and flow. *Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 457 (1851). Similarly, Article I, Section 8 of the U.S. Constitution establishes federal authority to “regulate Commerce . . . among the several States . . .” U.S. CONST. art. I, § 8. In *The Daniel Ball*, the Court reaffirmed the navigable-in-fact rule for establishing jurisdiction over all waters, including the non-tidal waters of the Grand River in Michigan and Lake Michigan. *The Daniel Ball*, 8 U.S. (10 Wall.) 557, 557 (1870). Finally, the Court has recognized a federal ‘navigational servitude’ over navigable waters, *Gibson v. United States*, 166 U.S. 269, 271-72 (1897), given the federal government’s “dominant public interest in navigation,” *United States v. Willow River Power Co.*, 324 U.S. 499, 507 (1945). The navigational servitude effectively insulates the federal government from otherwise valid regulatory takings claims and places an encumbrance on riparian property owners. See MODERN WATER LAW, *supra* note 86, at 299-305 (providing a thorough discussion of the navigational servitude). All three of these powers reflect a federal interest in both tidal and non-tidal navigable waters and their shores, based on federal law, overlapping with corresponding state interests. The equal footing doctrine links navigability to the public trust doctrine, particularly for the Great Lakes states admitted to the Union after its founding (*i.e.*, those states other than New York and Pennsylvania). See *id.* at 314-22. Under that doctrine, the states generally hold title to the beds and banks of waters that met the state title navigability test at the time they entered the union. *Id.* at 322-23. Thus, determining title to submerged lands underlying navigable waters as between the federal and state governments is determined by federal law under the equal footing doctrine. *PPL Mont., LLC v. Montana*, 565 U.S. 576 (2012). Once the state has title to the bed and banks of a navigable water body, however, the boundary lines of the state’s ownership interest as between the state and private shoreland owners is a matter of state law, determined under the public trust doctrine. See *Barney v. Keokuk*, 94 U.S. (4 Otto) 324 (1876); MODERN WATER LAW, *supra* note 86, at 117-21. That interest varies across the states, and it is yet the subject of some confusion and disagreement. See *infra* Section II.B.3.

88. See SLADE ET AL., *supra* note 86, at 3.

89. See, e.g., James L. Huffman, *Speaking of Inconvenient Truths—A History of the Public Trust Doctrine*, 18 DUKE ENVTL. L. & POL’Y F. 1 (2007) (providing a recent critique of the doctrine in general). For a critique of the Michigan Supreme Court’s most recent adjudication of its public trust doctrine specifically, see, e.g., Carl Shadi Paganelli, Note, *Creative Judicial Misunderstanding: Misapplication of the Public Trust Doctrine in Michigan*, 58 HASTINGS L.J. 1095 (2007).

applied primarily in coastal settings, an influential article published by Joseph Sax in 1970⁹⁰ argued for its expansion to encompass natural resources more broadly, which has in turn prompted considerable attention by commentators and some recognition in state courts.⁹¹ We acknowledge that call for expansion of the doctrine beyond its original coastal setting along with the responses it has drawn⁹², but we set aside that debate here, focusing our analysis on coastal settings.

There are several primary issues that the public trust doctrine implicates today, particularly for purposes here. First is the historical pedigree and continued validity of the doctrine itself. Second is its application to Great Lakes waters. Third is the ownership interest(s) it establishes for both submerged lands and shorelands as between the state and private owners. Fourth is the boundary(ies) that demarcate the transition from public to private interests. Fifth is the title interest(s), trust duty(ies), and use right(s) it establishes, especially where interests overlap. In addition to these specific issues, the doctrine also raises interesting questions regarding the appropriate relationship between the judiciary and the legislature in the context of the interplay between common law, constitutional law, and statutory law. Probably the greatest concern of critical commentators today, whether stated explicitly or not, is the relationship of the public trust doctrine vis-à-vis the regulatory takings doctrine, and more recently its implications vis-à-vis the concept of a judicial taking in a post-*Lucas* world.⁹³ We summarize these various debates broadly here as a prelude to our consideration of them regarding Great Lakes shorelands specifically below.

90. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 417 (1970).

91. See MODERN WATER LAW, *supra* note 86.

92. The literature both building on and critiquing Sax's article is voluminous. See, e.g., James L. Huffman, *A Fish Out of Water: The Public Trust in a Constitutional Democracy*, 19 ENVTL. L. 527 (1989) (critiquing Sax's interpretation of the public trust doctrine as a violation the U.S. Constitution's takings clause); cf. Scott W. Reed, *Fish Gotta Swim: Establishing Legal Rights to Instream Flows through the Endangered Species Act and the Public Trust Doctrine*, 28 IDAHO L. REV. 645 (interpreting the public trust doctrine to prioritize use of water for environmental protection over drinking water); see also Michael Blumm & Thea Schwartz, *Mono Lake and the Evolving Public Trust in Western Water*, 37 ARIZ. L. REV. 701 (1995) (discussing how public trust jurisprudence has revolutionized California water law).

93. See, e.g., James L. Huffman, *Avoiding the Takings Clause through the Myth of Public Rights: The Public Trust and Reserve Rights Doctrines at Work*, 3 J. LAND USE & ENVTL. L. 171 (1987); David J. Bederman, *The Curious Resurrection of Custom: Beach Access and Judicial Takings*, 96 COLUM. L. REV. 1375 (1996); Wolf, *supra* note 40. See also *Stop the Beach Renourishment, Inc. v. Fla. Dep't. of Envtl. Prot.*, 560 U.S. 702 (2010); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003 (1992) (addressing the question of whether a state coastal area management regulation had resulted in a regulatory taking). See *infra* Section II.C.3 for more discussion of this case.

1. Historical Origins

The ancient text most commonly cited as the original source of the public trust doctrine comes from the remaining fragments of Emperor Justinian's *Institutes* and *Digests*, which codified Roman law in the late sixth century A.D. toward the end of the Roman Empire.⁹⁴ As detailed below, prominent critiques of the pedigree of the public trust doctrine were made by authors Glenn MacGrady and Patrick Deveney in the 1970s, writing in separate publications.⁹⁵ Both were based primarily on historical analysis and both speak to the commonly recited—but allegedly flawed—interpretation of the *Institutes* in the context of Roman law more broadly. Both authors critique the public trust's incorporation into English common law through influential, but allegedly flawed, treatises written in the thirteenth and seventeenth centuries. The authors also critique the public trust doctrine's subsequent incorporation into American common law through influential treatises and court cases in the early nineteenth century, again allegedly flawed in turn for being premised on those earlier flawed recitations of Roman law and English common law. Despite the breadth and depth of these two analyses, definitive statements on the precise meaning and validity of ancient Roman and English historical interpretations are questionable, given the long timeframes involved and countervailing historical analyses that have been conducted in response to MacGrady's and Deveney's separate assessments.⁹⁶ Nonetheless, because of the prominence of recitations of Roman law and English common law as authority for the modern public trust doctrine, we discuss those recitations and the debates surrounding them briefly first.

In relation to private and public rights at the foreshore, Justinian's *Institutes* provided the following, in full:

94. See *infra* notes 97-98 and accompanying text.

95. 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 (1975); Patrick Deveney, *Title, Jus Publicum, and the Public Trust: An Historical Analysis*, 1 SEA GRANT L.J. 13 (1976). While not widely cited by advocates of the public trust doctrine, these two critiques have been relied upon heavily by scholars both critical of the public trust doctrine generally, see, e.g., Huffman, *supra* notes 89 & 92-93, and of its application to Great Lakes shores in particular, see, e.g., Paganelli, *supra* note 89. These critiques were published shortly after Sax's influential article calling for a more expansive application of that doctrine. See Sax, *supra* note 90.

96. In his analysis of Michigan's public trust doctrine, for example, Robert H. Abrams, *Walking the Beach to the Core of Sovereignty: The Historic Basis for the Public Trust Doctrine Applied in Glass v. Goekel*, 40 MICH. J.L. REFORM 861 (2007), disputes much of the historical interpretation of Roman law offered by Deveney and MacGrady, and thus subsequently by Huffman, Paganelli, and others, relying heavily on historical treatments of Roman law and English common law at odds with those interpretations. See, e.g., JAMES HADLEY, INTRODUCTION TO ROMAN LAW (D. Appleton & Co. 1873) cited in Abrams *supra*, at 871; PETER N. RIESENBERG, INALIENABILITY OF SOVEREIGNTY IN MEDIEVAL POLITICAL THOUGHT (Colum. Univ. Press 1956) cited in Abrams *supra*, at 878; HELLEN F. ALTHAUS, PUBLIC TRUST RIGHTS (U.S. Fish & Wildlife Service 1978) cited in Abrams *supra*, at 874; ALAN WATSON, ROMAN LAW AND COMPARATIVE LAW (1991) cited in Abrams *supra*, at 870.

- (1) By natural law the following things belong to all men, namely: air, running water, the sea, and for this reason the shores of the sea. No one, therefore, is prohibited from approaching the seashore if he avoids damaging houses, monuments, and other structures, because they are not, like the sea, subject to the Law of Nations.
- (2) All rivers and ports are also public, and therefore the right of fishing in a harbor or in streams is common to all.
- (3) The shore of the sea extends to the point attained by the highest tide in winter.
- (4) The public use of the banks of rivers is also subject to the Law of Nations, just as the use of the river itself is; and hence anyone has a right to secure a vessel to them, to fasten ropes to trees growing there, or to deposit any cargo thereon, just as he has to navigate the river itself; but the ownership of the same is in those whose lands are adjacent, and therefore the trees growing there belong to them.
- (5) The public use of the sea-shore is also subject to the Law of Nations in like manner as that of the sea itself, and therefore any person has as good a right to build a house there in which he can take refuge, as he has to dry his nets or to draw them out of the sea. The ownership of the shores, must, however, be considered as belonging to no one, but to be subject to the same law as the sea itself and the earth or sand underneath it.⁹⁷

In addition, it is important to note, as stated by MacGrady:

Depending upon the translation used, the *Institutes* defines the landward reach of the shore as “the limit reached by the highest winter flood,” as “the winter high-water mark,” or as “the highest point reached by the waves in winter storms.” Whatever the precise definition, it is clear that the Romans conceived of the shore as reaching as far landward as the maximum reach of the sea during the season of highest water (i.e. winter).⁹⁸

Portions of these fragments of Roman law were first incorporated into formal statements of English law with the writings of cleric and jurist Henry de Bracton in the mid-thirteenth century, in his *De Legibus et Consuetudinibus Angliae* (The Statute and Common Law of England, or On the Laws and Customs of Eng-

97. J. INST. 2.1.1-5 (Samuel P. Scott trans., 1932); as reprinted in Abrams, *supra* note 96, at 871-72.

98. MacGrady, *supra* note 95, at 531 (citations omitted). MacGrady further states that “it is also clear that such a definition would extend the Roman shore further landward than does the current American definition, which holds that the landward reach of the shore is measured by the *mean* high-tide line.” *Id.* at 531-32 (emphasis in original).

land).⁹⁹ Bracton declared that English common law at that time, premised at least in part on Roman law, held that the sea and seashore were common to all.¹⁰⁰ His interpretation, drawn from the *Institutes* and *Digests*, read in part:

By natural law these are common to all: running water, air, the sea, and the shores of the sea, as though accessories of the sea. No one therefore is forbidden access to the seashore, provided he keeps away from houses and buildings [built there], for by the *jus gentium* shores are not common to all in the sense that the sea is, but buildings built there, whether in the sea or on the shore, belong by the *jus gentium* to those who build them. Thus in this case the soil cedes to the building, though elsewhere the contrary is true, the building cedes to the soil.¹⁰¹

This concept was subsequently recited again by Sir Matthew Hale in his *De Jure Maris* (Law of the Sea), written by Lord Hale sometime around 1667 but not published until it was incorporated by Francis Hargrave into his *Law Tracts* in 1786.¹⁰² Hale stated:

The shore is that ground that is between the ordinary high-water mark and low-water mark. This doth *prima facie* and of common right belong to the king, both in the shore of the sea and the shore of the arms of the sea.¹⁰³

Hale also devised a schema of three legal interests in coastal areas, drawing from Roman law, including: the *jus publicum* (the rights of the general public, including at least an interest in navigation and the public right to access navigable waters, arguably inalienable by the crown); the *jus privatum* (private right to title, which may be held by the crown or a private individual); and the *jus regium* (the royal right, or the power of the king as supreme magistrate to manage coastal resources for the public safety and welfare—essentially a parallel authority within the context

99. Bracton is credited with writing this early and highly influential statement of English common law, grounded in part on Roman law, sometime around 1256. The first printed edition of this work appeared in 1569, and the now standard text of the work was translated by Travers Twiss in 1878; see generally the histories offered by authors cited *supra* note 89 for multiple renditions of Bracton's work and his influence.

100. MacGrady, *supra* note 95, at 555-56 (citations omitted).

101. *As reprinted in* MacGrady, *supra* note 95, at 555-56 (citations omitted). *Jus gentium*, a concept of natural law under ancient Roman law, refers to law common to all peoples, or the "law of nations," or the "law which all nations use"—a concept wider and more inclusive than modern concepts of "international law." *Jus gentium*, BLACK'S LAW DICTIONARY, (Deluxe 6th ed. 1990). MacGrady notes that this recitation recognizes both that the sea and seashore are held common to all—a concept that can be interpreted variously—and that "the soil of the shore can be privately owned, at least by building on it." MacGrady, *supra* note 95, at 556.

102. See MacGrady, *supra* note 95, at 549. See Section III.A for a discussion of critical analysis of Hale's work.

103. *As reprinted in* MacGrady, *supra* note 95, at 549-50.

of the coastal public trust doctrine to the modern police power prerogatives held by the states).¹⁰⁴

Hale and other writers also recognized classifications of *res* relevant to the coast (or “things,” including property, as distinct under Roman law from persons or legal actions), drawing again from the *Institutes*. These included, at the highest level, things susceptible to private ownership (*res quae in nostro patrimonio*) and things not susceptible to private ownership (*res extra nostrum patrimonium*).¹⁰⁵ Things not susceptible to private ownership were further subdivided into things that are common to all (*res communes*), things that are public (*res publicae*), things that belong to corporate bodies of men (*res universitatis*), and things that belong to no one (*res nullius*).¹⁰⁶

It is worth noting here that MacGrady concludes that the logical interpretation of this schema of ownership of “things” and threads of law, taken facially, would be that the sea, its submerged lands, and the foreshore were considered by the Romans to be things either *res communes* or *res nullius*—that is, things not susceptible to private ownership (or, subject to law as *jus publicum* rather than *jus privatum* interests).¹⁰⁷ Even so, MacGrady then explains at length why, at least, “one must hedge such a conclusion,” an assertion discussed more below.¹⁰⁸

2. Incorporation into American Law

Given this ancient Roman and English historical backdrop,¹⁰⁹ these and related provisions, rules, and concepts were drawn upon and cited by two of the most

104. See Deveney, *supra* note 95, at 45-46.

105. MacGrady, *supra* note 95, at 518.

106. *Id.* In addition to these concepts of law, there are numerous classifications of things and bodies of law that stem from the Roman Empire, detailed at length in the historical treatments of this topic. *Supra* notes 95-96. These various classifications are of interest in understanding the history of Roman law, but not so much for understanding the modern American doctrine. They do follow somewhat, however, the helpful conceptualization of different types of ownership interests as classified by Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711 (1986), including privately owned land, publicly-owned land, unclaimed commons (*i.e.*, lands subject to capture not yet claimed), inherently public lands (*i.e.*, lands not susceptible to private ownership), and lands with overlapping interests.

107. MacGrady, *supra* note 95, at 532-33.

108. *Id.* See *infra* notes 145-57 and accompanying text for more analysis of MacGrady’s conclusions.

109. In addition to discussing an extensive array of classifications of other “things” related to oceans and seas, such as flowing rivers and their foreshores, MacGrady, Deveney, and other historians discuss at length other common issues or themes relevant for understanding ancient Roman land and English common law *per se*. While important to acknowledge, those issues are not so relevant for understanding American common law for purposes here. Chief among these are, first, the so-called “*prima facie* rule,” purportedly holding that conveyances of shoreland property from the crown did not convey the foreshore unless expressly granted, and if not granted were thus retrained by the king. This rule, crafted by an obscure apologist for the crown in the mid-sixteenth century, was intended more as a

prominent American treatise writers of the early nineteenth century—Joseph Angell and James Kent. Angell, for example, stated:

And although the property of the soil is in the Crown, to high-water mark; yet the shore, or the land which is between the high and low-water marks, is also of common public right. The maxim being, *Rex in ea habet proprietatem, sed populous habet usum ibidem necessarium*, the king has the property, but the people have the necessary use.¹¹⁰

Similarly, Kent stated, without citation:

It is a settled principle in the English law, that the right of soil of owners of land bounded by the sea, or on navigable rivers, where the tide ebbs and flows, extends to high-water mark; and the shore below common, but not extraordinary high-water mark, belongs to the public; and in England the crown, and in this country the people, have the absolute proprietary interest in the same, though it may, by grant or prescription, become private property.¹¹¹

At about the same time, courts in the United States began to recognize the doctrine. First among those was the New Jersey Supreme Court's 1821 decision of *Arnold v. Mundy*.¹¹² That decision, which applied the doctrine to New Jersey's Atlantic Ocean coast, interpreted it in a way that essentially synthesized the interpretations of Angell and Kent, just described.¹¹³ In doing so, however, the decision

means to recapture shoreland properties that the king might then re-convey for great profit rather than a principled concern for protection of public trust shorelands. See MacGrady, *supra* note 95, at 552, 560-67; Abrams, *supra* note 96, at 882. A second issue commonly discussed was the effect of the *Magna Carta* of 1215, which established rights of the noble barons as against the king and included prohibitions against the erection of certain kinds of fish weirs in the Thames and other important public waters—provisions interpreted alternatively as either providing evidence of the fact that submerged lands were indeed susceptible to private ownership, MacGrady, *supra* note 95, at 554-55, or evidence of a growing public “counterweight to privatization of the shore,” Abrams, *supra* note 96, at 882.

110. JOSEPH K. ANGELL, A TREATISE ON THE RIGHT OF PROPERTY IN TIDE WATER 20 (1826), as reprinted in MacGrady, *supra* note 95, at 547-48.

111. J. KENT, COMMENTARIES ON AMERICAN LAW 344 (1826), as reprinted in MacGrady, *supra* note 95, at 548-49.

112. See *Arnold v. Mundy*, 6 N.J.L. 1, 11 (1821). Because colonial courts brought English common law to the New World, the public trust doctrine may have been widely understood to exist prior to this case. One commenter, for example, asserts that the doctrine first appeared in North America as early as 1641 through the *Body of Liberties*, citing to an historical review provided by the 1979 Massachusetts Supreme Court decision of *Boston Waterfront Development Corp. v. Commonwealth*, 393 N.E.2d 356, 359 (Mass. 1979). That decision noted both that lands below the “ordinary low water mark . . . belonged of common right to the king” and that littoral and riparian householders have free fishing and fowling rights to those lands and waters unless otherwise appropriated by the government (citations omitted). R. Prescott Jaunich, *The Environment, the Free Market, and Property Rights: Post-Lucas Privatization of the Public Trust*, 15 PUB. LAND L. REV. 168, 176-77 (1994).

113. See *infra* note 115 and accompanying text.

followed more the notion of absolute public ownership of public trust lands suggested by Kent, if not a more limited public access and use interest suggested by Angell. The language employed by Chief Kirkpatrick's opinion in describing the English common law, which the court noted had been incorporated into New Jersey's common law, was expansive. It has clearly informed subsequent statements of the law as conveyed by both sister state supreme courts and the U.S. Supreme Court since.¹¹⁴ That description read, in part:

[T] the navigable rivers in which the tide ebbs and flows, the ports, the bays, the coasts of the sea, including both the water and the land under the water, for the purpose of passing and repassing, navigation, fishing, fowling, sustenance, and all other uses of the water and its products (a few things excepted) are common to all the citizens, and that each has a right to use them according to his necessities, subject only to the laws which regulate that use; that the property, indeed, strictly speaking, is vested in the sovereign, but it is vested in him not for his own use, but for the use of the citizen, that is, for his direct and immediate enjoyment.¹¹⁵

Following *Arnold*, the doctrine was then deployed more prominently by the U.S. Supreme Court in several mid- to late-nineteenth century cases. Those cases included most notably four U.S. Supreme Court's decisions. First was *Martin v. Waddell's Lessee* in 1842,¹¹⁶ which first acknowledged the public trust doctrine as a doctrine of American common law. Second was *Barney v. Keokuk* in 1876,¹¹⁷ which held that the delineation between state and private ownership along a navigable waterway is a matter of state law. Third was *Illinois Central Railroad Co. v. Illinois* in

114. *E.g.*, SLADE ET AL., *supra* note 86, at 6.

115. *Arnold*, 6 N.J.L. at 76-77. Huffman, *supra* note 89, at 38, has critiqued Kirkpatrick's rendering of English common law, asserting as part of that critique that Kirkpatrick admitted just prior to making this statement of law that he had not taken the time to "look into it . . . in so full and satisfactory a manner as could have been wished." *Id.* at 38, n.217 (quoting Kirkpatrick in *Arnold*, 6 N.J.L. at 70). Even so, Kirkpatrick himself concluded that he had "nevertheless, so far looked into it as to satisfy myself of the principle that must prevail." *Arnold*, 6 N.J.L. at 70. *Arnold* was ultimately overruled by the New Jersey Supreme Court on other grounds, although subsequent New Jersey cases arguably reinstated the *Arnold* rule to some extent. *See* Deveney, *supra* note 95, at 56 n.261, and accompanying text. In any case, Deveney asserts that the *Arnold* decision was important historically primarily for its influence on the U.S. Supreme Court in rendering its decision of *Martin v. Waddell's Lessee*. *See infra* note 116 and accompanying text; Deveney, *supra* note 95, at 56-58.

116. *See* *Martin v. Waddell's Lessee*, 41 U.S. 234, 412-13 (1842); THE WILDLIFE SOC'Y, THE PUBLIC TRUST DOCTRINE: IMPLICATIONS FOR WILDLIFE MANAGEMENT AND CONSERVATION IN THE UNITED STATES AND CANADA 12 (2010).

117. *See* *Barney v. Keokuk*, 94 U.S. (4 Otto) 324, 339 (1876). Most states have subsequently set the boundary for demarcating ownership interests at the high water mark or high water line, although some states, mostly in the east, use the low water mark or low tide line. *See* MODERN WATER LAW, *supra* note 86, at 368 (quoting from Florida's state constitution).

1892 (hereinafter *Illinois Central*),¹¹⁸ which described the Great Lakes as ‘inland seas’ and recognized the public trust doctrine as being applicable to them.¹¹⁹ Fourth was *Shively v. Bowlby* in 1894,¹²⁰ which both reaffirmed that states admitted to the Union following the establishment of the U.S. (*i.e.*, including six of the eight Great Lakes states) joined on an ‘equal footing’ with the original thirteen states. As a result, *Shively* established that Great Lakes coastal states like Michigan enjoyed the common law public trust doctrine as had the original thirteen states, and it declared that submerged lands are of great value for the purposes of commerce, navigation, and fishing, and that the title and control of them are therefore vested in the sovereign for the benefit of the whole people.¹²¹ Reflecting its quick incorporation into the laws of the Great Lakes states, the public trust doctrine was first acknowledged by a Michigan chancery court in 1843, only six years after Michigan became a state,¹²² and it was reaffirmed and clarified by the Michigan Supreme Court most recently in 2005.¹²³

3. The Contours of Contemporary Public Trust Doctrines

The public trust doctrine as it has evolved under U.S. law actually consists today of separate doctrines unique to each coastal state, including both the ocean coastal and Great Lakes states. While those doctrines vary somewhat, especially in terms of elements such as their landward reach, each generally incorporates a core

118. *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 435 (1892); *see also* *Propeller Genesee Chief v. Fitzhugh*, 53 U.S. (12 How.) 443, 453-55 (1852); *Hardin v. Jordan*, 140 U.S. 371, 382 (1891). Both *Genesee Chief* and *Hardin* similarly described the Great Lakes as “inland seas” and recognized the public trust doctrine as applicable to them.

119. *Ill. Cent.*, 146 U.S. at 435. The *Illinois Central* decision, written by Justice Field, has been especially influential, both in general and with regard to Great Lakes waters in particular. Given its influence, this decision has also been heavily critiqued. *See, e.g.*, Joseph D. Kearney & Thomas W. Merrill, *The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central*, 71 U. CHI. L. REV. 799 (2004) (providing a thorough review of the history and issues underlying the *Illinois Central* decision and critiquing both its soundness and subsequent influence).

120. *Shively v. Bowlby*, 152 U.S. 1, 57 (1894). As noted, *Shively* re-affirmed the applicability of the equal footing doctrine to Oregon, which recognizes in states formed subsequently to the original 13 “the same rights, sovereignty, and jurisdiction over this subject [*i.e.*, submerged lands] as the original states.” *Pollard v. Hagan*, 44 U.S. (3 How.) 212, 230 (1845). Although not addressed further here, the equal footing doctrine itself also serves to further substantiate federal recognition of the applicability of the public trust doctrine to submerged lands and foreshores under state law, particularly for the Great Lakes states by virtue of the Northwest Ordinance. *See* Noah D. Hall & Benjamin C. Houston, *Law and Governance of the Great Lakes*, 63 DEPAUL L. REV. 723, 742-44 (2014). Nonetheless, this doctrine has not been much analyzed or criticized as a controversial doctrine as has the public trust doctrine itself. *See* James R. Rasband, *The Disregarded Common Parentage of the Equal Footing and Public Trust Doctrines*, 32 LAND & WATER L. REV. 1 (1997).

121. *Shively*, 152 U.S. at 57.

122. *La Plaisance Bay Harbor Co. v. City of Monroe*, Walker Chancery Rep. 155, 167-68 (Mich. 1843).

123. *Glass v. Goeckel*, 703 N.W.2d 58, 62 (2005).

set of elements.¹²⁴ We recite those elements here, as commonly understood and presented by courts and commentators, then discuss how and why those elements have been contested by critical commentators in the following section.

First and foremost, the various coastal state doctrines distinguish between the two property interests at the shore as articulated by Lord Hale, including a private ownership interest (*jus privatum*) and the public trust interest (*jus publicum*).¹²⁵ In general, either a private party or the state in its proprietary capacity can hold *jus privatum* title interests in submerged lands and shorelands. All of the eight Great Lake states appear to own title interest in their submerged lands, with some qualifications.¹²⁶ In contrast, only the state holds the common property *jus publicum* interest, and it applies to all submerged lands, whether *jus privatum* title to any given land is held by the state or a private party.¹²⁷ The *jus publicum* interest may also encompass some portion of the shorelands landward of the water's edge (*i.e.*, up to a 'high-water mark,' 'ordinary high-water mark,' or some similar boundary), whether defined legally as 'submerged' land or something else, depending on the way a particular state defines its public trust boundary.¹²⁸

Second, the public trust interest uniformly consists of the right of the citizens of the state to enter and use public trust shorelands for navigation, commerce, fishing, and—increasingly—recreation, although again the precise formulation of those rights differs somewhat from state to state.¹²⁹ The public trust interest thus represents in effect both a public easement and a private servitude, particularly on lands where *jus publicum* and *jus privatum* littoral property interests overlap. The easement consists of the right of the public to use submerged lands and shorelands lakeward of the public trust boundary, even those that are privately owned. The servitude consists of the burden on the underlying littoral property holder not to take actions that would destroy public trust lands or otherwise impede public use of the easement.¹³⁰

124. See generally SLADE ET AL., *supra* note 86; Bertram C. Frey & Andrew Mutz, *The Public Trust in Surface Waters and Submerged Lands of the Great Lakes States*, 40 MICH. J.L. REFORM 907 (2007); Elaine Sterrett Isely & Victoria Pebbles, *U.S. Great Lakes Policy and Management: A Comparative Analysis of Eight States' Coastal and Submerged Lands Programs and Policies*, 37 COASTAL MGMT. 197 (2009). See also the descriptions of the doctrine as discussed by various author within this Article.

125. See notes 104-06 *supra* and accompanying text; SLADE ET AL., *supra* note 86.

126. See Frey & Mutz, *supra* note 124, at 928.

127. See *supra* notes 104-06 and accompanying text; SLADE ET AL., *supra* note 86.

128. SLADE ET AL., *supra* note 86.

129. *Id.* Illinois Central recognized the core use rights protected by the public trust doctrine as navigation, commerce, and fishing, while an increasing number of states have modified their doctrines to protect additional uses as well, especially recreation. See MODERN WATER LAW, *supra* note 86, at 125, 132-33.

130. See James G. Titus, *Rising Seas, Coastal Erosion, and the Takings Clause: How to Save Wetlands and Beaches without Hurting Property Owners*, 57 MD. L. REV. 1279 (1998). Titus refers to these interests collectively as a "rolling easement" because the easement shifts as the shoreline itself naturally moves. Deveney and MacGrady both similarly discuss this notion of a public trust servitude on private

Third, the state always serves as trustee of the public trust interest and, as such, the state has a duty to safeguard the public trust interest in perpetuity.¹³¹ Courts regularly assert that, as a matter of law, this is a duty that the state cannot abdicate, while allowing in practice some latitude for interpreting what that means.¹³² Moreover, states may not as a general rule confer private title interests that are superior to public interests in public trust lands, although states may patent submerged lands to private ownership under certain circumstances.¹³³

Fourth, recognizing that shorelands are dynamic natural systems, the notion of *ius privatum* is generally recognized as a ‘moveable freehold’ ownership interest when it extends to the water’s edge, one capable of both expanding and diminishing given the natural movement of the shoreline over time.¹³⁴ Short-term changes as a result of storms, however, are generally held not to effect changes in property boundaries (where the meaning of ‘short-term’ is not well defined).¹³⁵ This concept again appears to be uniform across all of the coastal state doctrines, but it raises peculiar problems for Great Lakes states because of the unique attributes of those systems, a topic not addressed in more detail here but warranting further study.¹³⁶

Finally, these uniform elements notwithstanding, the U.S. Supreme Court and all of the coastal states recognize that the public trust doctrine is a state doctrine that can be modified either by judicial decision or legislative action, according

shoreland owner rights under Roman law in terms of “popular injunctions” that might be used to prevent shoreland owners from obstructing access to the public, Deveney, *supra* note 95, at 23-25, and the usufructuary rights enjoyed by riparian or littoral property owners to the public trust resources adjacent, MacGrady, *supra* note 95, at 526-27, although they question the enforceability of those interests in practice.

131. See SLADE ET AL., *supra* note 86.

132. The Michigan Supreme Court, for example, held long ago that that the “State may not . . . surrender such public rights [in the use of the public trust] any more than it can abdicate the police power or other essential power of government,” see *Nedtweg v. Wallace*, 237 Mich. 14, 17 (1926), although it recognizes the ability of the legislature to modify its public trust duties through statutory provision.

133. Under Michigan law, for example, the state may patent submerged lands and “made” lands on the Great Lakes, but only when doing so advances the public trust interest in navigation, *Nedtweg*, 237 Mich. at 18, or at the very least will not result in “detriment to the public interest in the lands and water remaining,” *Obrecht v. Nat’l Gypsum Co.*, 361 Mich. 399, 412-13 (1960). The State of Minnesota, in contrast, allows Great Lakes shoreline littoral property owners to fill and effectively convert state-owned submerged lands into privately owned upland out “to the point of navigability.” See *State v. Slotness*, 289 Minn. 485, 487 (1971). In addition, the Michigan Supreme Court has held that submerged lands patented by the U.S. government to shoreland property owners before Michigan became a state are not subject to the public trust doctrine, if the patent makes clear the intent that the shoreline boundary of the property in question does not move as the shoreline moves, because those conveyances are superior to state law. See *Klais v. Danowski*, 373 Mich. 262 (1964). That decision appears to apply narrowly to only such properties, however, and it has created some ambiguities that the Michigan courts have not subsequently addressed—a topic for further study. See *infra* Part IV.

134. See SLADE ET AL., *supra* note 86, at 92 (quoting *Hilt v. Weber*, 252 Mich. 198, 219 (1930)).

135. See *id.* at 91.

136. See discussion framing this issue *infra* Part IV.

to the best interests of the public.¹³⁷ Thus, the doctrine may evolve over time to adapt to changing circumstances, and states may alter or replace the common law public trust doctrine with a statutory scheme. Accordingly, the doctrine itself can differ from one state to the next, and sometimes within a single state from one time period to the next.

Given that room for state-specific adaptation, a key dimension along which the public trust doctrine varies from state to state is the geographic scope or spatial extent of the public trust interest. That is, on any given shore, what are the appropriate boundaries to mark *jus privatum* and *jus publicum* interests, and are those boundaries coincident or can public and private interests overlap?¹³⁸ As noted above, the doctrine is generally taken to have its historical roots in Roman civil and English common law, where it originally applied to tidal waters that rose and lowered over the course of a day.¹³⁹ The public trust interest was thus taken to encompass the bottomlands of tidal waters up to some point related to the tide, typically the ‘ordinary high water mark,’ or the point on the land to which the high tide ordinarily reached—although again the states vary in how they determine where that mark falls along the shore.¹⁴⁰ One challenge in adapting the public trust doctrine to the Great Lakes is that the Great Lakes are not tidal.¹⁴¹ Even so, the standing water levels of the Lakes fluctuate periodically with some degree of regularity over

137. See *Shively v. Bowlby*, 152 U.S. 1, 26 (1894):

The foregoing summary of the laws of the original States shows that there is no universal and uniform law upon the subject; but that each State has dealt with the lands under the tide waters within its borders according to its own views of justice and policy, reserving its own control over such lands, or granting rights therein to individuals or corporations, whether owners of the adjoining upland or not, as it considered for the best interests of the public. Great caution, therefore, is necessary in applying precedents in one State to cases arising in another.

There is a federal role here too, but one limited primarily to navigation on waters of the U.S. The U.S. Submerged Lands Act of 1953 recognizes coastal states’ powers to manage, administer, lease, develop and use the lands beneath navigable waters within each state’s boundaries. 43 U.S.C. § 1311(a)(2) (2006). It also defines the landward boundary of submerged lands as the ordinary high water mark, 43 U.S.C. § 1301(a)(1) (2006), and it vests the states with title and rights to the natural resources on or within those lands, 43 U.S.C. § 1311(a)(1) (2006), although it maintains the federal government’s authority to regulate certain offshore activities for flood control, power production, national defense, international affairs, commerce, and in particular navigation, 43 U.S.C. §§ 1311(d), 1314(a) (2006). See MODERN WATER LAW, *supra* note 86; see also *supra* note 87.

138. The Appendix to this Article illustrates variation on these boundaries across the eight Great Lakes states.

139. See *supra* notes 86-87 and accompanying text.

140. See SLADE ET AL., *supra* note 86; Titus, *supra* note 130. As noted, *supra* note 98, Roman law may even have recognized a boundary more landward than that typically recognized by most American states to the extent it appeared to reach to the extreme of the highest winter tide.

141. See Norton et al. *supra* note 19, at 527.

longer periods of time.¹⁴² Each of the Great Lakes states has had to confront the questions of what constitutes the appropriate *jus publicum* boundary along its Great Lakes shorelines, given longer-than-tidal periods of lake-level fluctuation, and whether that boundary is coterminous or overlapping with the *jus privatum* boundary—a source of great confusion in litigation for all of the Great Lakes states. Before discussing that issue in detail, we first address contemporary critiques of the public trust doctrine in general.

4. Historical Pedigree and Contemporary Doctrine Contested

As noted, the historical origins and progression of the public trust doctrine presented here have been thoroughly critiqued. The most thorough of those critiques, specifically in terms of historical scholarship, were offered by commentators MacGrady and Deveney in the mid-1970s.¹⁴³ Both authors were motivated by their conclusions, apparently reached independently, that the commonly portrayed pedigree of the doctrine in terms of its Roman law and English common law origins was not entirely accurate.¹⁴⁴ More recent commentators, coming expressly from a free market/limited government/strong private property rights school of thought, have revived and relied upon those critiques, citing MacGrady and Deveney to undermine the doctrine's validity, but focusing their concerns more on its implications for contemporary jurisprudence.¹⁴⁵

MacGrady conducted his analysis as a scholarly exercise of problematizing the common practice by courts and treatise writers of reciting Roman law, civil law, and English common law in their efforts to demonstrate the solid historical foundations of the doctrine.¹⁴⁶ He was concerned about how that collective interpretation had underlain concepts of navigability in American law since its origins, and about how that concept of navigability and the earliest portrayals of the public trust doctrine had in turn informed the evolution of the doctrine itself in American law over time.¹⁴⁷

As MacGrady notes, a plain reading of the fragments of the *Institutes* and *Digests* commonly used to justify the origins of the doctrine suggests that the Romans considered the sea and its foreshore to be things common to all (*res communes*) and

142. *Id.* at 528 (“Rather, Great Lakes water levels and shorelines fluctuate to a much greater extent and over much longer periods of time because of changing climatic and geophysical conditions.”).

143. *See supra* note 95 and accompanying text.

144. *See id.*

145. *See id.*

146. MacGrady, *supra* note 95, at 605-15. The author's biography states that the article was submitted as his thesis for the L.L.M. degree at Harvard University. *Id.* at 513.

147. *See* MacGrady, *supra* note 95, at 606 (asserting that laws and doctrines of navigability and public trust originated from problematic understandings of Roman law and English common law, and were “shaped by a process of invention, misconception, manipulation, personal reputation, and by treatise writing”).

not susceptible to private ownership.¹⁴⁸ He asserts, however, that such a conclusion should be “hedged,” for two reasons: first, that at least some of the fragments remaining were not uniformly consistent but rather wavered in terms of treating the shore as *res publicae* (owned by the state) or *res communes* (common to all); and second that other provisions in the *Institutes* made it quite clear that Roman law at least “tolerated appropriations of the seashore in the nature of private ownership.”¹⁴⁹ MacGrady suggests further that the *Institute’s* statement that the sea and its foreshores are things “common to all” might be interpreted alternatively as an application of the rule of capture; that is, to mean that shores at that time were an as-yet unclaimed commons—land open to anyone to settle and claim, thus privatized at that point—rather than land not susceptible to private ownership altogether.¹⁵⁰

Deveney similarly approached his analysis in order to problematize the popular use of Roman law and English law origins as the foundation for the modern public trust doctrine, asserting that “this judicial history has been very much an ad hoc affair and its use often substituted for or obscured analysis of the real interests competing for the coastal areas.”¹⁵¹ Deveney provides much the same historical review as that provided by MacGrady, including detailed assessments of Bracton’s and Lord Hale’s contributions to the English common law. He also asserts, as does MacGrady, that both treatise writers construed strong statements of a public trust under Roman law that were not adequately supported by the *Institutes* and *Digests*, and that perhaps those interpretations betrayed the treatise authors’ ideological beliefs more so than good statements of English common law as it existed at the times they wrote, respectively.¹⁵²

Deveney states a concern that American courts have used statements of Roman law and English common law to assert public trust doctrine principles that are too formalistic and absolute, using the language of the *Institutes* to draw hard, bright-line interpretations of the meaning of the public trust doctrine today.¹⁵³ He also asserts that the courts in particular have relied on those strong interpretations of ancient texts as a *deus ex machina* to avoid the difficult task of reconciling com-

148. *Supra* notes 100-01 and accompanying text.

149. MacGrady, *supra* note 95, at 532-33.

150. *Id.* at 533-34.

151. Deveney, *supra* note 95, at 15. This article provides no background information regarding the author. However, a short biography on the web indicates that Deveney earned a master’s degree in the history of religions at the University of Chicago, then studied law at the State University of New York at Buffalo School of Law, where he served as editor-in-chief of the *Sea Grant Law Review*. He subsequently spent his career in the public and private practice of law, specializing in real estate, see *John Patrick Deveney Biography*, CHEHEBAR & DEVENEY LLP, <http://www.cdllawllp.com/Site/Deveney.html> (last visited Nov. 1, 2018), but apparently never published scholarly work on this or related topics again. This article was the first in what comprised the inaugural edition of that journal.

152. Deveney, *supra* note 95, at 36-48.

153. Deveney, *supra* note 95, at 13-15.

peting principles that arise in the especially complex setting of coastal resources—a task he asserts is one better suited to the legislative branch.¹⁵⁴ Finally, building on the latter concern, Deveney concludes that the judiciary steps too far into the legislative realm through its imposition and exercise of the doctrine, particularly when making public policy through judicial decree.¹⁵⁵

Taken together, both MacGrady and Deveney seem to have been most concerned about one substantive legal question: whether under either the Roman law or English common law version of the public trust doctrine, title ownership to submerged lands held by the government was indeed inalienable. If true, that question would suggest that under American law, a given state's ownership of its submerged lands should be inalienable as well. Both MacGrady and Deveney demonstrate that under Roman law and English common law, it was legal and accepted that some level of ownership interest to some portion of coastal shoreland could be conveyed into private hands. Not so clear, however, is the precise relationship that remained as between public and private interests in cases of overlap, and what implications those relationships should have in the American context today.

5. Synthesis

Like the police power, the public trust doctrine stems from the inherent sovereignty of a state.¹⁵⁶ Unlike the police power, the public trust doctrine traces its historical pedigree back to ancient Roman law and English common law, at least in terms of the recording of clear statements of law in early texts.¹⁵⁷ Premised on those ancient statements, it appeared early in this country's history, and it has been acknowledged and incorporated by all of the country's oceanic and Great Lakes states as applicable to their coastal shores.¹⁵⁸

Nonetheless, as with debates over the nature and scope of the police power,¹⁵⁹ commentators like Deveney and MacGrady,¹⁶⁰ and more recently others relying uncritically on Deveney and MacGrady,¹⁶¹ have leveled strong critiques against the public trust doctrine, whether as confined historically to coastal settings more narrowly or as recently promoted to encompass natural resources more expansively. But juxtaposing the work of these commentators against the historical analyses of

154. *Id.* at 80-81.

155. *Id.* The issue of separation of powers in particular is addressed in more detail below. *See infra* Section II.C.

156. *See supra* Section II.A.

157. *See supra* Section II.A.; *see also supra* notes 97-106 and accompanying text.

158. *See infra* Appendix A.

159. *See supra* Section II.A.

160. *Supra* note 95.

161. *Supra* note 89.

other scholars who have reached different conclusions,¹⁶² makes clear that definitive statements on how the ancient Romans and second-millennial English understood public and private interests at the shore are, at best, contestable. Even so, this research does clearly show that the Romans and English recognized and accepted (or at least ‘tolerated’) that some interests in submerged coastal lands and their foreshores were susceptible to private ownership.¹⁶³

Finally, even critical historical scholarship clearly shows that while the public trust doctrine has tentacles reaching back to ancient Roman and English common law, our adoption of its principles has in fact always been truly American. It was adapted from the very genesis of the United States to the peculiar settings, concerns, understandings, and imperatives of the unique American context. Since first articulated by American courts, it has always been understood to arise from American common law, citations to Roman law and English common law notwithstanding. Aside from our reverence for private property, discussed more below, it is hard to imagine an American legal doctrine more well-settled.

Given all that, several conundrums remain. The first is how to reconcile competing demands over a resource that has historically been recognized as “common to all” but simultaneously susceptible to privatization. Second, if the status of “common to all” implicates some duty on the part of the state to protect the public interest, how do we reconcile the principle that that public trust duty is one that even a state’s legislature cannot abrogate (*i.e.*, one safe-guarded by the courts),¹⁶⁴ on one hand, with the competing principle that the public trust doctrine is a state-specific doctrine amenable to adaptation over time (*i.e.*, presumably enabling legislatures to do so),¹⁶⁵ on the other. The third is whether there is any meaningful difference in ownership interests to be drawn between submerged lands that are continuously submerged and those only periodically submerged (*i.e.*, the foreshore).

The third of these queries is especially relevant in the context of non-tidal inland seas like the Great Lakes, where portions of foreshore are absolutely submerged for sufficient periods of time such that they are not amenable to permanent development or cultivation, yet dry for sufficient periods of time that they can support ephemeral vegetation and appear to be above high water if not accreting. We note the importance and challenges posed by that question but leave it for future study. The answers to these queries rest in how the public trust doctrine itself has been understood in pragmatic application, rather than how it has been characterized as a theoretical proposition by treatise writers and by the courts in justifying their decisions.

There are two versions of the public trust doctrine, a strong version and a weak version. The strong version is captured by treatise writer Angell’s explanation

162. *Supra* note 96 and accompanying text.

163. *Supra* note 150 and accompanying text.

164. *Supra* notes 131-33 and accompanying text.

165. *Supra* note 137 and accompanying text.

of the doctrine,¹⁶⁶ Massachusetts Justice Kirkpatrick's recitation of it in *nold*,¹⁶⁷ and U.S. Supreme Court Justice Field's corresponding recitation in *Illinois Central*.¹⁶⁸ It suggests that the state holds all interests in submerged lands up to the high-water mark, in fee as a proprietor and as trustee of the public trust, and that both of those ownership interests are inalienable. The weak version is more akin to treatise writer Kent's¹⁶⁹ recitation of the doctrine, and indeed more consistent with the doctrine as actually structured by the states through constitutional and statutory provision, as well as actual resolution of disputes through case law.¹⁷⁰ This version thus appears to admit to the possibility that title ownership of submerged lands (and shorelands) can be conveyed into private ownership, but it requires that such conveyances always remain impressed by a public trust easement that recognizes and allows for continued common access and use, as well as a corresponding servitude on the shoreland property preventing exercise of that easement, both within reason.

Clearly the ancient Romans, the medieval English parliament, and the American coastal states have always allowed for privatization of shorelands, but these entities have also recognized a compelling overlying public interest in safeguarding common access to that shore.¹⁷¹ It is evident in the decisions rendered by the coastal states as applied and developed through statute.¹⁷² Similarly, considering the practical application of the several state public trust doctrines taken collectively, it has been a doctrine that—rather than establishing absolute, exclusive, and immutable dominions to coastal shores—has recognized and endeavored to harmonize the complex and overlapping private and public interests that have always existed at the interface between land and sea. Strong statements of the doctrine may animate its presentation by courts and advocates, but the weak version of the doctrine better describes its contours in pragmatic application.

Thus, to answer the first conundrum stated above, it appears well-settled under American law that the public trust doctrine, however adapted by a given state, recognizes that title interest to submerged and coastal shorelands can indeed be held in private hands, but at least some portions of those lands remain common to all, depending on the particulars of that state's doctrinal law. The fact that these doctrines may vary across states or over time in terms of how they balance public and private interests at the shore does not mean that the doctrines are flawed or unworkable. This fact simply reflects the complexity and competing interests inherent in dynamic coastal settings, as well as the unique historical, cultural, natural,

166. See *supra* note 110 and accompanying text.

167. See *supra* note 112 and accompanying text.

168. See *supra* note 118 and accompanying text.

169. See *supra* note 111 and accompanying text.

170. See SLADE ET AL., *supra* note 86, at 3-9.

171. See *supra* notes 129-30 and accompanying text.

172. See *infra* Part IV.

and other place-specific contexts in which states have had to reconcile those competing interests over time.

Setting aside strong formalistic statements of doctrinal rules in legal decisions and looking at the application of those rules in practice similarly offers some insight into the second conundrum noted above—the nature of the duties that coastal states bear under their public trust doctrines. We first consider the preeminent federal court decision that articulated the doctrine in the strongest terms and then applied it to the Great Lakes specifically—the *Illinois Central* decision, and then reconsider that case in light of our assessment of the public trust doctrine above.¹⁷³ The dispute that landed *Illinois Central* in federal court was not whether the public trust doctrine actually existed but rather the question of whether the Illinois Legislature had violated the Contracts Clause of the U.S. Constitution when it revoked its prior grant of submerged lands to that railroad company.¹⁷⁴ What seemed to trouble the Court above all else was not that the legislature had conveyed title interest to Great Lakes shoreland to a private entity *per se*, but rather that it had given away so much land in one conveyance, in a rash, irresponsible, and possibly corrupt way.¹⁷⁵ From that perspective, the interest at issue is better conceived as the inalienability of the *res regium*—the authority and corresponding duty the state has to protect reasonable common use of coastal shorelands for the public interest, not the fee title interest to the submerged lands themselves.¹⁷⁶ Moreover, the tensions that may exist between the legislative and the judiciary in discerning the meaning, content, and particulars of the public trust doctrine is perhaps best viewed in a way similar to contemporary constitutional adjudication where the courts do not set policy through the doctrine but serve as a check, ensuring that the legislature acts reasonably and fairly in doing so.¹⁷⁷

The public trust doctrine is on par with the police power prerogative. It does not represent a duty that the state maintains title possession of submerged lands and foreshores in fee in order to make those lands available for public use. Rather, it imposes a duty on the state to strike a balance, one that ensures that the public interest in common access and use of coastal resources is reconciled in a meaningful and fair way with the private interests and rights of littoral shoreland owners.

173. See *supra* note 118; see also *supra* Section II.B.

174. Deveney, *supra* note 95, at 59-63.

175. Kearney & Merrill, *supra* note 119; see also Deveney, *supra* note 95, at 59-63.

176. Deveney, *supra* note 95, at 59-63. This interpretation is perhaps a stretch, given the strong language used by the *Illinois Central* court, which describes the state's fee interest in submerged lands as being inalienable, and it has not been repeated widely by commentators citing to Deveney's work since. Even so, after asserting as an initial proposition that a state's fee interests are inalienable, the *Illinois Central* Court made clear that those interests could nonetheless be conveyed when the legislature determines that doing so will enhance, or at least not impinge, the public trust access and use rights to those lands. It also relied expressly on the New Jersey Supreme Court's reference to the *jus regium* in *Arnold* to justify its characterization of the public trust doctrine. *Id.* at 61.

177. See *supra* note 61 and accompanying text.

The public trust doctrine, like the police power prerogative, empowers the state legislature to adopt policies that effect such a balance between public and private. It similarly imposes a duty on the courts to ensure that the legislature does not shirk that responsibility. The full implication of this characterization is discussed more below, following discussion of the relationship between legislatures and courts in the context of private property rights.

C. *The Private Property Doctrine in Juxtaposition*

Compared to scholarly and judicial attention to police power prerogatives and the public trust doctrine, concerns regarding the safeguarding of private property rights in the American system have received considerably more treatment elsewhere, necessitating less explication here.¹⁷⁸ As noted, the protections of private property against unduly harsh regulation are considered separate doctrines, including most notably the due process and regulatory takings doctrines emanating from the Due Process and Takings clauses of the U.S. Constitution.¹⁷⁹ These doctrines are not generally referred to as a single, coherent ‘private property doctrine.’ Nonetheless, we refer to them collectively as one here. To situate the balance that courts and legislatures strike today along coastal shores between their police power and public trust authorities *vis-à-vis* private property rights, we briefly frame contemporary debates on how they resolve those tensions in general.

1. Contemporary Debates and Historical Origins

Since before the founding of the United States, debates over the proper management and use of land revolved around two broad initial propositions. The first is that private property rights are entirely social constructs that exist only because society creates and enlivens such rights.¹⁸⁰ More pointedly, private property rights exist because the state confers those rights upon the property owner, leading to the implication that what the state gives the state can take away. The second is that private property land ownership is mostly established through capture and possession, rather than merely being recognized as a social convenience, and that the state

178. See, e.g., Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149 (1971); Douglas W. Kmiec, *The Original Understanding of the Taking Clause is Neither Weak nor Obtuse*, 88 COLUM. L. REV. 1630, 1638-40 (1988); Wolf, *supra* note 40.

179. See generally JUERGENSMEYER & ROBERTS, *supra* note 59, at 390-445 (discussing federal and state takings and due process protections); DANIEL R. MANDELKER, *LAND USE LAW* §§ 2.01-2.38 (5th ed. 2003) (discussing federal and state takings protections); *id.* §§ 2.39-2.43 (discussing federal and state due process protections); GERALD A. FISHER ET AL., *MICHIGAN ZONING, PLANNING, AND LAND USE* 265-85 (2016) (discussing constitutional limitations on land use regulation in Michigan).

180. See, e.g., JUERGENSMEYER & ROBERTS, *supra* note 59, at 1-9 (framing the broad contours of these debates in a land use regulatory and development management context); see also FREYFOGLE, *supra* note 80 (employing a socially constructed view of private property).

exists first and foremost to protect those pre-existing private property rights rather than to create them.¹⁸¹ From this perspective, private property is not conferred by the state, and thus cannot be taken by the state, at least not without compensation. This core debate has been evident throughout the history, animated periodically by writings and calls for more socialistic approaches to property,¹⁸² as well as the prominence of neoliberal economic theorizing.¹⁸³ It also tracks fairly closely, although not conterminously, with arguments advanced by advocates for expansive police powers and public trust rights, on the one hand, in opposition to those advanced by advocates for strong private property rights, on the other.

Despite periodic waves of anti-communistic turmoil, as well as frequent rhetorical flourishes in both academic writings and the popular press about the potential for abuse by the state, extreme calls for the communal ownership of property have never held much sway in the American context.¹⁸⁴ In contrast, arguably extreme positions about the sanctity of private property rights and the corresponding need for a limited role for the state in order to safeguard them have been fairly common.¹⁸⁵ These latter positions have been grounded in strong but contestable assertions about the justifications underlying the formation of the country in the first place, as well as strong assertions about the theoretical justifications for ensuring a private property owner's dominion over his or her property, particularly from a neoclassical economic framing.¹⁸⁶

181. See generally FREYFOGLE, *supra* note 80; EPSTEIN, *supra* note 71 (employing the view that private property exists prior to the state). A recent Texas Supreme Court decision adjudicating a coastal dispute adopted an absolute pre-societal characterization of private property rights, stating "Private property rights have been described 'as fundamental, natural, inherent, inalienable, not derived from the legislature and as pre-existing even constitutions.'" *Severance v. Patterson*, 370 S.W.3d 705, 709 (Tex. 2012) (citation omitted). We have not found a single state court decision among those relating to Great Lakes coastal shoreland disputes, all assiduously respectful of private property rights, that adopted such a similarly absolute characterization even so.

182. See, e.g., WILLIAM GEORGE, *PROGRESS AND POVERTY* (1879).

183. See, e.g., FRIEDRICH A. HAYEK, *THE ROAD TO SERFDOM* (1944).

184. See, e.g., GEORGE, *supra* note 182, a text that has been widely read but that has not prompted widespread economic policy reform.

185. See, e.g., EPSTEIN, *supra* note 71; SIEGAN, *supra* note 85; *contra*, e.g., FREYFOGLE, *supra* note 80; Glendon, *supra* note 30.

186. Such assertions draw from a school of thought built initially on the economic theorizing by Hayek, Samuelson, Coase, Stigler, and others; incorporated subsequently into legal theorizing by Posner, Calabresi, and others; and now offered as an established component of legal education (e.g., Harrison). See, e.g., HAYEK, *supra* note 183; PAUL A. SAMUELSON, *FOUNDATIONS OF ECONOMIC ANALYSIS* (1947); GEORGE J. STIGLER, *THE THEORY OF PRICE* (1966); RICHARD A. POSNER, *ECONOMIC ANALYSIS OF THE LAW* (5th ed. 1998); GUIDO CALABRESI, *THE FUTURE OF LAW AND ECONOMICS: ESSAYS IN REFORM AND RECOLLECTION* (2016); JEFFREY L. HARRISON, *LAW AND ECONOMICS: CASES, MATERIALS, AND BEHAVIORAL PERSPECTIVES* (2002). They are frequently repeated by contemporary theorists speaking to the public trust doctrine and the use of natural resources. See, e.g., Huffman, *supra* notes 89, 92, 93. But Hayek's and others' read on economic theory and the state is neither universally accepted nor unassailable, either historically or theoretically. See, e.g., GEORGE, *supra* note 182; KARL POLANYI, *THE GREAT TRANSFORMATION: THE POLITICAL AND*

The historical origins of strong private property rights in the American context seem to fall chronologically somewhere between the origins of the public trust doctrine and the police power prerogative. By far the most prominent authority today for the strong protection of sacred, pre-societal private property rights is John Locke's *Two Treatises of Government*, first published in the late 1600s.¹⁸⁷ Locke's thesis was a philosophical argument, framed more as an apology justifying the rights of England's landed baronies as against the king, rather than as a justification for absolute private dominion over land in America.¹⁸⁸ Even so, that philosophizing clearly informed the thinking of the founders of the country as they justified independence from the English crown, devised a new American system of representative democracy, and incorporated protections of private property into that system.¹⁸⁹ While not cited much today, political thinkers and jurists early in American history looked to William Blackstone's *Commentaries on the Laws of England*, written in the latter 1700s, to understand what English common law had been imported into the American system.¹⁹⁰ Unlike Locke's treatises, Blackstone's commentary was presented as a restatement of English common law rather than as philosophy.

ECONOMIC ORIGINS OF OUR TIME (2001). Even mainstream economists contest the ways in which foundational law and economics theories such as the "Coase Theorem" have been misconstrued for ideological purposes rather than based on sound historical or analytical scholarship. Deirdre McCloskey, *The So-Called Coase Theorem*, 24 EASTERN ECON. J. 367 (1998); Glenn Fox, *The Real Coase Theorems*, 27 CATO J. 373 (2007). Similarly, dogmatic assertions about the benefits of a strong private property rights regime, such as the idea that privatization will ensure the long-term conservation of natural resources and that private property necessarily serves the public interest (*i.e.*, one consisting strictly of the aggregation of private interests), are incorrect factually and debatable philosophically. RICHARD N.L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES* (1999); Mark Sagoff, *Some Problems with Environmental Economics*, in ENVIRONMENTAL ETHICS: DIVERGENCE AND CONVERGENCE (Susan J. Armstrong & Richard G. Botzler eds., 1993); Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968); Mark Sagoff, *At the Shrine of Our Lady of Fatima or Why Political Questions Are Not All Economic*, 23 ARIZ. L. REV. 1283 (1981).

187. John Locke, *Chapter V: Of Property*, in TWO TREATISES OF GOVERNMENT (Peter Laslett, ed., New Am. Library rev. ed. 1965) (1690).

188. See, e.g., ALAN RYAN, *PROPERTY AND POLITICAL THEORY* 14-16 (1984) (arguing that Locke was concerned with refuting absolutism and the derivation of ownership rights from sovereigns); Kristin S. Shrader-Frechette, *Locke and Limits on Land Ownership*, in POLICY FOR LAND: LAW AND ETHICS 65 (Lynton Keith Caldwell & Kristin S. Shrader-Frechette, eds., 1993) (criticizing both absolutist capitalist and Marxist interpretations of Locke). Locke was aware that the New World had been discovered and was awaiting settlement, and that knowledge may have influenced his thinking, but his theorizing appears to have been mostly motivated by and directed to political debates occurring in England at the time.

189. See RYAN, *supra* note 188, at 14-48; JOHN QUINCY ADAMS, *THE SOCIAL COMPACT, EXEMPLIFIED IN THE CONSTITUTION OF THE COMMONWEALTH OF MASSACHUSETTS* 29 (1842).

190. See MARY ANN GLENDON, *supra* note 30, at 18-25. While Blackstone's influence was understood in a more nuanced way given the context at the time of the country's founding, his assertions are frequently over-stated in a dogmatic way and out of context today, if cited at all.

In any case, just like the historical pedigrees underlying the police power prerogative and the public trust doctrine, the private property doctrine as understood in American law today traces its origin to principles of English common law, but it is a uniquely American doctrine. It was first fully articulated through American constitutional and statutory provisions, and it has since evolved via amendments and adjudication as legislatures and courts have continually attempted to balance public and private interests in the American context. Given that backdrop, the American legal doctrine of private property rights can be understood by considering its pragmatic implementation through now well-settled adjudicatory doctrines.

2. The Contemporary Private Property Doctrine

In brief overview, the drafters of the U.S. Constitution first established a viable national government by enumerating its powers to act.¹⁹¹ In doing so, the drafters sought to check its potential for abuse by creating a series of checks-and-balances, including the separation of powers between co-equal branches of government. Then they incorporated additional protections through the Bill of Rights, including the Due Process Clause and the Takings Clause.¹⁹² Each of the several states similarly adopted constitutions that memorialized the authority to govern as sovereigns, constrained the potential for abuses by governmental authorities through structural checks-and-balances, and further constrained the potential for abuse through statements of individual rights paralleling those in the U.S. Constitution.¹⁹³

Without reviewing the extensive case histories or academic theorizing on these separate doctrines, courts initially assume deference toward the legislature and executive when considering alleged violations of private property rights.¹⁹⁴ Moreover, the adjudicatory tests employed in assessing alleged violations are effectively, if not explicitly, *ad hoc* balancing tests that take account of the context of a given dispute.¹⁹⁵ Together, that posture and those tests require petitioners to prove to a court that a governmental regulation or other action has been abusive, rather than requiring that government prove to the court, as an initial matter, the necessity for its actions. That adjudicatory approach is reversed only under extreme circumstances.¹⁹⁶ The modern adjudicatory approach thus reflects a combined judicial re-

191. U.S. CONST. art. I.

192. U.S. CONST. amend. V.

193. See, e.g., MICH. CONST. of 1963, art. I § 17; *id.* art. X § 2.

194. See *Vill. of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 395-97 (1926) (holding that when a local zoning regulation can be reasonably justified, the courts will defer to the local legislature in adjudicating a due process claim).

195. See *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (establishing a three-part *ad hoc* balancing test for adjudicating regulatory takings claims).

spect for the preeminent role played by the legislature in making public policy, along with the need to adjudicate difficult property-related disputes in context.

This deferential approach is entirely conversant with the separation of powers as between the branches of government. It advances especially the notion that courts ought not implement public policies better left to representative legislatures and the political process through the guise of constitutional review, while at the same time retaining an essential role for the courts in assessing whether legislative acts have unlawfully abdicated duties owed to the public. It is also consistent with well-reasoned historical review of the original justifications of the due process and takings clauses themselves; that is, that those protections exist to ensure that governments exercise their duly enabled authorities fully and appropriately, while also doing so fairly and justly.¹⁹⁷

3. Regulatory Takings and Judicial Takings Along Coastal Shorelands

Due process protections work to ensure that government does not become tyrannical by requiring that governmental actors provide appropriate justifications for actions taken. Takings and regulatory takings protections restrict the government by “bar[ring] [it] from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”¹⁹⁸ Given those protections, there is an aspect of the regulatory takings doctrine that is especially relevant regarding the public trust doctrine as it applies to coastal shorelands—the notion of a judicial taking.

Justice Antonin Scalia made clear that his understanding of private property and the state was one that comports with a philosophy of strong private property rights rather than the notion that private property rights are socially constructed.¹⁹⁹ Justice Scalia was also a proponent of the argument that the federal courts should be enabled to find that a state supreme court’s adjudication of its own state laws affecting the use of private property could be found to effect a regulatory tak-

196. *Dolan v. City of Tigard*, 512 U.S. 374, 391 (1994) (finding that a regulation adopted by the City of Tigard, OR, resulted in a regulatory taking because the property interest demanded of the petitioner through a dedication requirement far exceeded the harm the city purported to address through that dedication).

197. *See Sax*, *supra* note 77; *see also* FREYFOGLE, *supra* note 80. Similarly, on his way to presenting his take on the original understanding of the takings clause, Kmiec asserts that the “original understanding” of private property was that it serves the “constitutional aim of insulating individual citizens from arbitrary or disproportionately burdensome exercises of governmental power, but . . . does not deny the existence of that power.” Kmiec, *supra* note 178, at 1640.

198. *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

199. *See, e.g., Palazzolo v. Rhode Island*, 533 U.S. 606, 636-37 (2001) (Scalia, J., concurring) (Justice Scalia concurring and arguing that a change in title should not operate to invalidate an otherwise viable regulatory taking claim); *First English Evangelical Lutheran Church of Glendale v. Cty. of Los Angeles*, 482 U.S. 304, 319 (1987) (Scalia, J., concurring) (Justice Scalia joining the majority in holding that a regulation can effect a temporary taking).

ing if too disruptive of the property owner's expectations.²⁰⁰ Such a finding would be called, if recognized, a "judicial taking."²⁰¹

Even Justice Scalia recognized that owning private property does not give one absolute dominion to use it, at least to the point of creating nuisance-like harms to neighbors or the larger community through common law private and public nuisance. Justice Scalia's approach to reconciling that tension, however, was to conceptualize the extent of the right to use one's property in terms of the extent of title interests recognized under the common law.²⁰² That is, rather than acknowledging that property rights are socially constructed by the people, particularly when acting through a legislature, Scalia preferred to conceptualize property rights as being judicially constructed by appellate judges as they act to safeguard claims to ownership made by private individuals. Under this reasoning, because at common law one does not have a right to use one's property so as to create a nuisance, the organic title interest one has in that property does not encompass such uses. Thus, if one never had the right to such use in the first place, a regulation merely codifying that prohibitory rule cannot effect a regulatory taking; there was no interest present in the first place to have been taken. This reasoning informed Justice Scalia's proviso in the Court's decision of the regulatory takings case of *Lucas v. South Carolina Coastal Council*²⁰³ that a regulatory taking, at least in terms of a categorical taking premised on total economic deprivation, cannot be found if the land use activity prohibited would not have been allowed under a state's traditional rules of nuisance or property law in the first place (*i.e.*, the uses prohibited were never included in the title interest by operation of the state's common law).²⁰⁴

This issue, and the proviso included in *Lucas*, is especially relevant with regard to the public trust doctrine. An obvious allegation for a coastal shoreland property owner to make, when told that she cannot fully exclude the public from portions of her shoreland property or build wherever she wants on that property, is that her private property rights have been taken through that regulation, warranting compensation. Yet she may have been prevented from excluding others from the foreshore at the edge of her property, or building within that foreshore, by operation of the state's public trust doctrine. If so, and if that doctrine qualifies as a 'background principle of state property law,' then she never had the right to build or

200. See *Stop the Beach Renourishment, Inc. v. Fla. Dep't. of Env'tl. Prot.*, 560 U.S. 702 (2010). In this case, Justice Scalia, writing for a unanimous court, held that because the Florida state supreme court's ruling regarding the constitutionality of a beach renourishment program was consistent with the background principles of property law it did not effect a regulatory taking. However, in a separate part of the opinion joined by only a plurality, Justice Scalia argued the proposition that state court decisions construing their own state laws could nonetheless be found (presumably by federal court judges) to have effected a regulatory taking within the meaning of the U.S. Constitution's Fifth Amendment.

201. *Id.*

202. *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1028-29 (1992).

203. *Id.*

204. *Id.* at 1029.

exclude in her title interest in the first place. By extension, a regulatory takings claim would fail (at least as a categorical taking) because nothing was taken.

This line of reasoning is distressing to strong private property rights advocates. It also animates calls for federal courts to give heightened judicial review when a state supreme court makes a ruling on the reach and limits of a given background principle of state property law, such as the public trust doctrine, presumably with the hope that the federal courts will declare that the state supreme court ruling effected a judicial taking.²⁰⁵ Yet, as discussed at length above, it is hard to imagine a state background common law principle of nuisance or property law more well-settled than a state's public trust doctrine as applied to its coastal shorelands.²⁰⁶ It is difficult to predict how the U.S. Supreme Court will adjudicate future disputes raising claims that call on the Court to recognize a "judicial taking." However, we would note that a federal court ruling that a given state court's adjudication of its own state-specific public trust doctrine nonetheless effected a judicial taking would amount to a breathtaking example of modern judicial activism on the part of federal courts, especially given the U.S. Supreme Court's proviso in *Lucas*.²⁰⁷

4. Summary

In sum, despite assertions from strong private property advocates otherwise, the private property doctrine in American law was never meant to safeguard a property owner's ability to make the most profit from his or her land, or to use it to the point of harming others, or to compel government to compensate property owners for every regulation that might diminish its economic value.²⁰⁸ As noted by Justice Holmes in first articulating the regulatory takings doctrine, "[g]overnment

205. See *supra* note 200 and accompanying text. It is hard to imagine, but not out of the question, that the U.S. Supreme Court could expand the concept of a judicial taking if a state supreme court were to rule, based on its own reading of the state's traditional background principles, that a regulation did not effect a taking, yet the Court were to conclude that the state court was indeed mistaken, that the ruling did not comport with traditional background principles despite the state court's interpretation, and that the ruling thus effected a judicial taking. Moreover, it is not clear how the U.S. Supreme Court would treat the concept of a judicial taking if in fact a lower federal court were to rule, based on its reading of a state's traditional background principles, that a regulation did not effect a taking, yet the Court were to conclude that the lower court was indeed mistaken, that the ruling did not comport with traditional background principles, and that the ruling thus effected a judicial taking. In this latter case, would the Court then hold the federal government liable for compensation, or would it vacate the ruling and compel the state supreme court to reach such a conclusion, thus making the state liable for compensation?

206. See *supra* Section II.C.

207. See *supra* note 200 and accompanying text. Such a ruling would amount to judicial activism because it would stray far into the realm of the prerogative a state enjoys to interpret and adjudicate its own public trust doctrine, a prerogative recognized by Justice Scalia himself and one safeguarded through the *Lucas* 'background principles' proviso.

208. See *supra* Sections II.C.1 & 2.

hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.”²⁰⁹ Rather, it was designed to ensure that duly enabled governmental action is exercised fairly.²¹⁰ The American system clearly incorporates *a priori* reasonable expectations that owning private property means something. There exists in the American ethos a reasonable expectation that one should be able to possess, reasonably use, and reasonably exclude others from one’s property, and that at least one important function of American government is to safeguard such expectations. Even so, the American government and the law that enlivens it was established to form a “more perfect union” first, doing so with appropriate respect for the impacts on individual private property rights as an important but still secondary concern, not vice versa.²¹¹

Constitutional protections do not absolutely prevent government from taking life, liberty, or property, or imposing an economic burden on a property owner for the larger good, but those protections do demand that a government be able to justify that its actions are not wholly unreasonable or patently unfair.²¹² These protections allow courts to compel a legislature or executive to stop only when it cannot make out such a showing.²¹³ From that perspective, fairness through due process protections comes from demanding that government show that it is acting reasonably when it regulates private property, while deferring to the legislature or executive in its assessment of what that requires except for extraordinary evidence otherwise. Fairness through regulatory takings protections similarly comes from demanding that the government not place too heavy a burden on an individual property owner, while again deferring to the government in its assessment of what that requires except for extraordinary evidence otherwise.²¹⁴

Given this review of the police power prerogative, public trust doctrine, and private property doctrine separately, the question is how those doctrines interact along a coastal shore.

209. Pa. Coal Co. v. Mahon, 260 U.S. 393, 413 (1922).

210. See *supra* Sections II.C.1 & 2.

211. It bears repeating that rather than setting out to secure the blessings of private property ownership, the drafters of the U.S. Constitution set out to establish a national government that would tie together the several states “in order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity. . . .” U.S. CONST. pmbl.

212. See *supra* Sections II.C.1 & 2.

213. See GLENDON, *supra* note 30, at 25-32; see also *supra* notes 190-92 and accompanying text.

214. *Supra* note 213.

III. RECONCILING POLICE POWER PREROGATIVES, PUBLIC TRUST INTERESTS, AND PRIVATE PROPERTY RIGHTS ALONG COASTAL SHORELANDS

A. *Police Power and Public Trust Compared and Contrasted*

Both the police power prerogative and the public trust doctrine stem from the inherent sovereignty of a state and each traces its historical pedigree back to ancient Roman law and English common law.²¹⁵ Both doctrines, however, are uniquely American. These doctrines were first articulated as the ‘police power’ and ‘public trust,’ respectively, through American federal and state cases decided very early in the country’s history.²¹⁶ Both exist today as an amalgam of the common, statutory, regulatory, and case law of a particular state. Both essentially consolidate the ancient powers of the English king and the parliament into the state legislature, enable the legislature to act on behalf of the indivisible or larger communal interests of its people, and protect the interests of private individuals.²¹⁷ Finally, federal and state courts alike have consistently found that both doctrines reflect authorities that are so vital and inherent to the well-being of the state and the necessary prerogatives of the legislature that some essential core elements cannot be abrogated.²¹⁸

Beyond those similarities, the full implication of what it means for courts to ensure that legislatures not shirk institutional duties has evolved in unique ways between the two doctrines. While the courts have long recognized the existence of the police power prerogative and asserted repeatedly that it cannot be abrogated, courts have not imposed judicially an affirmative duty on the state to exercise that power to achieve particular policy goals; largely leaving the decision on where and how to exercise the power to the legislative and executive branches instead.²¹⁹ Courts’ assessment of whether the state is in danger of having abrogated its police power duties have focused on instances when a legislature or executive has purported to exercise that power, whether it has done so in a way that unduly ceded or undermined the public welfare to private interests.²²⁰

In a land use context, particularly with regard to local planning and land use regulation, evidence of these judicial concerns is well illustrated by the early judicial doctrines of “contract zoning” and “spot zoning” and the diminished importance of those doctrines over time. Both contract and spot zoning, announced

215. See *supra* Sections II.A.1, II.B.1 & 2.

216. See *supra* Sections II.A.1 & II.B.2.

217. See *supra* Sections II.A & B.

218. *Id.*

219. See Section II.A.

220. See, e.g., debate over the meaning of *Illinois Central*, *supra* notes 118, 143-55 and accompanying text.

early in the historical adjudication of zoning disputes, represented instances where courts concluded that a local government had unlawfully negotiated away its police power responsibilities, or unlawfully exercised its zoning authority, to the clear advantage of the private property owner and clear detriment of the larger public interest.²²¹ Over time, courts have become much less likely to invoke those doctrines, especially contract zoning.²²² Rather, courts have become more tolerant of negotiated actions such as “conditional rezonings,” recognizing the complex and reciprocal needs to be addressed and benefits to be had as the pace and timing of new land development imposes extraordinary new costs on local government for infrastructure and service delivery.²²³ That is, judicial constitutional doctrine has evolved over time as conditions and expectations have changed.

At the same time, the courts also announced early in the history of zoning that local regulation of private property through zoning was such a portentous power with regard to private property rights that it necessitated clear and specific delegations of authority by the state—not just reliance on broad delegations of police power authorities alone.²²⁴ That added level of protection by judicial decree has not since changed. As a result, all of the states have granted broad authorities to local units of government to engage in planning and zoning actions extensively, substantially if not entirely consistent with the powers those local governments would have enjoyed through their police power delegations alone but for that earlier judicial action.²²⁵

Thus, while local regulation of coastal shorelands particularly through zoning must be specifically delegated, including in Great Lakes states like Michigan, such delegations have generally been made. Moreover, localities are generally not required by either legislative action or judicial decree to use police powers (or zoning

221. See JUERGENSMEYER & ROBERTS, *supra* note 59, at 139-41. Consistent with the theme that doctrines like these evolve over time in light of changing conditions and expectations, courts are much less likely to find instances of spot zoning or contract zoning today as localities work to implement programs like growth management and struggle to cover the fiscal costs of rapid development. *Id.*

222. See *id.* at 141-46 (discussing contract and conditional zoning in general).

223. See *id.* at 143; see also FISHER ET AL., *supra* note 179, at 128-33 (discussing conditional rezoning and contract zoning under Michigan law).

224. See, e.g., *Clements v. McCabe*, 210 Mich. 207, 177 N.W. 722 (1920), *supra* note 64 (striking down a Detroit zoning ordinance for not having been duly enabled by the state).

225. See JUERGENSMEYER & ROBERTS, *supra* note 59, at 40-48 (discussing history of zoning and sources of authority for it in the U.S.). The universal adoption of zoning and then planning enabling laws was facilitated greatly by the U.S. Supreme Court's decision that local zoning regulations were not, on their face, violative of constitutional protections of private property rights in *Euclid*, and by the U.S. Bureau of Commerce's publication of model enabling laws, the State Standard Zoning Enabling Act in 1926 and the Standard City Planning Enabling Act in 1928. See *id.* at 42-45. It is worth noting that this decision and these publications were not responding to state judicial decrees regarding zoning authorities alone. Rather, they were also arguably a result of entrenched racial discrimination playing itself out through state and local land use regulation. See generally ROTHSTEIN, *supra* note 75, at 39-57.

authorities) to address areas like coastal shorelands for whatever purpose.²²⁶ When localities do, however, the courts generally approach those actions deferentially, asking not whether the state or locality's authorities overextended but whether those authorities were exercised unfairly.²²⁷

In contrast, referring to common law and constitutional and statutory provisions, courts have imposed a duty on state governments through the public trust doctrine to ensure that the public interest is secured in its seas and shorelands, including the inland seas and shorelands of the Great Lakes.²²⁸ This is not a duty to hold fee title interests in all submerged lands and shorelands into perpetuity, but rather a duty to ensure that public trust interests in common access and use are safeguarded, regardless of the title ownership of the underlying property.

The notion of a public interest in coastal shorelands, and a corresponding irrevocable duty on the part of the state²²⁹ to safeguard that public trust interest, comes from an array of sources and justifications. As detailed above, while it is often traced to principles of ancient Roman law and English common law, that historical pedigree serves more to highlight the fact that coastal resources have always been viewed as unique and distinctly special compared to upland property, rather than to establish unassailable legal precedent.²³⁰ In the American context, there has been the recognition of the indivisibility of the shorelands commons and the resources provided to—and in a sense the communal interests owned by—the unorganized public.²³¹

In a more theoretical way, the public trust duty is based on longstanding custom and expectations, along with a general sense of the need for fairness in the allocation of public and private interests at the shore. In a more practical way, it serves to prevent the legislature from undermining its duty to represent and regulate on behalf of the general public by doing things like improvidently selling off submerged lands and coastal shorelands for short-term economic gain.²³² To that extent, and given the special status of coastal shorelands historically, the existence of some affirmative duty imposed upon the state to safeguard its public trust interests, in contrast to the lack of such an affirmative duty to exercise the police power, makes sense.

Finally, all of the states have uniformly delegated the authority to regulate privately owned lands—including privately owned coastal shorelands—to their lo-

226. See Appendix A.

227. See *supra* Section II.C.2.

228. See, e.g., *Glass v. Goeckel*, 703 N.W.2d 58, 65 (Mich. 2005).

229. Specifically, state legislatures enjoying the consolidated powers of parliament and the king and acting as the sovereign on behalf of the people. See, e.g., *Trs. of Dartmouth Coll. v. Woodward*, 17 U.S. 518, 559–60, 4 L. Ed. 629 (1819).

230. See *supra* Section II.B.

231. See *Rose, supra* note 106.

232. *Supra* note 118 and accompanying text.

cal units of government,²³³ and those authorities are remarkably similar across the states for historical reasons.²³⁴ Coastal states, however, have not similarly delegated either the duty to protect *jus publicum* interests in coastal shorelands through land use regulation or other means, or the authority to do so, to their local units of government under the public trust doctrine.²³⁵ At least, such delegations appear to be much narrower and perhaps based as much or more on police power prerogatives as on public trust doctrines.²³⁶

B. *Police Power and Public Trust Checked and Critiqued*

Checking the potential abuse of governmental actions when managing its public trust waters and lands, the private property doctrine serves to ensure that when a state invokes its public trust doctrine to protect common access to coastal shorelands, or its police power authority to prevent the loss of vital habitat, it does so in a way that is, at least arguably, reasonable and fair.²³⁷ Under American law given the separation of powers doctrine, courts do not impose judicial preferences in deciding what policy or regulation would be the most reasonable or effective, or what would be the best way to balance fairness as between a property owner and the community; courts only act to check a governmental action when it is clear that those regulations are wholly unreasonable or unfair.²³⁸ Thus, when governments have good evidence that regulations or policies are legitimate and reasonably related to the problems governments are trying to solve or forestall, and that those policies comport with long-established and reasonable expectations on how to balance private and public interests at the coastal shore, those actions will generally be upheld by the courts.²³⁹

Contemporary critics of the public trust doctrine go to great lengths first to attack the historical pedigree and internal logic and coherence of that doctrine, especially when setting out to defend an absolutist version of private property rights

233. See *supra* Section II.A.

234. *Id.*

235. See SLADE ET AL., *supra* note 86, at 235-36.

236. The State of Michigan's High Risk Erosion program, for example, does allow local units of government to adopt local regulations that effectively implement the state program. Unlike zoning authorities and police power delegations more generally in most states, however, these provisions are more prescriptive, and the zoning ordinances adopted must be approved by the state. MICH. ADMIN. CODE r. 281.21-281.26 (2018). In contrast, the State of North Carolina, as another example, authorizes local zoning and it mandates coastal area planning by its Atlantic coastal counties under its Coastal Area Management Act (CAMA), but those authorizations and mandates are grounded in police power prerogatives and federal Coastal Zone Management Program provisions rather than the State of North Carolina's public trust doctrine. For a history of CAMA, see David W. Owens, *Coastal Management in North Carolina: Building a Regional Consensus*, 51 J. AM. PLAN. ASS'N. 322 (1985).

237. See *supra* Section II.C.

238. See *supra* Section II.C.

239. See JUERGENSMEYER & ROBERTS, *supra* note 59, at 43.

that would deny any public interest in the shore (*i.e.*, except for any foreshore that is already in public ownership in fee).²⁴⁰ Critics do so, however, without extending the same critical analysis of historical pedigree and internal logic and coherence to American notions of private property rights.²⁴¹ Moreover, these critics tend to adopt a particular historical version of private property rights' origins and its meaning that is far from universally accepted or uncontestable.²⁴² To that extent, the analyses are incomplete, and the conclusions warrant tempering.

Similarly, commentators critical of the police power and especially the public trust doctrine also often assert the need to ensure that a regulation of privately-owned land is 'constitutional',²⁴³ not whether it comports with police power or public trust imperatives. That assertion, however, suggests that the constitution in its entirety was adopted to make sure only that the courts act to secure individual interests in private property first, and then to enable legislative and administrative government for the benefit of the larger society second, and presumably only through the aggregation of individual benefits.²⁴⁴ These critics especially take this stand to argue that judicial action to effect the public trust doctrine represents judicial activism, outside the boundaries of the American scheme.²⁴⁵ In doing so, however, these critics subtly argue that only aggressive judicial review (if not 'activism') that safeguards private property rights in the form of constitutional adjudication is acceptable, while parallel aggressive review to ensure safeguards of public welfare and interests is not. That proposition, again, is certainly neither universal nor uncontestable.

Finally, MacGrady, Deveney, and others provide extensive reviews of ancient Roman law and English common law to argue that later English and American common law courts, as well as contemporary commenters, have misconstrued what ancient Romans and Anglo-Saxon Normans actually thought of their coastal shorelines, and that indeed neither the ancient Romans nor the medieval English recognized anything but the rule of capture (or attempts of expropriation by the king) at the shore.²⁴⁶ In addition to being contestable in terms of historical scholarship, what those analyses ultimately and better show is that the law has continually struggled to reconcile the interests of the community with the interests of private property owners at the coastal shore, a struggle that has extended from the earliest recordings from ancient Greece all the way through today.

In sum, to assert that the public trust doctrine is not a valid American common law because the ancient Greeks and Romans would not have universally rec-

240. See *supra* Sections II.B & C.

241. See *supra* Sections II.B & C.

242. See *supra* Sections II.B & C.

243. See, e.g., MacGrady, *supra* note 95, at 587; Deveney, *supra* note 95; Huffman, *supra* note 89.

244. See, e.g., EPSTEIN, *supra* note 71; SIEGAN, *supra* note 85, at 13.

245. See, e.g., Huffman, *supra* note 89; Paganelli, *supra* note 89.

246. See *supra* Section II.A.

ognized it as such raises the questions of how far back one must go, and how much clear consensus one must demonstrate, to assert that there is a coherent doctrine that ought to be respected. The common law helps establish reasonable expectations on what the law is and what it will likely be tomorrow. At the same time, the ability of the courts to overrule precedent when there are compelling reasons to do so has simultaneously allowed the common law to evolve over time in light of the evolving needs and expectations of society, much like legislators can amend statutes in response to changing conditions or constituent demands. There is something disingenuous in the arguments of strong private property advocates demanding that “ancient” common law should be jealously safeguarded by the courts when it speaks to notions of private property rights, but that “ancient” common law similarly formed should not be safeguarded when it speaks to notions of public trust interests in the seas and their shores.

C. *Institutional Roles and Doctrinal Prognosis*

In defining the appropriate roles of courts and legislatures, it is important to remember that neither the police power prerogative nor the public trust doctrine put public policy decision-making entirely into the courts’ hands. Rather, like the private property doctrine, which compels the courts to take a hard look when legislation or regulations might be unduly abusing the rights of private property ownership, the public trust doctrine requires courts to take a hard look when legislative or regulatory actions may be undermining the public trust’s long-established interests in communal access to coastal shorelands.²⁴⁷

In the end, whether based on strictly complete or correct interpretations of ancient Greek and Roman law, or the ancient common law of England stemming from the treatises of Bracton, Hale, and other jurists from the twelfth through sixteenth centuries, both federal and state courts recognized early on a robust public trust doctrine in coastal settings that has extended through today.²⁴⁸ While the particulars of the doctrine as applied by evolving judicial doctrine have and will likely continue to evolve over time for a given state, it is hard to see any coastal state completely jettisoning the doctrine altogether—at least not based on the reasoning that the historical and logical justifications of that doctrine are unsound given the pedigree of that history. It would seem more likely that any judicial modification of the doctrine will be at its edges and will emanate from the particulars of the coastal dynamics and doctrinal history that are apt for the specific dispute at hand.

247. See *supra* Sections II.B & C.

248. MacGrady’s critique of the concept of navigability as derived from ancient Roman law acknowledges nonetheless that by the late 1800s “the prima facie rule [*i.e.*, the public trust doctrine] had already become settled doctrine in England, and, in America, state ownership of the foreshore had been established beyond question by the U.S. Supreme Court’s 1842 decision in *Martin v. Waddell*.” MacGrady *supra* note 95, at 552 (footnotes and citations omitted).

IV. THE PUBLIC TRUST DOCTRINES OF THE GREAT LAKES STATES

A. Overview

As is typical among ocean coastal states that have adopted the public trust doctrine, the Great Lakes states vary in their adoption and adaptation of its principle features.²⁴⁹ While all eight states observe the convention that the lakebed is held by the state in trust for the people of that state, the states diverge especially in the identification of lakeward and landward boundaries, as well as on the questions of whether those boundaries are coterminous or overlapping and what that means in terms of balancing public and private interests. We describe here, and summarize in Table 1 below, selected key elements of the public trust doctrines of the Great Lakes states today. More detailed explication of those doctrines is provided in Appendix A. It is important to note that, for several of the states, these key attributes are based on old cases that address questions not quite on point in terms of modern framing, making definitive statements on current law in those states imprudent.

In terms of boundaries, Minnesota and Pennsylvania observe the lakeward boundary of the *jus privatum* to be the low water mark,²⁵⁰ while Michigan and Ohio observe it to be essentially at the water's edge or natural shoreline²⁵¹ and Illinois appears to place it at the water's edge as well.²⁵² Indiana is the only Great Lakes state to clearly establish the high water mark (or ordinary high water mark) as the lakeward boundary of the *jus privatum*;²⁵³ New York and Wisconsin appear to do so by case law as well, but those cases are not precise on that question.²⁵⁴ In addition, the Wisconsin Department of Natural Resources has published guidance indicating that it interprets the state's public trust doctrine such that riparian owners have

249. The Great Lakes states have generally relied on the same recitations of ancient Roman law, English common law, and American federal and state common law discussed above, *supra* Section 11.B.1, as the sources of authority for their particular public trust doctrines. *See, e.g.*, *Glass v. Goeckel*, 703 N.W.2d 58, 62 (Mich. 2005). In addition, the Great Lakes that joined the union after its founding (*i.e.*, all but New York and Pennsylvania) enjoy additional authority historically through the Northwest Ordinance of 1787. *See* MODERN WATER LAW, *supra* note 86, at 343-44.

250. *State ex rel. Head v. Slotness*, 185 N.W.2d 530, 532 (Minn. 1971); *Wood v. Appal*, 63 Pa. 210, 221 (1869).

251. *Glass*, 703 N.W.2d at 69; *State ex rel. Squire v. City of Cleveland*, 82 N.E.2d 709, 725 (Ohio 1948).

252. *Seaman v. Smith*, 24 Ill. 521, 525 (1860).

253. *Gunderson v. State*, 90 N.E.3d 1171, 1187 (Ind. 2018). *Gunderson* filed with the U.S. Supreme Court a petition for a writ of certiorari to the Supreme Court of Indiana on October 5, 2018; *see also* IND. CODE ANN. §§ 14-26-2 (West 1998).

254. *See People ex rel. Burnham v. Jones*, 112 N.Y. 597, 605 (1889); *see Diana Shooting Club v. Hustung*, 145 N.W. 816, 820 (Wis. 1914).

exclusive control over shorelands below the ordinary high water mark (*i.e.*, even if case law suggests that the *jus privatum* ends at that mark).²⁵⁵

From the other direction, the landward boundary of the *jus publicum* appears to be similarly varied among the states, although in practical application most are substantially the same. Minnesota, Wisconsin, and Pennsylvania appear to observe the landward boundary of the *jus publicum* to be the high water mark,²⁵⁶ New York appears to situate it at the mean high water mark,²⁵⁷ Indiana and Michigan both clearly place it at the *ordinary* high water mark,²⁵⁸ and Illinois appears to place it at the ordinary high water mark.²⁵⁹ In other words, despite variation in the use of specific terms and marks, all seven of these states place the landward reach of the public interest at some point up the shore touched by high water. Only Ohio uses the water's edge as the boundary.²⁶⁰

All of the states using high water or ordinary high water as a boundary for the *jus publicum* appear to employ a natural ordinary high water mark, defined in one way or another as the point along the shore showing evidence of the presence of water in the past sufficient to scour away long-lived vegetation.²⁶¹ Both Michigan and Indiana have adopted elevation-based standards as well (*i.e.*, defined as the point along the shore corresponding to a specified elevation above sea level), but both limit the applicability of that standard to use by administrative agencies for establishing the reach of regulatory authority, not for marking the reach of traditional public uses like navigation, traversing, or fishing by the general public.²⁶²

Equally important to establishing boundaries *per se* is clarifying the relationships and interaction between the *jus privatum* and *jus publicum* interests given those boundaries. Based on the analysis noted above, Wisconsin, Indiana, Ohio, and New York appear to avoid overlapping private and public rights by selecting a single boundary line, with Ohio placing it essentially at the standing water's edge and the rest at a high water mark. Ohio state caselaw thus suggests that the public has no public trust right to access the beach above the water's edge on Ohio's Lake

255. See WIS. DEP'T OF NAT. RES., PUBL-WZ004 08REV, ORDINARY HIGH WATER.

256. State v. Korrer, 148 N.W. 617, 623 (Minn. 1914); *Diana Shooting Club*, 145 N.W. at 820; Wood v. Appal, 63 Pa. 210, 221 (1869).

257. *Burnham*, 112 N.Y. at 606.

258. IND. CODE ANN. §§ 14-26-2 (West 1998); *Gunderson*, 90 N.E.3d at 1173; *Glass v. Goeckel*, 703 N.W.2d 58, 62 (Mich. 2005).

259. 615 ILL. COMP. STAT. 5/24 (2004); *Cobb v. Comm'rs of Lincoln Park*, 67 N.E. 5, 6 (Ill. 1903).

260. State *ex rel.* Squire v. City of Cleveland, 82 N.E.2d 709, 725 (Ohio 1948); State *ex rel.* Merrill v. Ohio Dep't of Nat. Res., 130 Ohio St. 3d 30, 35 (2011). More precisely, *Merrill* set the boundary of the *jus publicum* on Lake Erie at the line at which the water usually stands when free from disturbing causes, although the court did not provide any additional guidance on what that standard means or how it might be discerned in application on the shore. *Id.* at 40.

261. See, *e.g.*, *Glass*, 703 N.W.2d at 73.

262. See, *e.g.*, *Burleson v. Dep't of Env'tl. Quality*, 292 Mich. App. 544, 547-52 (2011).

Erie shoreline. In contrast, the Indiana Supreme Court recently held that the single boundary separating public from private ownership is at the natural ordinary high water mark, and that the state owns its Great Lakes public trust beaches in fee—making its public trust doctrine the most expansive doctrine of the Great Lakes states in terms of public ownership.²⁶³

In contrast, Minnesota, Illinois, Michigan and Pennsylvania appear to have overlapping rights, observing the rights of a riparian owner to low water or the water's edge but enforcing the *jus publicum* to the ordinary high water mark. For example, Michigan case law expressly states that even if a private owner's title extends into the water, the public's rights of navigation on the Great Lakes include the right to walk on the lakeside of the ordinary high-water mark.²⁶⁴ For Minnesota, in comparison, the relationship is not so clear. Riparian owners hold title to the low water mark; however, that title is absolute only to the high water mark.²⁶⁵ Even so, owners may deny access to and from the water adjacent to their property interest, and have the right to wharf out to the point of navigability.²⁶⁶ At the same time, owners take title to the land subject to an easement to the state to fulfill its duty to protect public use (*e.g.*, for commercial navigation and recreational activity).²⁶⁷

Finally, note again that Wisconsin state case law indicates that the *jus publicum* reaches landward to the ordinary high water mark and that the *jus privatum* and *jus publicum* boundaries do not overlap, suggesting that at the very least the public should have access to exposed shorelands below the ordinary high water mark.²⁶⁸ The Wisconsin DNR, however, appears to interpret the Wisconsin public trust doctrine to give exclusive control of exposed shoreland below the ordinary high water mark to the riparian owner (*i.e.*, no public access allowed on privately owned shoreland, as in Ohio).²⁶⁹

Regarding the ability of a state to alienate public trust shoreland, all of the Great Lakes states' public trust doctrines provide for the filling or construction into navigable waters by permit,²⁷⁰ consistent with Deveney's argument that the Romans tolerated private ownership of submerged lands and foreshores.²⁷¹ Even

263. *Gunderson v. State*, 90 N.E.3d 1171 (Ind. 2018). The plaintiff in this case recently filed a petition for certiorari with the U.S. Supreme Court, which is under review at the time of this writing. *See supra* note 253.

264. *Glass v. Goeckel*, 703 N.W.2d 58, 72 (Mich. 2005).

265. *State ex rel. Head v. Slotness*, 185 N.W.2d 530, 532 (Minn. 1971).

266. *Id.*

267. *Id.*

268. *See supra* notes 254 & 256.

269. *See WIS. DEP'T NAT. RES.*, *supra* note 255.

270. *See, e.g.*, 615 ILL. COMP. STAT. 5/18 (2004); MICH. COMP. LAWS ANN. §§ 324.32502 (West 2018); OHIO REV. CODE ANN. § 1506.10 (LexisNexis 2001); *Muench v. Pub. Serv. Comm'n*, 261 Wis. 492 (1952); *Movrich v. Lobermeier*, 372 Wis. 2d 734, 734-35 (2016).

271. *See supra* Section II.B.4.

so, all appear to qualify the conditions under which that may be done. For example, permits may be subject to demonstration by the proponent that the actions “will not substantially affect public use of the lands for hunting, fishing, swimming, pleasure boating, or navigation or that the public trust in the state will not be impaired by those agreements for use, sales, lease, or other disposition.”²⁷² This allowance may include the opportunity to acquire title by filling. Alternatively, in Indiana a riparian owner may not fill in real property or construct a dock or wharf beyond the dock or harbor line, defined by the United States.²⁷³ However, a riparian landowner may acquire title to submerged land between the shore and dock or harbor line, and thereafter fill and patent that land, under state permit.²⁷⁴ In Michigan, state statute allows for the sale, lease, or other disposition of unpatented bottomlands, including filling submerged lands, but in all instances the proponent must demonstrate that these actions “will not substantially affect public use of the lands for hunting, fishing, swimming, pleasure boating, or navigation or that the public trust in the state will not be impaired by those agreements for use, sales, lease, or other disposition.”²⁷⁵

Finally, beyond the questions of ownership interests and public access, Wisconsin appears to be the most ambitious of the eight Great Lakes states in terms of establishing a state duty to protect public trust shorelands. It has an expansively defined duty to preserve public trust lands and waters, not limited to its duty to ensure navigability; to protect natural resources and the environment; and to preserve scenic beauty.²⁷⁶ Case law has further held the state’s public trust duties to include eradication and prevention of pollution.²⁷⁷

TABLE 1. SELECTED ATTRIBUTES OF THE PUBLIC TRUST DOCTRINES OF THE GREAT LAKES STATES.

State	First cited (source)	Codified by statute?	Lakebed title held by state?	Lakebed alienable by the state?	Lakeward boundary of <i>jus privatum</i>	Landward boundary of <i>jus publicum</i>	Overlapping?
MN	1914 (case)	Yes	Yes	Yes	LWM	HWM	Yes
WI	1914 (case)	Yes	Yes	Yes	HWM	HWM	No
IL	1860 (case)	Yes	Yes	Yes	Water’s edge	OHWM	Yes

272. MICH. COMP. LAWS ANN. § 324.32502 (West 2018).
 273. IND. CODE ANN. § 14-18-6-3 (West 1998).
 274. IND. CODE ANN. §§ 14-18-6-4 to -6 (West 1998).
 275. MICH. COMP. LAWS ANN. § 324.32502 (West 2018).
 276. *Just v. Marinette Cty.*, 201 N.W.2d 761, 768 (Wis. 1972); see *Muench v. Pub. Serv. Comm’n*, 261 Wis. 492 (1952).
 277. See *Wisconsin’s Env’tl. Decade, Inc. v. Dep’t of Nat. Res.*, 271 N.W.2d 69, 72-73 (Wis. 1978).

IN	1918 (case)	Yes	Yes	Yes	OHWM	OHWM	No
MI	1843 (case)	Yes	Yes	Yes	Water's edge	OHWM	Yes
OH	1878 (case)	Yes	Yes	Yes	Water's edge	Water's edge	No
PA	1885 (case)	No	Yes	Yes*	LWM	HWM	Yes
NY	1894 (case)	Yes	Yes	Yes	Mean HWM	Mean HWM	No

OHWM = ordinary high water mark; HWM = high water mark; LWM = low water mark.

* A Pennsylvania court has held that the Commonwealth does not lose title to filled land (*Delaware Ave., LLC v. Dept. of Cons.*, 997 A.2d 1231 (2010)).

B. *Conclusions and Questions Remaining*

This Article has examined the historical pedigree, logic, and evolution of each of three common law doctrines as they have come together and interacted along the shores of the Laurentian Great Lakes—the police power, public trust, and private property rights doctrines. A principal motivation for this work is that proponents of the public trust doctrine in particular often cite back to ancient Roman and English common law as its source. Detractors, in turn, increasingly question the historical pedigree and logic of that doctrine more generally and, to a lesser extent, the applicability of it to Great Lakes shores. Few of those same detractors, however, similarly question the pedigree, logic, or evolution of either the police power or private property rights doctrines. Review of all three separately in terms of each doctrine's origins and evolution, and juxtaposition in terms of interactions with and implications for the others, provides some insights into the challenges of discerning the original understandings and the evolving application of common law doctrines in real-world settings generally, as well as the difficulties that courts and legislatures have encountered in reconciling those doctrines along Great Lakes shorelines more particularly.

In broad terms, review of the judicial and scholarly treatment of each of these doctrines underscores our initial observation that contemporary conclusions about the original meanings and historical pedigree of a common law doctrine—especially doctrinaire statements—should be asserted with some care. Hard and fast assertions run the risk of being over-simplified, taken out of context, or otherwise misconstrued. Our review also underscores the risk of selectively critiquing a doctrine that can only be understood fully in the context of competing doctrines without similarly critiquing those other doctrines as well; that is, for risk of raising purportedly fatal flaws of the one doctrine that could equally be leveled at the others.

Critics of the public trust doctrine as it has been applied in the American context have ably demonstrated that strong assertions about the meaning of that doc-

trine based specifically on its historical pedigree and logic—that it places title ownership of submerged lands and foreshores in the state and that that ownership is inalienable—clearly go too far.²⁷⁸ At the same time, that same scholarship also clearly demonstrates that there has always been something special about the shore, that the waters, submerged lands, and foreshores of the oceans and inland seas are commons resources that always have been available for some limited public use, even if some underlying title interests of those resources are privatized.²⁷⁹ Similarly, selective critique of the public trust doctrine alone, especially on historical grounds, without consideration of the historical origins of police power authorities or private property rights in parallel, leads to conclusions that undermine the soundness of the latter—especially private property rights—upon fuller analysis.²⁸⁰ That is, while reference to public interests along coastal shorelines clearly do exist back to sixth century Roman times, notions of private property interests—at least as understood in the American context today—are indeed more recent, reaching back primarily to the seventeenth century writings of John Locke.²⁸¹

Careful review suggests that all three doctrines trace their roots to English common law and even ancient Roman law, but are all in fact distinctly American doctrines, first fully articulated and then developed over time in the context of unique American institutions, values, and conflicts. Each is equally robust, and each is as aptly applied to American coasts as the other. Conversely, if indeed the public trust doctrine is susceptible to critique for its historical pedigree, then doctrinal notions of the police power and private property rights as juxtaposed to it are equally so. Moreover, despite case law and commentary rhetoric that can be dogmatically extreme, efforts to understand and reconcile these doctrines in practice generally strike a pragmatic balance, recognizing simultaneously the private rights inherent in shoreland property ownership along with the public interest in common access to and use of submerged lands and the foreshore, within reason.

In addition, careful review demonstrates that the public trust doctrine has been long applied by all of the Great Lakes states to their Great Lakes shorelands through common law doctrine, and all but one (Pennsylvania) have codified at least portions of that doctrine through statute, for at least a century if not longer.²⁸² Application of that doctrine makes sense because, while the lakes are not tidal as are the oceans, the standing water levels of the lakes fluctuate substantially over time nonetheless.²⁸³ Because of those fluctuations, there are periods of low water and especially periods of high water along those shores, such that some portion of

278. *Supra* Section II.B.

279. *Supra* Section II.B.

280. *Supra* Sections II.B & C.

281. *Supra* Section II.C.

282. *See supra* Section IV.A.

283. *See* Norton et al., *supra* note 19, for more detailed explication of Great Lakes shoreline dynamics and application of the concept of an 'ordinary high water mark' in that context.

Great Lakes shoreland is regularly scoured by the forces of water in a way that makes use of it for cultivation or building imprudent—a sometimes inconvenient brute fact of Nature that cannot be simply dismissed through application of legal fiction. Even so, because periods between low and high water can be drawn out across decades, application of the doctrine to the Great Lakes has proven to be less than straightforward. This has been especially complicated in terms of discerning where and what an ordinary high water mark means on a Great Lakes shore and what the relationship between public trust interests and private property rights should be lakeward of it. That fact of Nature has also led to some variation in doctrinal application across the states.

As detailed above, all eight Great Lakes states assert fee title ownership of their submerged Great Lakes bottomlands.²⁸⁴ All recognize expressly or impliedly the concept of a ‘moveable freehold’ (whether using that term or some other), such that transitions of public to private shoreland or vice-versa occur through the natural dynamics of Great Lakes coastal processes.²⁸⁵ All similarly recognize a public trust interest in their submerged lands, while all but one (Ohio) appear to recognize if not expressly declare that that public trust interest extends landward up onto the foreshore to some mark of high water, and indeed that fee title ownership may extend that far as well (as recently held by the Supreme Court of Indiana).²⁸⁶ All recognize that the scope of those public trust interests includes traditional uses such as navigation and fishing,²⁸⁷ although the precise contours of those uses appear to vary across the states, or have at least not been fully circumscribed. Finally, all also allow for the alienation of public trust submerged lands and foreshore into private ownership, but all appear to continue to impress a duty to safeguard public trust interests on that transaction itself, if not one that survives after.²⁸⁸

Given all those similarities, there are still uncertainties that warrant further analysis. These uncertainties include a number of questions left unresolved by law, such as what use rights exactly are retained under the public trust doctrine and to what extent private shoreland owners might act to ameliorate conflicts. Similarly, what ability does local government have to exercise public trust duties to protect public trust interests or reconcile public and private conflicts? Or, what exactly is the relationship between legislative and judicial authorities in amending a state’s public trust doctrine over time? There are also a number of questions that arise from the interaction between law and Nature—especially relevant in Great Lakes coastal settings. Most compellingly, what public trust duties and private property rights are implicated as shorelands change artificially because of the construction of shoreline armoring or other structures? Similarly, do traditional notions of accre-

284. See SLADE ET AL., *supra* note 86; *supra* Section IV.A.

285. *Supra* Section IV.A.

286. *Supra* Section IV.A.

287. *Supra* Section IV.A.

288. *Supra* Section IV.A.

tion, reliction, erosion, and avulsion continue to be viable on a Great Lakes shore? And, what is the potential for a state and/or local government to be held liable when it permits imprudent shoreland development, given increased knowledge of how imprudent such development can be? All of these questions are best addressed in the context of a single state's particular doctrine, and all represent questions for further study.

APPENDIX A: OVERVIEW OF THE PUBLIC TRUST DOCTRINES OF THE GREAT LAKES STATES

State	Summary of Law
Illinois	<p>In Illinois, title to the bed of Lake Michigan is held in trust for the people of that State. 615 Ill. Comp. Stat. 5/24 (2004). The boundary line of land adjoining Lake Michigan is defined as “the line at which the water usually stands when free from disturbing causes.” <i>Seaman v. Smith</i>, 24 Ill. 521, 525 (1860). However, the Illinois Supreme Court has also held that:</p> <p style="padding-left: 40px;">In England . . . it has been treated as settled that the title in the soil of the sea or arms of the sea, below ordinary high-water mark, is in the sovereign, except so far as an individual or a corporation has acquired rights in it by express grant or by prescription or usage, and that this title, <i>ius privatum</i>, whether in the sovereign or in the subject, is held subject to the public right, <i>ius publicum</i>, of navigation and fishing . . . This is the doctrine of this State as applied to lands under the navigable waters of Lake Michigan . . .</p> <p><i>Cobb v. Comm’rs of Lincoln Park</i>, 67 N.E. 5 (Ill. 1903) (citations omitted). These cases suggest that private title extends to the water and that public trust interests in navigation and fishing extend to the ordinary high water mark such that they can overlap, but this question appears to not have been litigated directly on point.</p> <p>Under the common law doctrine of public trust, a riparian landowner may gain title to land added by “gradual and imperceptible” accretion. <i>See, e.g., Schulte v. Warren</i>, 75 N.E. 783, 784-85 (Ill. 1905). Similarly, if the water were to gradually and imperceptibly encroach upon riparian land, the owner would lose title to that land. <i>Id.</i> However, “where there is a sudden or marked change in the shore line and the lands of the adjoining owner are flooded or the course of a stream changed, the adjoining owner is not thereby divested of his title.” <i>Id.</i> While the general rule is that a landowner may not gain title to naturally accreted land by virtue of artificial structures, if he receives that benefit from actions undertaken by others, he gains title. <i>Brundage v. Knox</i>, 117 N.E. 123 (Ill. 1917).</p> <p>It is unlawful to erect any structure or fill, deposit any matter, or build wharves or piers in the navigable waters of Lake Michigan without acquiring a State permit. 615 Ill. Comp. Stat. 5/18 (2004). In <i>Du Pont v. Miller</i>, 141 N.E. 423 (1923), the Court announced that, “It is made the duty of the state to secure the public easements against encroachment. . . .” <i>Id.</i> at 427.</p> <p>Navigable waters in Illinois are defined as “any public waters which are or can be made usable for water commerce.” 70 Ill. Comp. Stat. 1810/2 (West 2005). In navigable waters, including Lake Michigan, private riparian ownership is subject to public easement of navigation. <i>Du Pont v. Miller</i>, 141 N.E. 423 (1923).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • Submerged Lands Act, 5 Ill. Comp. Stat. 605/ (2004). • Illinois Port District Act, 70 Ill. Comp. Stat. 1810/ (2005). • Rivers, Lakes, and Streams Act, 615 Ill. Comp. Stat. 5/ (2004). <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>Seaman v. Smith</i>, 24 Ill. 521 (1860). • <i>Revell v. People</i>, 52 N.E. 1052 (Ill. 1898). • <i>Cobb v. Comm’rs of Lincoln Park</i>, 67 N.E. 5 (Ill. 1903). • <i>Schulte v. Warren</i>, 75 N.E. 783 (Ill. 1905). • <i>Brundage v. Knox</i>, 117 N.E. 123 (Ill. 1917). • <i>State v. New</i>, 117 N.E. 597 (Ill. 1917). • <i>Du Pont v. Miller</i>, 310 Ill. 140, 141 N.E. 423 (1923). • <i>Senko v. LaCrosse Dredging Corp.</i>, 147 N.E.2d 708 (Ill. App. Ct. 1957).

State	Summary of Law
	<ul style="list-style-type: none"> • <i>Beacham v. Lake Zurich Prop. Owners Ass'n</i>, 526 N.E.2d 154 (Ill. 1988).
Indiana	<p>The State of Indiana holds title to the bed of Lake Michigan in trust for the public. <i>Lake Sand Co. v. State ex rel. Att'y Gen.</i>, 120 N.E. 714, 715 (Ind. App. 1918). A riparian owner may not fill in real property or construct a dock or wharf beyond the dock or harbor line, defined by the United States. Ind. Code Ann. § 14-18-6-3 (West 1998). However, a riparian landowner may acquire title to submerged land between the shore and dock or harbor line, and thereafter fill and patent that land, under state permit. Ind. Code Ann. § 14-18-6-4 (West 1998).</p> <p>Rights to the shore of Lake Michigan are controlled by the common law public trust doctrine, under which the state holds title to the beds of navigable lakes and streams below the natural high-water mark for the use and benefit of the whole people. Ind. Code Ann. § 14-26-2 (West 1998). The Indiana Supreme Court, reversing in part a Court of Appeals decision, recently held that:</p> <p style="padding-left: 40px;">the boundary separating public trust land from privately-owned riparian land along the shores of Lake Michigan is the common-law ordinary high water mark and that, absent an authorized legislative conveyance, the State retains exclusive title up to that boundary. We therefore . . . reverse the [Court of Appeal's] decision that private property interests here overlap with those of the State.</p> <p><i>Gunderson v. State</i>, 90 N.E.3d 1171, 1173 (Ind. Sup. Ct. 2018). The Court further held that the common-law "natural OHWM is the legal boundary separating State-owned public trust land from privately-owned riparian land" rather than the elevation-based administrative ordinary high water mark. <i>Id.</i> at 1187 (footnotes omitted). As is typical under the public interest doctrine, riparian owners in Indiana possess the right to accretion due to natural causes. Ind. Code Ann. § 14-26-2 (West 1998). Riparian owners may apply for state permit to alter the shoreline or bed of a public lake. <i>Id.</i></p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • Ind. Code Ann. § 14-26-2 (West 1998). • Ind. Code Ann. § 14-29-1-1 (West 1998). • Ind. Code Ann. § 14-18-6 (West 1998). <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>Lake Sand Co. v. State ex rel. Att'y Gen.</i>, 120 N.E. 714 (Ind. App. 1918). • <i>State ex rel. Ind. Dep't of Conservation v. Kivett</i>, 95 N.E.2d 145 (Ind. 1950). • <i>Bath v. Courts</i>, 459 N.E.2d 72 (Ind. Ct. App. 1984). • <i>Gunderson v. State</i>, 90 N.E.3d 1171 (Ind. Sup. Ct. 2018).
Michigan	<p>In Michigan, the Great Lakes Submerged Lands Act governs ownership of the Great Lakes' submerged lands. The Great Lakes Submerged Lands Act, Mich. Comp. Laws Ann. §§ 324.32501-.32516 (West Supp. 2006). The State's public trust doctrine is defined as "the perpetual duty of the [S]tate to secure to its people the prevention of pollution, impairment or destruction of its natural resources, and the rights of navigation, fishing, hunting and use of its lands and waters for other public purposes." Mich. Admin. Code r. 322.1001(m) (1999).</p> <p>GLSLA covers all unpatented bottomlands and made lands in the Great Lakes that belong to the State or are held in trust by the State. Mich. Comp. Laws Ann. § 324.32502. It does not cover lands patented to a shoreland owner by the U.S. Government prior to when Michigan became a state, where the patent demonstrated a clear intent that the lakeward boundary of the property was fixed and not subject to natural movement. <i>Klais v. Danowski</i>, 129 N.W.2d 414 (1964). For lands not thus patented, the GLSLA allows for the sale, lease, or other disposition of the</p>

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unpatented bottomlands, including filling submerged lands. Mich. Comp. Laws Ann. §§ 324.32502. However, in all instances, the proponent must demonstrate that these actions “will not substantially affect public use of the lands for hunting, fishing, swimming, pleasure boating, or navigation or that the public trust in the state will not be impaired by those agreements for use, sales, lease, or other disposition.” *Id.* If a riparian owner wishes to dredge or place any materials on the bed of the Great Lakes, she must obtain a State permit. *Id.* GLSLA does not affect property rights secured by a swamp land grant or acquired by naturally occurring accretions. *Id.*

Michigan case law states that even if a private owner’s title extends into the water, the public’s rights of navigation on the Great Lakes include the right to walk on the lakeside of the ordinary high-water mark. *Glass v. Goeckel*, 703 N.W.2d 58 (Mich. 2005). In this case, the Michigan Supreme Court set aside GLSLA’s administrative ordinary high water mark for purposes other than regulatory administration, defining the ordinary high water mark as “the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic.” Mich. Comp. Laws Ann. §§ 324.32502; *Glass v. Goeckel*, 703 N.W.2d 58,72 (Mich. 2005). A few years later, the Court of Appeals further bifurcated *Glass*’s dual limits (GLSLA’s elevation-based administrative high water mark and the “natural” ordinary high water mark as defined in *Glass*). *Burleson v. Dep’t of Env’tl. Quality*, 292 Mich. App. 544 (Mich. Ct. App. 2011). Under *Burleson*, the Michigan Department of Environmental Quality may only regulate to the administrative boundary. *Id.* at 554.

Key Statutes

- The Great Lakes Submerged Lands Act, Mich. Comp. Laws Ann. § 324.32501-32516 (West Supp. 2006).

Key Cases

- *Lincoln v. Davis*, 19 N.W. 103 (Mich. 1884).
- *People v. Silberwood*, 67 N.W. 1087 (Mich. 1896).
- *Nedtweg v. Wallace*, 208 N.W. 51 (Mich. 1926).
- *Hilt v. Weber*, 233 N.W. 159 (Mich. 1930).
- *Klais v. Danowski*, 129 N.W.2d 414 (Mich. 1964).
- *Glass v. Goeckel*, 703 N.W.2d 58 (Mich. 2005).
- *Burleson v. Dep’t of Env’tl. Quality*, 292 Mich. App. 544 (2011).

Minnesota

Minnesota caselaw applying the public trust doctrine is relatively sparse. *Save Mille Lacs Sportsfishing, Inc.* 859 N.W. 2d 845, 851 (2015). The State holds in public trust the title to the subsurface soils up to the low-water mark of all navigable lakes, including Lake Superior. *State v. Korror*, 148 N.W. 617, 621 (Minn. 1914). This title imposes upon the State a duty to maintain those waters for navigation and other public use. *State v. Longyear Holding Co.*, 224 Minn. 451, 472–73 (1947).

Riparian owners hold the title to the low-water mark; however, their title is absolute only to the high-water mark. *State ex rel. Head v. Slotness*, 185 N.W.2d 530, 532 (Minn. 1971). They may deny access to and from the water adjacent to their property interest, and they have the right to wharf out to the point of navigability. *Id.*

As in other Great Lake states, the area between low-water mark and the high-water mark is subject to both the *jus publicum* and the *jus privatum*. *State v. Korror*, 148 N.W. 617, 621 (Minn. 1914). Riparian owners take title to the land subject to an easement to the State to fulfill their duty to protect public use (e.g., for commercial navigation and recreational activity). *State ex rel. Head v. Slotness*, 185 N.W.2d 530, 532 (Minn. 1971). However, where a riparian owner had filled and reclaimed land, the Court ruled that the State had to pay just compensation for the land when

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	<p>it wished to build a highway. State <i>ex rel.</i> Head v. Slotness, 185 N.W.2d 530 (Minn. 1971).</p> <p>The State defines the ordinary high-water mark of lakes by statute as “an elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.” Minn. Stat. Ann. § 103G.005, Subd. 14 (West 2005).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • Minn. Stat. Ann. § 103G.005, Subd. 14 (West 2005). <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • State v. Korner, 148 N.W. 617 (Minn. 1914). • State v. Longyear Holding Co., 224 Minn. 451 (1947). • State <i>ex rel.</i> Head v. Slotness, 185 N.W.2d 530 (Minn. 1971). • Save Mille Lacs Sportsfishing, Inc. 859 N.W. 2d 845 (Minn. 2015).
New York	<p>Of the Great Lakes states, New York most closely follows the English common law tidal test. Bertram C. Frey & Andrew Mutz, <i>The Public Trust in Surface Waterways and Submerged Lands of the Great Lakes States</i>, 40 U. Mich. J.L. Reform 907, 936 (2007). Although Lake Erie and Lake Ontario are not tidal bodies of water, title is vested in the State for the public trust. Saunders v. N.Y. Cent. & Hudson River R.R., 38 N.E. 992, 994 (N.Y. 1894). Whether public and private boundaries are coterminous or overlapping is not clear, although the state appears to own exclusively to the ordinary high water mark. See <i>People ex rel. Burnham v. Jones</i>, 112 N.Y. 597, 606 (1889):</p> <p style="padding-left: 40px;">No question arises in this case over the line of riparian proprietorship along the lake, as it is conceded by both parties that it extends only to high-water mark on inland seas, or large navigable bodies of water like those of Lake Ontario, and that the title to all lands beyond high-water mark, or under water, is in the state.</p> <p>(citations omitted). A trial court ruled in 1934 that a littoral shoreland owner on Lake Ontario took title to the low-water mark, Ransom v. Shaeffer, 274 N.Y.S. 570, 573 (1934), citing to a 1923 court of appeals decision that had noted in dicta that littoral shoreland owners on inland lakes (not specifically a Great Lake) took title to the low-water mark, Stewart v. Turney, 237 N.Y. 117 (1923). See also Chism v. Smith, 123 N.Y.S. 691 (App. Div. 1910) (noting in dicta that littoral landowners along large lakes own to the mean low water mark); Robin Kundis Craig, <i>A Comparative Guide to the Eastern Public Trust Doctrines</i>, 16 Pa. St. Envtl L. Rev. 1, 87 (2007) (finding that the line between public and private ownership in New York is the ordinary high water mark but acknowledging that “New York case law has not been crystal clear regarding this point”). See also N.Y. Pub. Lands Law § 75 (McKinney 2018); Charles G. Stevenson, <i>Title of Land Under Water in New York</i>, 23 Yale L.J. 397, 404 (1914) (arguing that lands submerged beneath navigable waters should be held in fee by the U.S. Government, not the states, and providing an historical survey of state legislation showing the State of New York claimed fee title to lands under navigable lakes as early as 1830).</p> <p>Regardless of the “public trust” limitation of its title, the State may convey away those lands to private persons or entities for “public, or such other purposes as it may determine to be for the best interests of the state.” <i>People v. Steeplechase Park Co.</i>, 113 N.E. 521, 526-27 (N.Y. 1916); Saunders v. N.Y. Cent. & Hudson River R.R., 38 N.E. 992, 994 (N.Y. 1894).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • N.Y. Pub. Lands Law § 75 (McKinney 2018) <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>People ex rel. Burnham v. Jones</i>, 112 N.Y. 597 (1889). • Saunders v. N.Y. Cent. & Hudson River R.R., 38 N.E. 992 (N.Y.

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	<p>1894).</p> <ul style="list-style-type: none"> • <i>Fulton Light, Heat & Power Co. v. State</i>, 94 N.E. 199 (N.Y. 1911). • <i>People v. Steeplechase Park Co.</i>, 113 N.E. 521 (N.Y. 1916). • <i>Douglaston Manor v. Bahrakis</i>, 678 N.E.2d 201 (N.Y. 1997).
Ohio	<p>Ohio statute declares ownership of the:</p> <p>waters of Lake Erie consisting of the territory within the boundaries of the state . . . together with the soil beneath and their contents . . . in trust for the people of the state, for the public uses to which they may be adapted, subject to the powers of the United States government, to the public rights of navigation, water commerce, and fishery, and to the property rights of littoral owners, including the right to make reasonable use of the waters in front of or flowing past their lands.</p> <p>Ohio Rev. Code Ann. § 1506.10 (LexisNexis 2001). The State's department of natural resources is charged with enforcing State rights declared under the Fleming Act. <i>Id.</i> Also under this legislative authority, the State may permit private development, use, and/or lease of Lake Erie if doing so does not impair public rights. <i>Id.</i> Littoral owners on Lake Erie have title to the natural shoreline. <i>State ex rel. Squire v. City of Cleveland</i>, 82 N.E.2d 709, 725 (Ohio 1948). Case law defines the "natural shoreline" as the line where water usually stands undisturbed. <i>Sloan v. Biemiller</i>, 34 Ohio St. 492, 512 (1878). As recently as 2011, the Ohio Supreme Court declined to adopt the ordinary high water mark and low water mark standards of other states. <i>State ex rel. Merrill v. Ohio Dept. of Natural Resources</i>, 130 Ohio St. 3d 30 (2011).</p> <p>Ohio goes further than other Great Lakes states in defining the State's duties to protect the quality of public waters and related wildlife. <i>State v. City of Bowling Green</i>, 313 N.E.2d 409 (Ohio 1974). For example, in <i>State v. City of Bowling Green</i>, the City was held liable for negligent discharge of pollutants resulting in the death of wildlife. <i>Id.</i> The Court held that "an essential part of trust doctrine" is the State's affirmative duty to act against negligence impacting property held in public trust. <i>Id.</i> at 411. However, plaintiffs seeking to enjoin projects alleging private nuisance must present "clear and convincing evidence of immediate and irreparable harm that would result from project." <i>Hack v. Sand Beach Conservancy Dist.</i>, 176 Ohio App. 3d 309 (2008).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • Ohio Rev. Code Ann. § 1506.10 (LexisNexis 2001). • Ohio Rev. Code Ann. § 1506.11 (LexisNexis 2001). <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>Sloan v. Biemiller</i>, 34 Ohio St. 492 (1878). • <i>State ex rel. Squire v. City of Cleveland</i>, 82 N.E.2d 709 (Ohio 1948). • <i>State v. City of Bowling Green</i>, 313 N.E.2d 409 (Ohio 1974). • <i>Thomas v. Sanders</i>, 65 Ohio App. 2d 5 (1979). • <i>Mitchell v. Cleveland Elec. Illuminating Co.</i>, 507 N.E.2d 352 (Ohio 1987). • <i>Frances S. Buchholzer</i>, 1993 Ohio Op. Atty. Gen. 2-128 (1993). • <i>Lemley v. Stevenson</i>, 104 Ohio App.3d 126 (1995). • <i>Hack v. Sand Beach Conservancy Dist.</i>, 176 Ohio App. 3d 309 (2008). • <i>State ex rel. Merrill v. Ohio Dep't of Nat. Res.</i>, 130 Ohio St. 3d 30 (2011).
Pennsylvania	<p>Pennsylvanian law regarding application of the public trust doctrine to the Great Lakes is limited. It is accepted that the Commonwealth holds title to the beds of the Great Lakes within its territories in trust for the public. <i>Dunlap v. Commonwealth</i>, 108 Pa. 607 (1885); <i>Ill. Cent. R.R. v. Illinois</i>, 146 U.S. 387 (1892). More generally, if a lake is considered navigable, riparian owners take title to the low-</p>

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	<p>water mark subject to the public's right of navigation, fishing, and other proper uses up to the high-water mark. <i>Wood v. Appal</i>, 63 Pa. 210, 221 (1869). A Pennsylvania court has held that the Commonwealth does not lose title to filled land. <i>Del. Ave., LLC v. Dep't of Conservation</i>, 997 A.2d 1231 (Pa. 2010).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • N/A <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>Wood v. Appal</i>, 63 Pa. 210, 221 (1869). • <i>Dunlap v. Commonwealth</i>, 108 Pa. 607 (1885). • <i>Ill. Cent. R.R. v. Illinois</i>, 146 U.S. 387 (1892). • <i>Del. Ave., LLC v. Dep't of Conservation</i>, 997 A.2d 1231 (Pa. 2010).
Wisconsin	<p>The State of Wisconsin has an expansively defined duty to preserve public trust lands and waters, not limited to its duty to ensure navigability, protect natural resources and the environment, and preserve scenic beauty. <i>Just v. Marinette Cty.</i>, 201 N.W.2d 761 (Wis. 1972); <i>Muench v. Pub. Serv. Comm'n</i>, 261 Wis. 492 (1952). Case law has further held the State's public trust duties to include eradication and prevention of pollution. <i>Wisconsin's Env'tl. Decade, Inc. v. Dep't of Nat.l Res.</i>, 271 N.W.2d 69 (Wis. 1978).</p> <p>Title in the Great Lakes is vested to the State up to the high-water mark, defined as "the point on the bank or shore up to which the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic." <i>Diana Shooting Club v. Husting</i>, 145 N.W. 816, 818-20 (Wis. 1914); <i>but see Doemel v. Jantz</i>, 180 Wis. 225 (1923) (suggesting that ownership interests are overlapping). Nonetheless, riparian owners are permitted to alter the shoreline of a navigable body of water upon review and express permission by the State. <i>Muench v. Pub. Serv. Comm'n</i>, 261 Wis. 492 (1952); <i>Movrich v. Lobermeier</i>, 372 Wis. 2d 724 (2016).</p> <p><i>Key Statutes</i></p> <ul style="list-style-type: none"> • Wis. Stat. Ann. § 59.692 (West 2016) • Wis. Stat. Ann. § 281.11 (West 2018) • Wis. Stat. Ann. § 30.18 (West 2012) <p><i>Key Cases</i></p> <ul style="list-style-type: none"> • <i>DeGayner & Co. v. Dep't of Nat. Res.</i>, 236 N.W.2d 217 (Wis. 1875). • <i>Diana Shooting Club v. Husting</i>, 145 N.W. 816 (Wis. 1914). • <i>Muench v. Pub. Serv. Comm'n</i>, 261 Wis. 492 (1952). • <i>State v. Pub. Serv. Comm'n</i>, 81 N.W.2d 71 (Wis. 1957). • <i>Just v. Marinette Cty.</i>, 201 N.W.2d 761 (Wis. 1972). • <i>Omernik v. State</i>, 218 N.W.2d 734 (Wis. 1974). • <i>De Simone v. Kramer</i>, 77 Wis. 2d 188 (1977). • <i>Wis.'s Env'tl. Decade, Inc. v. Dep't of Nat. Res.</i>, 271 N.W.2d 69 (Wis. 1978). • <i>State v. Trudeau</i>, 408 N.W.2d 337 (Wis. 1987). • <i>Vill. of Menomonee Falls v. Wis. Dep't of Nat. Res.</i>, 412 N.W.2d 505 (Wis. Ct. App. 1987). • <i>Rock-Koshkonong Lake Dist. v. State Dep't. of Nat. Res.</i>, 350 Wis. 2d 45 (2013). • <i>Movrich v. Lobermeier</i>, 372 Wis. 2d 724 (2016).

