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Offshore Wind Development in the Great Lakes: Accessing Untapped Energy Potential Through International and Interstate Agreement to Overcome Public Trust Concerns

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Offshore Wind Development in the Great Lakes: Accessing Untapped Energy Potential Through International and Interstate Agreement to Overcome Public Trust Concerns

*Jordan Farrell**

Abstract

Offshore wind energy development in the Great Lakes presents an immense opportunity for distributed generation of renewable energy; however, this potential has thus far remained untapped. One significant barrier to why there has not yet been such wind energy development in the Great Lakes is the public trust doctrine. This doctrine generally stands for the principle that a state cannot convey its submerged lands to a private party. However, there remains much legal uncertainty with regards to the doctrine. Courts and scholars have struggled to determine with any certainty the origins and grounding of the doctrine and the limits it places on states with regards to public trust lands. This uncertainty poses a barrier to wind energy developers, leaving projects open to legal challenges and, even if public trust scrutiny is overcome, significant delays.

This article examines the general principles of the public trust doctrine and analyzes the public trust doctrine in each of the eight Great Lakes states. While the uncertainties and ambiguity of the doctrine cannot be resolved, based on this review there are two common exceptions that minimize public trust concerns and may allow private developments on public trust lands: (1) control or title remaining with the public; and (2) promotion of the public interest. This article argues that there is an opportunity to construct an international agreement between the United States and Canada, and a subsequent interstate compact between the eight Great Lakes states, to establish a structure for offshore wind energy transactions in the Great Lakes and to emphasize the public benefit therein. Such agreements have the potential to mitigate public trust uncertainty and litigation risk on wind energy developers seeking to harness the wind potential of the Great Lakes.

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INTRODUCTION

Offshore wind energy development in the Great Lakes region presents an immense opportunity for distributed generation and energy security, but the current legal regime relating to submerged lands makes offshore development in these five lakes bordering the United States and Canada remarkably difficult. Current law has an anti-regional approach, with state-by-state submerged land ownership and state-by-state public trust doctrine implications, making private development at a regional level nearly impossible. Furthermore, the international legal arrangements between the United States and Canada are at best agnostic to these problems.

Together, these shortcomings create a breeding ground for parties who oppose project development to initiate litigation and stall or completely defeat offshore wind deals through a myriad of arguments, including uncertain regulatory powers and public trust violations. To circumvent the issues presented by the current legal regime, an international compact provides an intriguing avenue to establish a uniform approach to offshore wind development and the development of utility-scale wind farms. While there has been extensive literature regarding the public trust doctrine and offshore wind in the Great Lakes, this Note is the first to analyze the potential for overcoming the current legal barriers through an international and interstate agreement.

In Part I, I will provide an overview of the overwhelming potential for offshore wind power in the Great Lakes. In Part II, I will discuss the most significant barrier to realizing this potential: the various public trust doctrines in the states bordering the Great Lakes. In Part III, I will describe how an international and interstate agreement can overcome Public Trust concerns. In Part IV, I will discuss one foreseeable downside of using an international and interstate agreement framework to address Public Trust challenges, namely that the energy generated in one state will enter the grid and potentially be serving residents outside of that state.

I. BENEFITS AND POTENTIAL OF OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES.

From climate change to air quality to water quality, there are mounting environmental questions about the current energy system's reliance on fossil fuels.¹ There are also questions of national security and energy security for both the United States and Canada.² An economy dependent on fossil fuels

¹ E.g., Noah Long & Kevin Steinberger, *Renewable Energy Is Key to Fighting Climate Change*, NRDC EXPERT BLOG (July 26, 2016), <https://www.nrdc.org/experts/noah-long/renewable-energy-key-fighting-climate-change>.

² See generally Charles L. Glaser, *How Oil Influences U.S. National Security*, 38 INT'L SECURITY 112, 115 (2013) (discussing how reliance on the oil market generally, either as a supplier or buyer, can impact economic and national security and the general influences of oil on national security); ANDREW BEST ET AL., CANADIAN ENERGY SECURITY: WHAT DOES

bears inherent market volatility as countries simultaneously seek economic growth and a higher quality of life for their citizens. On top of these considerations, the COVID-19 pandemic has thrown the world—and the energy sector—into disarray, heightening the calls for a more secure energy system in the United States and abroad.³

The world has known for decades that renewable energy has the potential to solve many of these problems. Despite this, renewable generation comprises only a fraction of United States and global energy production.⁴ One rising technology for renewable energy generation is offshore wind farms, and an immense untapped market for such farms lies in the Great Lakes. These five lakes on the border between the United States and Canada not only make up the largest freshwater system on Earth⁵ but have a vast potential to house the primary energy generating source for this populous region.

Whether located onshore or offshore, wind energy can be harnessed through wind turbines. These turbines consist of a set of blades, curved to create a pressure difference, connected to a rotor. When the wind blows, a pressure difference is created around the blades causing them to spin and turn the rotor. The rotor is connected to a generator, so as the rotor turns, the generator begins to spin, creating an electrical current which is then transformed and sent to the power grid.⁶ While this is a gross oversimplification of the technology, this general concept allows one to understand the advantages of wind power generation, especially offshore.

First, this technology is renewable and clean. There is not a finite amount of wind, nor does harnessing energy from the wind dwindle the amount of future wind that can be harnessed. This is in direct contrast with

ENERGY SECURITY MEAN FOR CANADA? 10-12 (2010), https://www.canada.ca/content/dam/csis-scrs/documents/publications/Cnd_nrg_Scrt_Rprt-eng.pdf (discussing how renewable energy plays a key role in Canadian energy security).

³ See Robert Rapier, *Will Covid-19 Hasten The Demise of Fossil Fuels?*, FORBES (July 12, 2020, 6:00 PM), <https://www.forbes.com/sites/rtrapier/2020/07/12/will-covid-19-hasten-the-demise-of-fossil-fuels/#67d7a88b280d>; see also Nelson Mojarro, *COVID-19 is a Game-Changer for Renewable Energy. Here's Why*, WORLD ECONOMIC FORUM (June 16, 2020), <https://www.weforum.org/agenda/2020/06/covid-19-is-a-game-changer-for-renewable-energy/>; William Cummings, *We are on the verge of a massive collapse: Ex-Energy Secretary Perry says COVID-19 will ravage oil industry*, USA TODAY (Apr. 1, 2020, 7:53 PM), <https://www.usatoday.com/story/news/politics/2020/04/01/rick-perry-coronavirus-oil-industry-near-collapse/5102155002/>.

⁴ *U.S. Energy Facts Explained*, U.S. ENERGY INFORMATION ADMINISTRATION (May 7, 2020), <https://www.eia.gov/energyexplained/us-energy-facts/> (describing United States energy consumption data); *Data and Statistics*, INTERNATIONAL ENERGY AGENCY (2020), <https://www.iea.org/data-and-statistics/data-tables/?country=WORLD&energy=Electricity&year=2018> (describing global electricity generation statistics for the year 2018).

⁵ Noah D. Hall & Benjamin C. Houston, *Law and Governance of the Great Lakes*, 63 DEPAUL L. REV. 723, 723 (2014).

⁶ *How Do Wind Turbines Work?*, U.S. OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, <https://www.energy.gov/eere/wind/how-do-wind-turbines-work>.

fossil fuels, where there is a finite amount that could possibly be harvested. The generation of electricity through turbines produces zero carbon emissions, whereas fossil fuels emit carbon by being burned to turn a generator.⁷ Wind turbines bring with them additional environmental benefits as well, such as eliminating the need for landscape degradation through drilling and mining, as well as preserving water resources no longer needed in traditional fossil fuel generation techniques.⁸ Thus, wind energy has a great advantage with regard to environmental stewardship and climate change mitigation. The advantages of wind energy are not solely environmental. All renewable energy generating facilities, including wind, serve economic, national security, and energy security goals as well.⁹

Onshore wind development is one of the most prevalent renewable energy sources and one of the fastest growing energy generation mechanisms.¹⁰ However, there are a number of valid criticisms of onshore wind development. Primarily, the current transmission grid is ill-equipped to ensure easy connection of new wind farms to the electrical grid. The current transmission grid in the United States focuses on high-capacity fossil fuel plants located relatively close to major consumption points.¹¹ Inconsistent with this current system, the highest potential production for onshore wind farms is in the Great Plains region of the United States, far away from many major consumption points.¹² These geographic considerations present

⁷ *Wind Power Facts and Statistics*, AMERICAN WIND ENERGY ASSOCIATION, <https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits>.

⁸ *Id.*

⁹ For a full description of these benefits, see U.S. DEPARTMENT OF ENERGY & U.S. DEPARTMENT OF THE INTERIOR, NATIONAL OFFSHORE WIND STRATEGY 19-22 (2016), <https://www.energy.gov/sites/prod/files/2016/09/f33/National-Offshore-Wind-Strategy-report-09082016.pdf>; see also AMERICAN COUNCIL ON RENEWABLE ENERGY, THE ROLE OF RENEWABLE ENERGY IN NATIONAL SECURITY 1-9 (2018), https://acore.org/wp-content/uploads/2018/10/ACORE_Issue-Brief_-The-Role-of-Renewable-Energy-in-National-Security.pdf (discussing how nations rely on foreign sources for fossil fuel resources, especially coal and oil, and how renewable energy can serve national security and energy security goals by lowering this reliance).

¹⁰ *Data and Statistics*, INTERNATIONAL ENERGY AGENCY (2017), <https://www.iea.org/data-and-statistics/data-tables/?country=WORLD&year=2017&energy=Renewables%20%26%20waste> (showing global energy statistics in 2017 finding that wind power is the second greatest global renewable energy generating technology only behind hydropower); *Wind*, INTERNATIONAL ENERGY AGENCY (2020), <https://www.iea.org/fuels-and-technologies/wind> (comparing onshore global wind data to offshore wind data); *Wind Vision*, U.S. DEPARTMENT OF ENERGY, <https://www.energy.gov/maps/map-projected-growth-wind-industry-now-until-2050> (showing a map of the projected growth of wind energy industry in the United States).

¹¹ See *Barriers to Renewable Energy Technologies*, UNION OF CONCERNED SCIENTISTS (Dec. 20, 2017), <https://www.ucsusa.org/resources/barriers-renewable-energy-technologies>.

¹² *Wind Prospector*, NATIONAL RENEWABLE ENERGY LABORATORY, <https://maps.nrel.gov/wind-prospector/?aL=MIB4Hk%255Bv%255D%3Dt%26VMGtY3%255Bv%255D%3Dt%26VMGtY3%255Bd%255D%3D1&bL=clight&cE=0&IR=0&mC=19.80805412808859%2C-114.78515624999999&zL=3>. Note the prevalence of high-class wind potential

another problem. Even when the transmission grid reaches these production facilities, efficiency in generation will be dampened due to the long distances the power must travel to reach the point of consumption.¹³ While modern transformer and power line technology have sought to minimize these losses, the comparative location continues to add cost to production.¹⁴ The second primary argument against wind power is that it is too intermittent to provide a reliable energy resource.¹⁵ This criticism has largely been disproven, and the continuing advancement of transmission efficiency and battery storage technology is making intermittency less of a barrier.¹⁶ Nonetheless, this concern continues to loom large in the minds of those who resist wind energy development.¹⁷

The reason the Great Lakes and offshore wind energy, in general, have such a high magnitude for energy generation is because offshore wind turbines maximize the advantages of wind energy while minimizing the disadvantages of onshore wind farms. Offshore wind farms maximize energy generation potential through mechanics that are not possible onshore. Wind turbines can be built taller with larger rotors, capturing significantly more energy than onshore wind turbines.¹⁸ Larger towers and greater generation potential lead to reduced cost and greater profit for the developers.¹⁹

Additionally, offshore wind generation has the ability to overcome the

in the Great Plains region, lack of onshore potential in the Great Lakes states, and the high-class potential of the Great Lakes.

¹³ See *How much electricity is lost in electricity transmission and distribution in the United States?*, U.S. ENERGY INFORMATION ADMINISTRATION (May 14, 2021), <https://www.eia.gov/tools/faqs/faq.php?id=105&t=3>.

¹⁴ *Id.* (describing power loss due to transmission).

¹⁵ Jinfu Liu et al., *Overview of wind power intermittency: Impacts, measurements, and mitigation solutions*, 204 APPLIED ENERGY 47 (2017).

¹⁶ *Barriers to Renewable Energy Technologies*, *supra* note 11.

¹⁷ *Id.*

¹⁸ See WALTER MUSIAL ET AL., 2018 OFFSHORE WIND TECHNOLOGIES MARKET REPORT 31 (U.S. Office of Energy Efficiency & Renewable Energy, 2019), <https://www.energy.gov/sites/prod/files/2019/09/f66/2018%20Offshore%20Wind%20Technologies%20Market%20Report.pdf>; see also, *Haliade-X offshore wind turbine*, GE RENEWABLE ENERGY, [https://www.ge.com/renewableenergy/wind-energy/offshore-wind/haliade-x-offshore-turbine#:~:text=Introducing%20the%20Haliade%2DX%2012,63%25\)%2C%20and%20digital%20capabilities; see also David Roberts, These huge new wind turbines are a marvel. They're also the future, VOX \(May 20, 2019 12:36 PM\), https://www.vox.com/energy-and-environment/2018/3/8/17084158/wind-turbine-power-energy-blades](https://www.ge.com/renewableenergy/wind-energy/offshore-wind/haliade-x-offshore-turbine#:~:text=Introducing%20the%20Haliade%2DX%2012,63%25)%2C%20and%20digital%20capabilities; see also David Roberts, These huge new wind turbines are a marvel. They're also the future, VOX (May 20, 2019 12:36 PM), https://www.vox.com/energy-and-environment/2018/3/8/17084158/wind-turbine-power-energy-blades). At the time of this note, General Electric has begun marketing the world's largest offshore wind turbine, which stands 260 meters tall and has rotors that are 220 meters. These turbines are nearly twice the size of the average onshore wind turbine in the United States and have a nameplate capacity of 12MW, which is nearly four times the average nameplate capacity of an onshore wind turbine in the United States today. Even without going to the extreme, the average offshore wind turbine averages nearly double the average onshore wind turbine nameplate capacity at 6MW compared to 3MW.

¹⁹ NATIONAL OFFSHORE WIND STRATEGY, *supra* note 9, at 30, <https://www.energy.gov/sites/prod/files/2016/09/f33/National-Offshore-Wind-Strategy-report-09082016.pdf>.

transmission issues previously discussed. First, the distributed nature of the generation ensures that production occurs near consumption. This minimizes total distance transmitted and grid congestion, which would typically lead to inefficiencies in transmission.²⁰ Especially in the Great Lakes, major metropolitan areas such as Toronto, Chicago, Mississauga, Milwaukee, and Cleveland, all currently without great potential to develop renewables on land, could have distributed wind production within close proximity.²¹ The U.S. Department of Energy has estimated that the Great Lakes have a gross offshore wind potential of 519 GW which equates to a technical potential of 136 GW.²²

Thus, the question is: what is preventing this region from discovering and utilizing this untapped potential at its doorstep?²³ One answer is a piecemeal legal regime and regulatory environment that regulates submerged land development under one of the most ambiguous and murky legal doctrines in American jurisprudence, making the development of private energy generating facilities extremely difficult if not impossible to navigate.

II. THE CURRENT SUBMERGED LANDS LEGAL REGIME LEAVES STATE PUBLIC TRUST DOCTRINES TO GOVERN THE DEVELOPMENT OF SUBMERGED LANDS, WHICH IS A BARRIER TO OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES.

One of the primary roadblocks to the development of offshore wind in the Great Lakes is the current legal regime which leaves individual state public trust doctrines to govern the development of submerged lands and waterways.²⁴ Generally, the public trust doctrine sets forth that a state holds

²⁰ *Id.* at 22.

²¹ See Ms Aggie, *The Biggest Cities on the Great Lakes*, WORLD ATLAS (Nov. 28, 2019), <https://www.worldatlas.com/articles/the-biggest-cities-on-the-great-lakes.html>. For a full discussion on the market for offshore wind farms in the United States see NATIONAL OFFSHORE WIND STRATEGY, *supra* note 9; MUSIAL, *supra* note 18.

²² NATIONAL OFFSHORE WIND STRATEGY, *supra* note 9, at 8, 13. The report further notes that this potential is significantly lower due to current technological constraints. Because of the Great Lakes' propensity to freeze and the inability of current floating foundations to resist surface ice floes, the study only considered areas of the Great Lakes with a water depth of 60 meters or less.

²³ It is interesting to consider that the Department of Energy predicts offshore wind energy generation will become part of the total wind capacity in the Great Lakes states by 2030. *Wind Vision*, *supra* note 10.

²⁴ The five lakes which make up the Great Lakes are governed by highly complex governance structure. The lakes are shared by two nations, eight states, two provinces, thousands of local governments, and numerous indigenous tribes. The primary international agreement governing the relations between the United States and Canada with regards to the Great Lakes is the Boundary Waters Treaty (Treaty). While the Treaty establishes obligations for navigability, commerce, and pollution, it gives each nation the power to carry on "governmental works in boundary waters... wholly on its own side of the line." The Boundary Waters Treaty of 1909, Gr. Brit.-U.S., Jan. 11, 1909, 36 Stat 2448, [https://ijc.org/sites/default/files/2018-07/Boundary Water-ENGFR.pdf](https://ijc.org/sites/default/files/2018-07/Boundary%20Water-ENGFR.pdf). No international treaty between the

in trust for the benefit of the public certain lands, and those benefits cannot be abridged.²⁵ Those lands subject to the public trust doctrine include surface waters and submerged lands.²⁶ Considering offshore wind turbines require structures secured to or tethered to the submerged lands underneath the Great Lakes, they are unquestionably subject to the public trust doctrine.

There is an overwhelming amount of scholarship and case law discussing the public trust doctrine, its origins, and its implications.²⁷ I will not attempt to replicate this work already done. I will focus my discussion on the general principles of the public trust doctrine as it relates to offshore wind development, the major points of murkiness in the doctrine, the uncertainty of the state-by-state doctrinal approach, and how this regime serves as a barrier to offshore wind development.

A. Public Trust Doctrine Generally

There is little overall certainty with regards to the public trust doctrine. It is clear that the doctrine is a fundamental principle in United States law and an outgrowth of ancient Roman and English principles protecting lands in trust for the public.²⁸ The law of the public trust doctrine has developed over time through common law jurisprudence. The seminal case regarding the limits placed on states by the public trust doctrine is *Illinois Central Railroad Company v. Illinois* (hereinafter *Illinois Central*).²⁹ While there is much disagreement as to the holding in *Illinois Central* and the legal grounding for the public trust doctrine, there are general principles found in the case which can provide a foundation for understanding the public trust

countries has covered the topic of submerged landholding. United States domestic law clearly states submerged lands are governed by the individual states. This principle has been statutorily codified in the Submerged Lands Act, 43 U.S.C. § 1311(a)(1986), providing title and ownership of submerged lands (lands beneath navigable waters) to states. However, this statute is an outgrowth of the Equal Footing Doctrine, the finding by the Supreme Court that the original states retained rights to govern submerged lands beneath their navigable waters, and therefore, all future states must constitutionally retain these rights as well. *Pollard's Lessee v. Hagen*, 44 U.S. 212, 229 (1845); *Martin v. Waddell*, 41 U.S. 367, 410-11 (1842).

²⁵ See Bertram C. Frey & Andrew Mutz, *The Public Trust in Surface Waterways and Submerged Lands of the Great Lakes States*, 40 U. MICH. J.L. REFORM 907, 910 (2007), <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=1324&context=mjlr>.

²⁶ *Id.*

²⁷ Frey, *supra* note 25, at 910 n.17 (noting the immense amount of literature on the public trust doctrine); Alexandra B. Klass, *Renewable Energy and the Public Trust Doctrine*, 45 U.C. DAVIS L. REV. 1021, 1027 (2012), https://lawreview.law.ucdavis.edu/issues/45/3/Topic/45-3_Klass.pdf.

²⁸ *E.g.*, Frey, *supra* note 25, at 918.

²⁹ *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 452 (1892) [hereinafter *Illinois Central*]. One of the foundational scholarly articles of the public trust doctrine describes *Illinois Central* as “the Lodestar in American Public Trust Law. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 489 (1970), <https://repository.law.umich.edu/cgi/viewcontent.cgi?article=4782&context=mlr>.

doctrine.

In *Illinois Central*, the Court set forth in broad terms that a state's holding of submerged lands is "a title held in trust for the people of the state, that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties."³⁰ Such language suggests that the public trust doctrine is fundamentally an anti-private development principle that seeks to preserve the quality and use of these natural resources for future generations.³¹ Another way of putting this is that the public trust doctrine places a fiduciary obligation on states to restrict uses of lands that are held in public trust to protect them from impairment of these traditional public uses.³²

The Court in *Illinois Central* goes on to delineate the restrictions on states imposed by the public trust doctrine. Primarily, the Court holds that a state cannot convey public trust property for private party benefit. Again, the Court uses very broad language:

The State can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties . . . than it can abdicate its police powers in the administration of government and the preservation of the peace.³³

However, the Court places a caveat on this restriction in saying,

³⁰ *Illinois Central*, 146 U.S. at 452.

³¹ See also Frey, *supra* note 25, at 908 ("The modern doctrine of public trust in waterways compels the Great Lakes states, as trustees of the beds of the Great Lakes, their waters, and their living contents, to ensure a sustainable future for the lakes and to preserve their traditional public uses and natural character." (citing *Illinois Central* at 452)). But see 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, 924-25 (2004), <https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1296&context=facpub> (concluding that Justice Fields' use of the public trust doctrine was not an anti-development doctrine, but rather the only tool that could be used to "preserve access to the lake for commercial vessels at competitive prices").

³² *Illinois Central*, 146 U.S. at 453 ("The state can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties, except in the instance of parcels mentioned for the improvement of the navigation and use of the waters, or when parcels can be disposed of without impairment of the public interest in what remains, than it can abdicate its police powers in the administration of government and the preservation of the peace."). For an in-depth analysis of the doctrine set forth in *Illinois Central*, see Kearney, *supra* note 31. For a discussion of the adoption and general principles of the public trust doctrine, see Sax, *supra* note 29, at 475; Michael Julius Motta, *The Walking Dead or Weekend at Bernie's? How the Public Trust Doctrine Threatens Alternative Energy Development*, 5 WASH. & LEE J. ENERGY CLIMATE & ENV'T 329 (2014).

³³ *Illinois Central*, 146 U.S. at 453.

It is grants of parcels under navigable waters that . . . do not substantially impair the public interest in the lands and waters remaining, that are . . . [a] valid exercise of legislative power consistently with the trust of the public upon which such lands are held by the state. The control of the state for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interest of the public therein.³⁴

Thus, the Court seems to place two major exceptions on the broad public trust doctrine principles stated. If the state does not wholly abdicate the use and control of lands to private parties, or if the parcel is to be used in promoting a public interest, the actions of the state will not be in violation of the public trust doctrine. The Court ultimately held that Illinois' grant of public trust lands to the Railroad was "necessarily revocable" as the state could not wholly abdicate their public trust responsibilities, and therefore "the trust by which the property was held by the state can be resumed at any time."³⁵

If read in a vacuum, *Illinois Central* seemingly sets forth public trust principles. However, the ambiguity in the decision becomes quite clear when looking to apply the doctrine more broadly. One major question following *Illinois Central* and the other early public trust doctrine cases is what law the public trust doctrine is grounded in—a salient question because the Court did not cite any authority for the broad principles outlined above. Scholars have separately concluded that the public trust doctrine is a matter of federal constitutional law,³⁶ federal law³⁷, and state law.³⁸ While there must be some

³⁴ *Illinois Central*, 146 U.S. at 452-53.

³⁵ *Illinois Central*, 146 U.S. at 455.

³⁶ Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425 (1989), <https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1970&context=articles>; James R. Rasband, *The Disregarded Common Parentage of the Equal Footing and Public Trust Doctrines*, 32 LAND WATER L. REV. 1 (1997), <https://core.ac.uk/download/pdf/217081453.pdf>.

³⁷ Kearney, *supra* note 31, at 928 n.577.

³⁸ *National Audubon Society v. Superior Court*, 658 P.2d 709, 732 (1983) [hereinafter *Mono Lake Case*] (holding the state's public trust doctrine may be used to challenge allocation of waters of the Mono Basin, expanding the traditional definition of the public trust doctrine); see also Kacy Manahan, Comment, *The Constitutional Public Trust Doctrine*, 49 ENVTL. L. 263 (2019), <https://law.lclark.edu/live/files/27949-49-1manahanpdf> (arguing that state constitutional provisions are the proper grounding for the public trust doctrine). See also Eric Pearson, *Illinois Central and the Public Trust Doctrine in State Law*, 15 VA. ENVTL. L.J. 713, 717 n.22 (1996) (citing Wilkinson, *supra* note 36). If one sentence can encompass the confusion of the public trust doctrine, I feel it is this one. In Wilkinson's article, he argues that the public trust doctrine is grounded in constitutional law as an outgrowth of the equal footing doctrine. Yet, he starts the article by stating "the public trust doctrine announced in [*Illinois Central*] . . . and the state-law based trust doctrines total 51 public trust doctrines." While attempting to find an answer to the question, the haziness once again prevails. See also LOU ELLIOTT, *THE PUBLIC TRUST DOCTRINE AND OFFSHORE WIND IN THE GREAT LAKES* (2010),

federal component to the public trust doctrine, this may only extend to an analysis of what lands are subject to the doctrine.³⁹ This is because the lands subject to the doctrine are the lands that a state gains by virtue of state sovereignty under the equal footing doctrine.⁴⁰ Indeed, many cases adjudicating public trust disputes look to federal law in determining the extent of state public trust lands.⁴¹ On the other hand, other cases have held that the extent of the lands held in public trust is determined by states.⁴²

It seems equally likely that the public trust doctrine is grounded at least in part in state law. Because of the doctrinal confusion, it is said that there are 51 public trust doctrines, one for each state and then the federal component.⁴³ Most states have an established public trust doctrine through judicial decisions, state constitutions, or common law principles, with many states developing their doctrine with an eye towards the principles set forth in *Illinois Central* and other early public trust doctrine cases.⁴⁴ However, these state doctrines still vary widely in their definitions, scope, and exceptions.⁴⁵ In addition, courts have found that those states do not have an ultimate right in defining the scope of the public trust doctrine, finding the principles of *Illinois Central* as a barrier to complete state control.⁴⁶ Thus,

<https://www.glc.org/wp-content/uploads/2016/10/2010-ubls-public-trust-doctrine.pdf> (citing Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 82 NOTRE DAME L. REV. 699 (2006)).

³⁹ *Illinois Central*, 146 U.S. at 434 (citing *Pollard's Lessee* 44 U.S. at 212 (establishing that submerged lands belong to the states through the equal footing doctrine and therefore are subject to the public trust and discussing public trust in terms of commerce and navigation as federal concerns); *United States v. Utah*, 283 U.S. 64, 75 (1931) (holding that the extent of public trust lands turns on navigability, which is a federal question).

⁴⁰ *Pollard's Lessee*, 44 U.S. at 228-29; *Martin v. Lessee of Waddell*, 41 U.S. 367, 410-11 (1842).

⁴¹ *Defts. of Wildlife v. Hull*, 18 P.3d 722, 728, 738-39 (Ariz. Ct. App. 2001) (citing *Illinois Central* in determining that the public trust doctrine created duties on Arizona in regard to submerged lands and holding an essential outright disclaimer to “watercourse bedlands” violates the public trust doctrine); see also *United States v. Utah*, 283 U.S. 64, 75 (1931) (holding that the extent of public trust lands turns on navigability, which is a federal question).

⁴² E.g., *Gunderson v. State, Ind. Dep't of Nat. Res.*, 90 N.E.3d 1171, 1182 (Ind. 2018) (citing *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 475 (1988)); *Lee v. Williams*, 711 So. 2d 57, 60 (Fla. Dist. Ct. App. 1998).

⁴³ *Wilkinson*, *supra* note 36, at 425.

⁴⁴ See BLUMM ET AL., *LEWIS & CLARK LAW SCH. LEGAL STUDIES, THE PUBLIC TRUST DOCTRINE IN FORTY-FIVE STATES* (Michael C. Blumm eds., 2014), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2235329.

⁴⁵ Robin Kundis Craig, *A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries*, 16 PENN ST. ENV'T L. REV. 1 (2007), https://www.researchgate.net/publication/228138146_A_Comparative_Guide_to_the_Eastern_Public_Trust_Doctrine_Classifications_of_States_Property_Rights_and_State_Summaries; Robin Kundis Craig, *A Comparative Guide to the Western States' Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 ECOLOGY L.Q. 53 (2010), <https://www.jstor.org/stable/24114989?seq=1>.

⁴⁶ E.g., *Mono Lake Case* at 723-24 (“[T]he Attorney General of California . . . argues for

the doctrine cannot be entirely a creature of state law either. Other cases openly acknowledge the uncertainty of the extent of the public trust doctrine.⁴⁷

The question then becomes: if there is uncertainty as to what legal grounding the doctrine has, to what degree can individual states define their public trust doctrines differently? It seems clear enough that states cannot completely abdicate the public trust responsibilities, but what are those responsibilities exactly? Are they defined by *Illinois Central* or by state statute or something else? As states have passed legislation to define the public trust doctrine, the questions become whether these definitions are binding on the individual states, what level of deference will be given to such statutes, and whether courts will impose separate public trust doctrine principles if they find that the doctrine is not grounded in state law.

These questions compound when looking at explanations by courts in public trust doctrine cases. The opinions by various courts seemingly cannot be reconciled to find an answer to these many questions. The plain language of *Illinois Central* sets an outer limit that states may not abdicate their responsibilities to protect this public trust land. However, commentators and courts have argued and held that states have significant flexibility in defining the public trust doctrine and complying with such requirements. *Defenders of Wildlife v. Hull*⁴⁸ from Arizona discusses the need for the legislature to conduct a “particularized assessment,” and if such an assessment is not done, the transfer of public trust lands may be forfeited. Thus, questions arise concerning the ability of a state to dictate the public trust by conducting such a particularized assessment. In *Kootenai Environmental Alliance, Inc. v. Panhandle Yacht Club, Inc.*,⁴⁹ the court upheld a state code provision which set forth powers of the Department of Lands to “regulate and control the use or disposition of lands in the beds of navigable lakes, rivers and streams . . . so as to provide for their commercial, navigational, recreational or other public use. . . .”⁵⁰ While the court noted that public lands cannot be alienated legislatively and that the public trust doctrine sets the outer boundary for government action, this holding still affirmed a transfer of public trust lands by the administrative agency and seemingly gave significant flexibility to legislative and administrative determinations in such a decision.⁵¹ The court emphasized that the process set forth was constitutional under the state

a broad concept of trust uses. . . . encompass[ing] all public uses. We know of no authority which supports this view. . . . [The public trust doctrine] is an affirmation of the duty of the state to protect the people’s common heritage of [resources]. . . .”)

⁴⁷ *Def. of Wildlife v. Hull*, 18 P.3d 722, 728 (Ariz. Ct. App. 2001) (“Although the extent of the public trust to be found in the bedlands of Arizona’s waterways is presently undefined.”).

⁴⁸ *Id.*

⁴⁹ *Kootenai Env’t All., Inc. v. Panhandle Yacht Club, Inc.*, 671 P.2d 1085 (Idaho 1983).

⁵⁰ *Id.* at 1094.

⁵¹ *Id.* at 1095.

constitution and that abiding by this process was key in affirming the decision of the Department of Lands.⁵² Thus, this decision shows in Idaho that the state has to set processes and standards for the abdication of public trust lands, even though the duties themselves cannot be abdicated.

Scholars of the public trust doctrine have additionally argued that judicial deference to legislative and executive determinations that grants are within the public trust is proper.⁵³ This confusion culminates with the express language of *Phillips Petroleum Co. v. Mississippi*, another paramount public trust doctrine case.⁵⁴ In *Phillips Petroleum*, the Court stated, “[i]t has been long established that the individual States have the authority to define the limits of the lands held in public trust and to recognize private rights in such lands as they see fit.”⁵⁵ This quote suggests that States have the power to define both scope and standard of the public trust; however, by express terms, this language runs directly counter to the principles set out in *Illinois Central*. There, the court expressly prohibited states from exercising power to recognize private rights as they saw fit.⁵⁶ Despite this uncertainty, courts across the country have used this language from *Phillips Petroleum* in adjudicating public trust disputes. For example, in *Lee v. Williams*, a Florida Court states, “[w]hat *Phillips Petroleum* makes clear, however . . . is that the public trust doctrine is a creature of the common law, the extent of which and alterations to which are subject to judicial determination, *at least where there is no contrary constitutional or legislative directive*” (emphasis added).⁵⁷ Therefore, neither the scholarship nor the caselaw provides answers to the doctrinal confusion about the depth and breadth of state power in setting public trust doctrine principles.

B. Public Trust Doctrine of the Eight States Surrounding the Great Lakes

Recognizing there is irreconcilable confusion on the foundations of the public trust doctrine, it becomes necessary when discussing development of public trust lands in the Great Lakes to understand from a high level the

⁵² *Id.*

⁵³ See Motta, *supra* note 32, at 331 n.10; see also ELLIOTT, *supra* note 38.

⁵⁴ *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988).

⁵⁵ *Id.* at 475.

⁵⁶ See also *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 294 A.2d 47 (N.J. 1972) (recognizing that prior court decisions in the jurisdiction give an unlimited power in the legislature to convey such trust lands to private persons but noting that this appears to be in direct conflict with *Illinois Central*).

⁵⁷ *Lee v. Williams*, 711 So. 2d 57, 60 (Fla. Dist. Ct. App. 1998); see also *Donnell v. United States*, 834 F. Supp. 19, 26 (D. Me. 1993). (“Under the public trust doctrine, the United States Supreme Court has established that ‘the individual states have the authority to define the limits of the lands held in public trust and to recognize private rights in such lands as they see fit.’ *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 475 (1988). Maine may properly give property rights to land submerged under private structures in the water to the private structure owner; however, these state property rights remain subject to the federal government’s control for purposes of navigation and commerce.”).

public trust doctrine of each Great Lakes state. While each of these states finds the core of its public trust doctrine in *Illinois Central*, the subtle variations in each state further exemplify the existing difficulty of navigating the public trust doctrine in offshore wind development. Furthermore, in each of the eight Great Lakes states, courts have thwarted projects and development by finding violations of the public trust doctrine, often in directly contradictory terms. Thus, part of the difficulty comes in predicting the uncertain application of the public trust doctrine in these states.⁵⁸

1. Illinois

While questions remain about the broader applicability of *Illinois Central* and what it stands for, it is clear that Illinois looks to *Illinois Central* to set the state's public trust doctrine and to determine conveyances of public trust property.⁵⁹ As a foundation, the court has stated, “[i]t can be seen that the State holds title to submerged land . . . in trust for the people, and that in general the governmental powers over these lands will not be relinquished.”⁶⁰

However, the court has also recognized exceptions in allowing conveyances of public lands to pass muster in public trust analysis. In *People v. Kirk*, for example, the court found that building a road over reclaimed public trust lands was not a violation of the public trust doctrine as governmental powers continued to be exercised over the lands, the legislature could continue to exercise control, and that conveyance did not interfere with navigation or fishing as it had existed prior.⁶¹ Furthermore, another Illinois precedent has relied on *Illinois Central* in finding a conveyance of land for public benefit to overcome public trust concerns. In *Friends of Parks v. Chicago Park District*, the court found that a grant of public trust lands for further development of Soldier Field, held by a private party, did not violate the public trust doctrine because of the public benefit of athletics, arts, culture, and use of the lakefront as a whole.⁶² The court further supports this conclusion by citing a statement that seems to directly contradict the holding of *Illinois Central* itself: “[t]he resolution of [the conflict between those who

⁵⁸ For this discussion, the primary focus is on any variability of the public trust doctrine's general application of these eight states as it pertains to the submerged lands of the Great Lakes. For a more robust analysis of the variability in other public trust doctrine considerations between the states, for example what lands the public trust doctrine applies to, see Kenneth K. Kilbert, *The Public Trust Doctrine and the Great Lakes Shores*, 58 CLEV. ST. L. REV. 1 (2010), <https://core.ac.uk/download/pdf/216928525.pdf>; Frey & Mutz, *supra* note 25. For a more detailed discussion of some of the Great Lakes states' respective public trust doctrines, see BLUMM, *supra* note 44.

⁵⁹ *Friends of the Parks v. Chi. Park Dist.*, 786 N.E.2d 312, 326 (Ill. 2003) (“*Illinois Central* involved the conveyance of public trust property to a private party. The doctrine was applied by this court to a similar transfer in *People ex. rel. Scott v. Chi. Park Dist.*, 360 N.E.2d 773 (1976).”).

⁶⁰ *People ex rel. Scott v. Chi. Park Dist.*, 360 N.E.2d 773, 779 (Ill. 1976).

⁶¹ *People ex rel. Moloney v. Kirk*, 162 Ill. 138, 151 (1896).

⁶² *Friends of Parks*, 786 N.E.2d at 170.

want to preserve and those who want to develop in good faith for the public good lands considered inviolate to change] is for the legislature and not the courts.”⁶³

Despite these statements, Illinois has often found conveyances of public trust lands to be in violation of the public trust doctrine. Notwithstanding the recent cases exercising these exceptions, Illinois courts have historically voided almost all transactions in which public trust lands have been conveyed to private interests.⁶⁴ For example, in *People ex rel. Scott v. Chicago Park Dist.* the court held that the conveyance of submerged lands of Lake Michigan to the United States Steel Corporation was in violation of the public trust.⁶⁵ In finding a violation, the court noted that public benefit cannot simply be incidental to the grant, such as jobs or economic growth, but rather that the purpose of the grant, even if to private interests, is for a public benefit.⁶⁶ The court distinguishes from *People v. Kirk*⁶⁷ in that even though that conveyance was to a private party, the purpose of the grant itself to expand Lake Shore Drive was primarily a public interest and could overcome public trust scrutiny. The court further found in *Lake Michigan Federation v. U.S. Army Corps of Engineers* a legislative conveyance to Loyola to be a violation of the doctrine because, even though there would be public lakefront access and the conveyance was for an educational institution, the grant was for the benefit of a private university and thus in violation of the trust.⁶⁸

These discussions illustrate the difficulty of development due to a lack of certainty. While certain cases, such as *People v. Kirk*, have shown the opportunity to overcome public trust scrutiny, the doctrine has been used to thwart development time and time again. Even in cases in which the private development arguably was providing benefit, the conveyance to private benefit halted any development. The uncertainty of the doctrine and prior use of the doctrine to hold transfers of Great Lakes and other public trust lands

⁶³ *Id.* (quoting *Paepcke v. Public Building Comm’n*, 263 N.E.2d 11, 21 (Ill. 1970) (holding use of park property for school purposes was not in violation of the public trust doctrine)).

⁶⁴ *People ex rel. Scott*, 360 N.E.2d at 779-81 (citing a litany of cases in which Illinois courts, and courts in general, have found conveyance of public trust lands to private interests to be in violation of the public trust doctrine and noting that the only conveyance to private purpose that withstood public trust consideration was Lake Shore Drive). *See also* Kilbert, *supra* note 58, at 49 (“Tracing cases involving legislative grants of submerged lands under Lake Michigan since *Illinois Central*, the court found only one instance where a legislative grant of submerged land under Lake Michigan did not violate the public trust: where the sale of a strip of shore was upheld in order to facilitate the extension of Lake Shore Drive over the reclaimed land.”).

⁶⁵ *People ex rel. Scott*, 360 N.E.2d at 781.

⁶⁶ *Id.*

⁶⁷ *People v. Kirk (Lakeshore Drive Case)*, 45 N.E. 830 (Ill. 1896).

⁶⁸ *Lake Michigan Fed’n v. U.S. Army Corps of Engineers*, 742 F. Supp. 441, 447 (N.D. Ill. 1990).

unconstitutional, going all the way back to *Illinois Central*, stands as a barrier to potential offshore wind project developers.

2. Indiana

Like in Illinois, the Indiana Supreme Court recently interpreted the public trust doctrine in *Gunderson v. State of Indiana* by referencing *Illinois Central* and held the doctrine to be a common law fiduciary duty of the state to hold certain lands in trust for the public.⁶⁹ The court also discusses how the public trust doctrine is also at least in part codified in the Indiana Code's lake preservation statute.⁷⁰ In analyzing the state's Lake Preservation Act,⁷¹ the court found that there was no intent by the legislature to abdicate the state's rights to this land by excluding Lake Michigan from the public protections provided by the act.⁷² In doing so, the court proffers Indiana's general public trust principle that "[e]ven if the legislature had intended to extinguish public trust rights in the shores of Lake Michigan, it lacked the authority to *fully* abdicate its fiduciary responsibility over these lands [except as to such parcels as are used in promoting the interests of the public therein]" (emphasis added).⁷³ As for the role of the legislature in public trust analysis, the court notes,

[B]eyond [the protected uses of navigation, commerce, or fishing], separation of powers compels us to exercise judicial restraint . . . [especially] where the legislature has codified, in part, our State's public trust doctrine. . . Thus, we conclude that any enlargement of public rights on the beaches of Lake Michigan beyond those recognized today is better left to the more representative lawmaking procedures of the other branches of government.⁷⁴

While this case was in part a decision on the Department of Natural Resources ability to define the line to which the public trust doctrine would apply, it exemplifies the beliefs of the Indiana court that (1) the public trust doctrine is a common law principle defined by *Illinois Central*; and (2) the legislature is in the position to make determinations on the expansion of the public trust doctrine, especially considering the codification of the public trust doctrine in Indiana statute. Indiana Statute provides that the citizens of Indiana have a vested right in the preservation and protection of Lake

⁶⁹ *Gunderson v. Indiana*, 90 N.E.3d 1171, 1183 (Ind. 2018).

⁷⁰ *Id.* at 1188 ("[T]he legislature has codified, in part, our State's public trust doctrine. See I.C. §§ 14-26-2-1 to -25.").

⁷¹ IND. CODE § 14-26-2 (2020).

⁷² *Gunderson*, 90 N.E.3d at 1183.

⁷³ *Id.* (quoting *Illinois Central* ("[t]he control of the State for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein.")).

⁷⁴ *Id.* at 1187.

Michigan.⁷⁵ Furthermore, this provision shows that Indiana recognizes the *Illinois Central* exception that states may abdicate public trust lands if the purpose is to promote a public interest. However, no Indiana case has adjudicated the standard or limits of this exception. Accordingly, the Indiana public trust doctrine remains uncertain in application. It leaves questions open about the extent of the exceptions as well as the balance between the state's control over the doctrine and that of other sources such as federal law and *Illinois Central*. These uncertainties, paired with the lack of public trust jurisprudence in Indiana, pose a risk to public trust concerns for potential offshore wind developers under this current legal regime.

3. Michigan

Michigan also recognizes the public trust doctrine as a common law principle applicable to the Great Lakes and other public trust bodies of water.⁷⁶ Michigan adopted a general rule in *Nedtweg v. Wallace*, citing to the principles of *Illinois Central* in saying, “[t]he rights of the public . . . [deny] the power [of the state], by grant or otherwise, to abdicate the trust by placing use and control in private hands to the curtailment or exclusion of public use.”⁷⁷ This rule has been succinctly stated by the courts to be, “the state, as sovereign, has an obligation to protect and preserve the waters of the Great Lakes and the lands beneath them for the public.”⁷⁸

Again, it is unclear what these broad statements mean in any particular case. As a general rule, “Michigan has an undoubted right to make use of its proprietary ownership of the land in question, [subject only to the paramount right of] the public [to] enjoy the benefit of the trust.”⁷⁹ This statement is further made in the context of determining whether Michigan must at all times “remain the proprietor of, as well as the sovereign over, the soil underlying navigable waters.”⁸⁰ What is somewhat clear is that there are qualifications on the public trust doctrine that serves as a means by which the state may convey property so long as the benefits of the trust for the public remain paramount or the state remains in proprietary control.⁸¹ The outcome of *Nedtweg* turned in part on both of these considerations. The legislative action in question was the leasing of lots to private persons suitable for cottages and summer homes. The court found that the Michigan legislature did not violate the public trust doctrine in leasing this land because the conveyance was structured as a lease, and furthermore, the conveyance was

⁷⁵ IND. CODE § 14-26-2.1-4(d).

⁷⁶ *Glass v. Goeckel*, 703 N.W.2d 58, 64 (Mich. 2005).

⁷⁷ *Nedtweg v. Wallace*, 208 N.W. 51, 54 (Mich. 1926) (citing *Illinois Central*, 146 U.S. 387 (1892)); *People v. Kirk (Lakeshore Drive Case)*, 45 N.E. 830 (Ill. 1896); *Saunders v. N.Y. Cent.*, 38 N.E. 992 (N.Y. 1894).

⁷⁸ *Glass*, 703 N.W.2d at 64.

⁷⁹ *Id.* at 65 (quoting *Nedtweg*, 208 N.W. at 53).

⁸⁰ *Glass*, 703 N.W.2d at 65.

⁸¹ *Id.*

a decision of the legislature as to “whether the public interests will be best served by leaving the lake bottom . . . or permit use thereof . . . to the greater benefit of the public.”⁸² Therefore, the legislature was not abdicating their rights, but rather the conveyance was made subject to the public trust⁸³ and for a greater public benefit.⁸⁴ Therefore, in Michigan, the legislature has significant leeway with regards to public trust lands so long as they do not abdicate both the property and the sovereignty over it, which makes lease structures effective.

While the exceptions are comparatively clearer in Michigan, there remains uncertainty with regards to the standards in judging public interest and public control.⁸⁵ While *Nedtweg* stands as an example of conveyance overcoming public trust scrutiny, no standard has been set beyond the court stating that there is not a strict prohibition on the disposal of lake bottomlands and that this is consistent with *Illinois Central*.⁸⁶ This uncertainty leaves important questions unanswered, and project developers need to overcome this uncertainty in any offshore wind project under the current legal regime.⁸⁷

4. Minnesota

Minnesota also recognizes the public trust doctrine as a common-law principle, noting that *Illinois Central* was the first case in which this principle was formally recognized.⁸⁸ Rather than explicitly adopting the holdings of *Illinois Central*, Minnesota has recognized what they call the “common-law public trust doctrine.”⁸⁹ This doctrine was first recognized in Minnesota, just one year after *Illinois Central*, with the Minnesota Supreme Court stating,

In this state, we have adopted the common law on the subject of waters, with certain modifications, suited to the difference in conditions between this country and England, . . . and . . . we have repudiated the doctrine that the state has any private or proprietary right (as had the king) in navigable waters, but that it holds them in its sovereign capacity, as trustee for the people, for public use.⁹⁰

The Minnesota doctrine recognizes the same rationale and principles as

⁸² *Nedtweg*, 208 N.W. at 54-55.

⁸³ *Glass*, 703 N.W.2d at 65 (citing *Nedtweg*, 208 N.W. at 54-55).

⁸⁴ *Nedtweg*, 208 N.W. at 54-55.

⁸⁵ *Id.* at 57.

⁸⁶ *Id.*

⁸⁷ Justices have even acknowledged the difficulties of adjudicating the public trust doctrine, even going so far as to state, “the . . . confused precedent that we all have valiantly struggled to decipher.” *Glass*, 703 N.W.2d at 81 (Young, J., concurring in part and dissenting in part).

⁸⁸ *White Bear Lake Restoration Ass’n ex rel. State v. Minn. Dep’t of Nat. Res.*, 946 N.W.2d 373, 385 (Minn. 2020).

⁸⁹ *Id.*

⁹⁰ *Lamprey v. Metcalf*, 53 N.W. 1139, 1143 (Minn. 1893).

in *Illinois Central*, with the core of the doctrine being the protection of public use from “private interruption and encroachment.”⁹¹ Primarily, this policy statement shows the powerful belief that the public trust doctrine in Minnesota is innately an anti-development doctrine, especially when the conveyance will be to private interests.

Minnesota stated the general rule for exceptions of conveyances to private interests in *State v. Longyear Holding Co.*⁹² In that case, the court said that the state has a “right as trustee to dispose of beneficial interests in such lands, provided that in doing so it (a) acted for the benefit of all the citizens, and (b) did not violate the primary purpose of its trust, namely, to maintain such waters for navigation and other public uses.”⁹³ This statement sets forth the standard which Minnesota applies to determine what would generally be considered the public benefit exception to the public trust doctrine. Furthermore, the court recognized the private use of land is not in violation of the doctrine when the state does not alienate the land or deprive the public of its use or rights in the land.⁹⁴ In that case, the court found that lease conveyance for use to Lake Mining Company for extraction of ore was not in violation of the public trust doctrine as the land was not alienated from public hands and the use by the private interests was a benefit to the public.⁹⁵

However, this ruling must be contrasted with *State v. Slotness*, which held that the condemning and conveyance of former lakebed lands for highway use was in violation of the public trust.⁹⁶ The court notes that “the construction of a public highway . . . is not remotely connected with navigation or any other water-connected public use. It is a land use and nothing more.” In doing so, the court explicitly refused to “extend the holding in *Longyear* beyond the unique situation upon which it was decided.”⁹⁷ This holding raises questions and certainly perpetuates the uncertainty as to how offshore wind development might be treated under the current Minnesota doctrine.

Thus, Minnesota has exceptions to public trust scrutiny, however, the exact standards are uncertain, and the public trust doctrine has still been used to stop development. These exceptions to the public trust doctrine are similar to the exceptions we have seen in other states: (1) that land is used for the public benefit, or (2) that the public retains some measure of control of the public trust property. As the foundational principles of Minnesota’s public trust doctrine are inherently anti-development, the standards for the exceptions are not clear, and public trust scrutiny has stood in the way of

⁹¹ *White Bear Lake Restoration Ass’n*, 946 N.W.2d at 386.

⁹² *State v. Longyear Holding Co.*, 29 N.W.2d 657 (Minn. 1947).

⁹³ *Id.* at 670.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Compare *State v. Slotness*, 185 N.W.2d 530, 533-34 (Minn. 1971), with *People v. Kirk*, 45 N.E. 830 (Ill. 1896).

⁹⁷ *Slotness*, 185 N.W.2d at 533.

development in the past, there is a significant risk posed to offshore wind development under the current legal regime.

5. New York

The public trust doctrine in New York has been applied broadly and has been in place since shortly after *Illinois Central*.⁹⁸ The Court of Appeals of New York, citing *Illinois Central*, adopted the public trust principles first in *Saunders v. New York Central & Hudson River R.R. Co.*, stating that the state holds the lands under navigable waters in trust for the public.⁹⁹ However, the anti-development principles of other states have not been the trend in New York. In *Saunders*, in determining whether a railroad company could retain title to lands below the original high-water mark of the Hudson River, the court established broad exceptions to the general *Illinois Central* principles. These exceptions are rooted in public interest, as in other states, but are much more sweeping. In *Saunders*, the court stated,

While the state holds the title to lands under navigable waters, in a certain sense, as trustee for the public, it is competent for the supreme legislative power to authorize and regulate grants of the same for public, or such other purposes as it may determine to be for the best interests of the state, and the legislature has conferred power upon the commissioners of the land office to make such grants for railroad purposes.¹⁰⁰

Therefore, even when presented with a substantially similar factual situation to that of *Illinois Central*, the court found that the state possessed the right to make a grant of land to railroads because of the public benefit of transportation of the railroad achieved by the legislative grant.¹⁰¹

The breadth of the exceptions to public trust doctrine scrutiny has been cited repeatedly by the courts of the state. In *Long Sault Development Co. v. Kennedy*, the court went so far as to say:

The power of the Legislature to grant land under navigable waters to private persons or corporations for beneficial enjoyment has been exercised too long and has been affirmed by this court too often to be open to serious question at this late date . . . the contemplated use, however, must be reasonable and one which can fairly be said to be

⁹⁸ For example, recent public trust cases such as *Union Square Park Cmty. Coal., Inc. v. N.Y.C. Dep't of Parks and Recreation*, 8 N.E.3d 797 (N.Y. 2014) deal with public trust questions extending all the way to the placement of restaurants in city parks.

⁹⁹ *Saunders v. N.Y. Cent. & Hudson River R.R. Co.*, 38 N.E. 992, 994 (N.Y. 1894).

¹⁰⁰ *Id.* at 994-95.

¹⁰¹ *Id.* (stating “the land which a railroad corporation acquires in this state, though it may be technically called a fee, is for the use as a public highway, and this is a use for the benefit of the public . . .”).

for the public benefit or not injurious to the public.¹⁰²

Citing *Coxe v. State of N.Y.*,¹⁰³ the court further states, “[f]or every purpose which may be useful, convenient, or necessary to the public, the state has the unquestionable right to make grants in fee or conditionally for the beneficial use of the grantee, or to promote commerce according to their terms.”¹⁰⁴ Thus, despite the public trust doctrine being adopted by the state, the exceptions are so broad that public trust scrutiny does not often stand in the way of development of public trust lands.¹⁰⁵ The legislature has been given the freedom to determine the public benefit and make conveyance in accordance with such a determination. But this power has not been absolute, as exemplified in the holding of *Long Sault Development Co. v. Kennedy*. There, the court found that the grant of the lands “virtually turns over to the corporation entire control of navigation at the Long Sault rapids,” abdicating the future duties of the state under the public trust.¹⁰⁶ While the case provides broad exceptions, the express language also exemplifies both anti-development and anti-monopoly principles.

These conclusions create an inherent confusion and murkiness about the doctrine and its exceptions. While there is broad authority conferred upon the legislature, the doctrine has still stood in the way of development. The deference to the legislature further raises many of the same unanswered issues as discussed above, including questions about the role of state legislative determinations, the extent to which states can define public trust standards, and the standards by which public trust exceptions will be judged. While it seems that New York has an easier pathway to offshore development, these questions linger, and so long as they remain unanswered, there is a risk posed to offshore wind development by the public trust doctrine.

6. Ohio

The general public trust doctrine principle of Ohio is stated in *State v. Cleveland & Pittsburgh Railroad Co.*¹⁰⁷ The Supreme Court of Ohio stated, “the state as trustee for the public cannot, by acquiescence, abandon the trust property or enable a diversion of it to private ends different from the object for which the trust was created.”¹⁰⁸ In citing *Illinois Central*, the court concluded that title of lands under Lake Erie resides with the state and that

¹⁰² *Long Sault Dev. Co. v. Kennedy*, 105 N.E. 849, 851-52 (N.Y. 1914).

¹⁰³ *Coxe v. State of N.Y.*, 39 N.E. 400, 402 (N.Y. 1895).

¹⁰⁴ *Long Sault Dev. Co.*, 105 N.E. at 852.

¹⁰⁵ See also *People v. Steeplechase Park Co.*, 113 N.E. 521 (N.Y. 1916) (confirming the principles of the many New York cases in which public trust lands have been conveyed to private interests).

¹⁰⁶ *Id.*

¹⁰⁷ *State v. Cleveland & Pittsburgh R.R. Co.*, 113 N.E. 677, 682 (Ohio 1916).

¹⁰⁸ *Id.*

land is held for the trust of the public.¹⁰⁹ Following *State v. Cleveland & Pittsburgh Railroad Co.*, Ohio codified the public trust doctrine in the Fleming Act of 1917. The current public trust doctrine of Ohio is codified in state statute, stating in relevant part:

It is hereby declared that the waters of Lake Erie consisting of the territory within the boundaries of the state, extending from the southerly shore of Lake Erie to the international boundary line between the United States and Canada, together with the soil beneath and their contents, do now belong and have always, since the organization of the state of Ohio, belonged to the state as proprietor 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.¹¹⁰

Exceptions are further codified in statute:

Whenever the state . . . upon application of any person who wants to develop or improve part of the [submerged lands of Lake Erie] . . . determines that any part of the territory can be developed and improved or waters thereof used as specified in the application without impairment of the public right . . . a lease of all or any part of the state's interest therein may be entered into with the applicant.¹¹¹

This exception encompasses the two major general exceptions in the public trust doctrine we have seen so far and makes them conjunctive: the conveyance must be in the public interest *and* must remain in the control of the state through a lease rather than in fee.

It is under this framework that the court analyzes public trust doctrine arguments. For example, in *Lemley v. Stevenson*, the court found that a lease of submerged lands to preserve a historic dock and to prevent shoreline erosion was in the public benefit, and the legislature and administrative agencies followed the process codified in statute to make such a grant, and therefore there was no violation of the Ohio public trust doctrine.¹¹² However, Ohio's public trust jurisprudence has focused greatly on the rights of littoral landowners and has noted that "the state as trustee for the public cannot, by acquiescence, abandon the trust property or enable a diversion of

¹⁰⁹ *Lemley v. Stevenson*, 661 N.E.2d 237, 242 (Ohio Ct. App. 6th Dist. 1995) (citing *State v. Cleveland & Pittsburgh R.R. Co.*, 113 N.E. 677, 682 (Ohio 1916)). *See also* *State ex rel. Squire v. City of Cleveland*, 82 N.E.2d 709 (Ohio 1948).

¹¹⁰ Ohio Rev. Code Ann. § 1506.10 (West 2020).

¹¹¹ *Id.* § 1506.11.

¹¹² *Lemley*, 661 N.E.2d at 243-44.

it to private ends different from the object for which the trust was created.”¹¹³ This case, and those similar, reiterate the idea that the public trust doctrine in Ohio is an anti-development principle, and any conveyance will be restricted within the bounds described above. Even in littoral disputes, the public trust doctrine has served to halt development and/or reverse it. For example, in *Schnittker v. State*, the court held that the Department of Natural Resources had the power to regulate littoral land uses under the public trust doctrine, and a failure to submit to those regulations gave the state the power to remove the dock of a littoral landowner.¹¹⁴

Therefore, the uncertainty in the application of the Ohio public trust doctrine to the Great Lake’s submerged lands and the unclear standards regarding the public purpose and public rights exceptions creates ambiguities which pose a risk to development of offshore wind in Ohio.

7. Pennsylvania

Pennsylvania adopted, pre-*Illinois Central*, the common law concept that submerged lands are held by the state and for the trust of the public.¹¹⁵ As a general principle, the court held that the state could not dispose of property so held to a private individual for private use.¹¹⁶ Generally, these public rights include the public’s rights of navigation, fishing, and other public trust uses.¹¹⁷ Pennsylvania follows *Illinois Central*, with the court stating, “title to the underlying submerged land remains in the Commonwealth and may not be alienated in fee by the Commonwealth government.”¹¹⁸ Most precedent in Pennsylvania relating to the standards of the public trust doctrine falls under adjudication of conveyances under the Pennsylvania “Donated or Dedicated Property Act” (DDPA).¹¹⁹ This act sets forth that donation or dedication of land to a municipality for a public use is “held by [the] political subdivision as trustee, for the benefit of the public with full legal title in the said trustee.”¹²⁰ It is under this analysis that the Pennsylvania Supreme Court has set forth this general statement for the public trust doctrine as “the common law public trust doctrine strictly prohibits a governmental body from conveying public lands to an entity or

¹¹³ *Schnittker v. State*, No. 00AP-976, 2001 WL 410280, at *5 (Ohio Ct. App. 10th Dist. Apr. 24, 2001) (citing *State v. Cleveland & Pittsburgh R.R. Co.*, 113 N.E. 677, 682 (Ohio 1916)).

¹¹⁴ *Id.*

¹¹⁵ *Poor v. McClure*, 77 Pa. 214, 219 (Pa. 1873).

¹¹⁶ *Id.*

¹¹⁷ Kilbert, *supra* note 58, at 55 n.314 (citing a variety of Pennsylvania cases and legal opinions which qualify riparian rights to the public trust).

¹¹⁸ *Delaware Ave., L.L.C. v. Dep’t of Conservation & Nat. Res.*, 997 A.2d 1231, 1233 n.4 (Pa. Commw. Ct. 2010) (citing *The New York and Erie R.R. Co. v. Young*, 33 Pa. 175 (1859) and *City of Philadelphia v. Commonwealth*, 130 A. 491 (Pa. 1925)).

¹¹⁹ 53 P.S. §§ 3381–3386 (1959).

¹²⁰ *Id.* § 3382

person for private use.”¹²¹

While setting forth this general rule, however, the Pennsylvania Supreme Court has readily acknowledged confusion in applying the public trust doctrine. The court has stated, “we also recognize that the ‘public trust doctrine’ does not set forth universally applicable black letter law . . . scholars of public trust law . . . acknowledge that the ‘amorphous’ public trust concept merely provides a potential tool through which citizens may attempt to develop a comprehensive approach to natural resource management.”¹²² The court further notes “the constitutional and legislative variations among the states approach the infinite.”¹²³

Under the existing DDPA precedent, Pennsylvania has thwarted the development of these public trust lands. In a challenge of a conveyance of park land to a developer, the court held that the conveyance would allow the dedicated parcels to be used for residential housing, a private purpose that was in violation of the doctrine.¹²⁴ Furthermore, the court rejected an argument that the conveyance was not in fee, rather via easement, by noting that the easement was a land interest that allowed for control of the land in violation of the public trust.¹²⁵ While not explicitly stated, the case law indicates two critical factors, yet again, to Pennsylvania public trust analysis: (1) whether the land will be put to use for a public purpose; and (2) whether the commonwealth retains or conveys control over that land to the private interest. The lack of precedent and the uncertainty of these exceptions in Pennsylvania pose a risk to current offshore wind projects. Without clear guidance as to cases involving the development of submerged lands of the Great Lakes, public trust scrutiny and potential litigation serve as a barrier to the proliferation of offshore wind projects in Pennsylvania.

8. Wisconsin

The Wisconsin public trust doctrine has been found to be rooted in the Wisconsin State Constitution article IX, Section 1.¹²⁶ It is notable that it has

¹²¹ *In re Borough of Downingtown*, 161 A.3d 844, 877 (Pa. 2017) (citing *Payne v. Kassab*, 361 A.2d 263, 268 (Pa. 1976) and *Bd. of Tr. of Phila. Museums v. Tr. of Univ. of Pa.*, 96 A. 123, 123-24 (Pa. 1915)).

¹²² *Pennsylvania Environmental Defense Foundation v. Commonwealth*, 161 A.3d 911, 933 n.26 (Pa. 2017).

¹²³ *Id.* (citing William H. Rodgers Jr., *Handbook on Environmental Law*, § 2.16 (West Pub. Co. 1977)).

¹²⁴ *In re Borough of Downingtown*, 161 A.3d 844, 877 (Pa. 2017).

¹²⁵ *Id.*

¹²⁶ *Borsellino v. Dep’t of Nat. Res.*, 606 N.W.2d 255, 261 (Wis. Ct. App. 1999). WIS. CONST. art. IX, § 1 (“The state shall have concurrent jurisdiction on all rivers and lakes bordering on this state so far as such rivers or lakes shall form a common boundary to the state and any other state or territory now or hereafter to be formed, and bounded by the same; and the river Mississippi and the navigable waters leading into the Mississippi and St. Lawrence, and the carrying places between the same, shall be common highways and forever free, as well to the inhabitants of the state as to the citizens of the United States, without any tax, impost or

further been found by the courts of Wisconsin that the doctrine originated in the Northwest Ordinance of 1787.¹²⁷ Out of this section of the constitution, the court has found, “the state holds the beds of navigable waters in trust for public use.”¹²⁸ As a general principle, the Wisconsin State Legislature has the power to regulate and enforce these public trust principles,¹²⁹ and has used this power to expand and clarify the doctrine.¹³⁰ The public trust doctrine serves to protect the historic right of navigation but has been further expanded to include other public uses for various purposes.¹³¹ After recognizing the public trust doctrine is found in the constitution, the court has imported the principles of the doctrine from *Illinois Central* and public trust scholarship. Generally, the Wisconsin public trust doctrine is “premised on the idea that private ownership of public resources is improper and provides the public with a right to the benefit of certain public resources.”¹³² In adjudicating public trust doctrine disputes in the Great Lakes, the court has applied these general principles of *Illinois Central*.¹³³ In applying these principles, the court has prevented development of public trust lands, as was the case in *ABKA Ltd. P’ship v. Wisconsin Dep’t of Nat. Res.*, where the court found that the conversion of a marina to a condominium violated the public trust doctrine as it would vest control over the trust lands to private individuals.¹³⁴

The Wisconsin public trust doctrine also imports the two exceptions from *Illinois Central*: that the doctrine is not violated if the state does not abdicate control, and that the state may lose control over the trust resources for “such parcels as are used in promoting the interests of the public therein.”¹³⁵ In stark contrast to *People ex rel. Scott v. Chicago Park Dist.*

duty therefor.”).

¹²⁷ *R.W. Docks & Slips v. State*, 628 N.W.2d 781, 787-88 (Wis. 2001).

¹²⁸ *Borsellino v. Wisconsin Dept. of Nat. Res.*, 606 Wis.2d 430, 443 (Wis. Ct. App. 1999).

¹²⁹ *ABKA Ltd. P’ship v. Wisconsin Dep’t of Nat. Res.*, 648 N.W.2d 854, 858 (Wis. 2002).

¹³⁰ Evann D. S. Derus, *A New Must of the Public Trust: Modifying Wisconsin’s Public Trust Doctrine to Accommodate Modern Development While Still Serving the Doctrine’s Essential Goals*, 99 MARQ. L. REV. 447, 456 (2015). It has further been found that “the legislature may authorize limited encroachments upon the beds of navigable waters when it will serve the public interests,” often being applied to private docks and the like, but inapplicable for our purposes. *Borsellino*, 606 Wis.2d at 443.

¹³¹ *ABKA Ltd. P’ship*, 648 N.W.2d at 858; *R.W. Docks & Slips v. State*, 628 N.W.2d 781, 787-88 (Wis. 2001). Because of this expanse, Wisconsin’s public trust doctrine has been seen as one of the most protective of the Great Lakes states. Derus, *supra* note 130, at 457.

¹³² *ABKA Ltd. P’ship v. Wisconsin Dep’t of Nat. Res.*, 635 N.W.2d 168, 179 (Wis. Ct. App. 2002). While this case was affirmed by the Wisconsin Supreme Court on other grounds, the court adopted the reasoning of this court in terms of setting forth the public trust doctrine principles. See *ABKA Ltd. P’ship*, 648 N.W.2d 854. See also *R.W. Docks & Slips*, 628 N.W.2d at 787-88.

¹³³ *E.g.*, *City of Milwaukee v. Wisconsin*, 214 N.W. 820, 832 (Wis. 1923).

¹³⁴ *ABKA Ltd. P’ship*, 648 N.W.2d at 858.

¹³⁵ *City of Milwaukee*, 214 N.W. at 832. Note that as the definition of public use in the public trust doctrine has expanded, it logically expands this exception as well, as the

from Illinois, the Wisconsin Supreme Court permitted a conveyance of land to the Illinois Steel Company, holding that the conveyance was in the public interest.¹³⁶ As a factor in whether the public purpose was primary or incidental in the conveyance, the court considered whether the grant of the land was part of a larger plan intending to bring a benefit to the public. The court found that the conveyance of the land to the Illinois Steel Company was part of an “entire plan” to aid the city in navigation and commerce, and thus the primary purpose of the conveyance was public in nature.¹³⁷ The court further relies on previous precedent, which relied upon public health and public welfare benefits in finding private use of trust land allowable as a public benefit.¹³⁸ This sets forth the understanding that, while as a basis the public trust doctrine is anti-development, the exceptions do, in fact, allow change to be brought to the trust lands.¹³⁹ The outer limit is set—a conveyance for the sole benefit of private parties will not pass public trust scrutiny—however, there is a lack of clarity as to where the line sits between conveyance for public health and welfare and a purely private conveyance.¹⁴⁰ The only guidance on this standard is in *State v. Pub. Serv. Comm’n*, where the court looked to five persuasive factors in finding the grant of land for park purposes, even though title will be held by private interests.¹⁴¹ The court noted,

1. Public bodies will control the use of the area. 2. The area will be devoted to public purposes and open to the public. 3. The diminution of lake area will be very small when compared with the whole of Lake Wingra. 4. No one of the public uses of the lake as a lake will be destroyed or greatly impaired. 5. The disappointment of those members of the public who may desire to boat, fish or swim in the area to be filled is negligible when compared with the greater convenience to be afforded those members of the public who use the city park.¹⁴²

These factors point to many of the same exception factors, such as public control, public use, and interference with existing public uses. While this clearly shows that the Wisconsin public trust doctrine does not prohibit transfers of trust lands, the transfer must meet this public purpose test which remains unclear. Accordingly, while Wisconsin seemingly defines public interest more broadly than other states, the uncertainty of the doctrine and the exception standard, with only the five factors listed above to look to,

conveyance may be allowed so long as it is in the “improvement of the interest thus held.”

¹³⁶ *Id.*

¹³⁷ *Id.* at 830.

¹³⁸ *Id.* at 830-31.

¹³⁹ See Derus, *supra* note 130, at 457.

¹⁴⁰ *Priewe v. Wisconsin State Land & Improvement Co.*, 67 N.W. 918, 918 (Wis. 1896).

¹⁴¹ *State v. Pub. Serv. Comm’n*, 81 N.W.2d 71, 73-74 (Wis. 1957).

¹⁴² *Id.*

continues to leave potential developers with uncertainty in terms of public trust scrutiny and potential litigation. While it may have been easy for the court to find a park with public access was in the public interest, the translatability of these factors to other analyses leaves questions remaining for any project proposed to use the submerged lands of the Great Lakes.

C. Public Trust Doctrine Conclusions

These preceding analyses illustrate the difficulty of navigating the public trust doctrine of each state, even if it is possible to find the “guiding principle” of that state. While every state has adopted the public interest exception and has quoted *Illinois Central* for the guiding principles, the outcomes of the cases discussed still do not provide clear answers to whether future projects would or would not fall at the hands of the public trust doctrine. The confusion lies not always in the variance between the states, but within each individual public trust doctrine. As is frequently the case when analyzing this doctrine, the confusion often prevails.

The foregoing discussion (albeit more of an acknowledgement of the confusion surrounding the doctrine) exemplifies the two major ways in which the public trust doctrine stands as a barrier to offshore wind farm development. First, there may be substantive claims as to whether the elements of the public trust doctrine are met. While there is likely no clear answer in any public trust doctrine case, it is clear that at the core, the public trust doctrine is an anti-development doctrine, and therefore, questions will always arise when a project proposal is discussing development of submerged public trust lands. Offshore wind projects require development of submerged lands of the Great Lakes, and the parties who have the means and expertise to engage in such development are often private companies. As with all business, the purpose of these projects is primarily to make money. Based on the core principle that conveyance of public trust lands to private interests is in violation of the doctrine, there are questions about the viability of such projects to pass public trust scrutiny.

Second, the uncertainty itself may be fatal to offshore wind projects. Each state serves as a breeding ground for litigation, project delays, and overall cost increases. Top scholars have spent decades attempting to determine the principles of the public trust doctrine. Even so, the confusion perpetuates, and no more than a few common threads have been found. This uncertainty leaves project developers at risk of cost increases due to lengthy public challenges, insecurity about compliance with legal requirements, and an ultimate lack of knowing whether a project may come to fruition.¹⁴³ Such

¹⁴³ As the solution posed is an international agreement, it is worth noting that Canada also has the concept of the public trust doctrine. While Canada’s doctrine is similar to its U.S. counterpart, environmentally focused litigants have attempted to protect natural resources in a number of cases by raising the public trust doctrine but have never succeeded. For a longer discussion of the Canadian public trust doctrine and how it has thus far been unsuccessful as

unknowns can often delay, derail, or completely end these major projects.¹⁴⁴ One salient example of this exact concern came out of the Cape Wind project, the first offshore wind farm proposed in the United States.¹⁴⁵ While not a Great Lakes project, the threat of litigation from a variety of groups included claims on public trust doctrine grounds.¹⁴⁶ The court ultimately found that there was no violation of the public trust doctrine; however, the project was delayed for nearly a decade because of this litigation, drastically increasing the costs on the developer.¹⁴⁷ The very nature of the public trust doctrine and the confusion likely will continue to breed these claims.¹⁴⁸

While these barriers are often recognized by wind energy supporters, contemporary solutions have fallen short thus far.¹⁴⁹ I turn now to a new solution to these problems: an international agreement structured to comply with the exceptions to the public trust doctrine and spur development of wind energy in the Great Lakes.

III. AN INTERNATIONAL TREATY WITH STATES ADOPTING THROUGH INTERSTATE COMPACT HAS THE OPPORTUNITY TO UNLOCK THE POTENTIAL OF THE GREAT LAKES AND INFORM PUBLIC TRUST DOCTRINE ANALYSES BY SHOWING THAT DEVELOPMENT IS IN THE PUBLIC INTEREST.

In light of this tremendous legal uncertainty analyzed in the prior sections, any framework for offshore wind development in the Great Lakes must be structured to minimize the legal barriers posed by the public trust doctrine. Notwithstanding all the confusion existing in the public trust

a litigation strategy, *see* Vladislav Mukhomedzyanov, *Canadian Public Trust Doctrine at Common Law: Requirements and Effectiveness*, 32 J. ENVTL. L. PRAC. 317 (2019).

¹⁴⁴ For example, the Cape Wind Associates project off the coast of Massachusetts took nearly a decade to litigate, and the Icebreaker wind project in Ohio experienced similar delays.

¹⁴⁵ Hanna Conger, Comment, *A Lesson from Cape Wind: Implementation of Offshore Wind Energy in the Great Lakes Should Occur Through Multi-State Cooperation*, 42 LOY. U. CHI. L.J. 741, 752-58 (2011).

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 756-57.

¹⁴⁸ *Id.* (“Every future offshore wind farm must contend with the relevant state’s public trust doctrine, since each state is obligated to abide by the Doctrine, and each wind farm must transmit its electricity to customers on the mainland via transmission cables like those at issue in this case.”). For example, the Lake Erie Energy Development Corp. (LEEDCo) was developed a decade ago with the goal of bringing offshore wind to the Great Lakes and is just now potentially breaking through. Jeffrey Tomich, *Great Lakes Offshore Wind—Possibility or Pipe Dream?*, E&E NEWS (Nov. 1, 2019, 6:23 AM), <https://www.eenews.net/stories/1061403233>.

¹⁴⁹ *E.g.*, Memorandum of Understanding to Create a Great Lakes Offshore Wind Energy Consortium to Coordinate Issues of Regional Applicability for the Purpose of Promoting the Efficient, Expedient, Orderly and Responsible Evaluation of Offshore Wind Power Project in the Great Lakes (2012), https://www1.eere.energy.gov/wind/pdfs/great_lakes_offshore_wind_energy_consortium_mou.pdf, was signed in 2012 and little progress has been made to overcome these barriers.

doctrine, as we have seen, there are two common exception threads that minimize public trust concerns and may allow development to overcome public trust scrutiny. While no solution will completely deal with this public trust uncertainty, these exceptions and common threads pose the most promising way to structure a legal regime and development deals for offshore wind turbines. As shown throughout the analysis of the public trust doctrines of the eight Great Lakes states, the two major exception factors which can enable the public trust doctrine to be overcome are (1) if the state keeps title to the land or some other mechanism in which the state preserves control over the land; and (2) if the project is indisputably in the public benefit or does not impair public interest.¹⁵⁰ Generally, courts analyze both of these factors in determining whether a transaction complies with the public trust doctrine.¹⁵¹

The difficulty then becomes structuring development projects and a legal regime in a way that maximizes these two elements. Perhaps the most promising way to do so is to establish an international agreement with a subsequent interstate compact. Making a clear statement on the public interest benefits of offshore wind and laying a public foundation for the structure of any private development deals will allow developers more certainty in engaging in these projects.

A. Overcoming Public Trust Doctrine Violations Through the Exceptions Set Forth in the Doctrine.

1. Title Remains in the Public or the Grant is Subject to Public Control.

As discussed above, one common exception to the public trust doctrine occurs when the state retains control of the lands, or the title remains in the state. The foundation of this exception is set forth in *Illinois Central*. The Court stated, “[t]he State can no more abdicate its trust over property in which the whole people are interested . . . so as to leave them *entirely under*

¹⁵⁰ *E.g.*, *Illinois Central*, 146 U.S. at 453. Justice Fields states, “The control of the state for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein.” He further states, “The state can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils underneath them, so as to leave them entirely under the use or control of private parties . . . than it can abdicate its police powers in the administration of government and the preservation of the peace.” This has been interpreted to authorize small privatizations of trust resources where the bulk of the trust resources remain public. Michael C. Blumm, *The Public Trust Doctrine and Private Property: The Accommodation Principle*, 27 PACE ENVTL. L. REV. 649, 660 (July 2010), <https://www.law.gwu.edu/sites/g/files/zaxdzs2351/f/downloads/ThePublicTrustDoctrineandPrivateProperty.pdf>. See also *supra* Part II (analyzing Great Lakes states public trust doctrine and the exceptions of each state).

¹⁵¹ *E.g.*, *Lake Michigan Federation v. U.S. Army Corps of Engineers*, 742 F. Supp. 441, 445 (N.D. Ill. 1990) (analyzing the structure of the conveyance to Loyola University of public trust land and intended use of that land and holding it in violation of the public trust doctrine because the state did not retain proper public control and the use was not sufficiently in the public interest).

*the use and control of private parties.*¹⁵² This has been recognized by courts as allowing grants of public trust land in certain cases where the public continues to control the land. This exception is shown in many of the Great Lakes states' public trust doctrines, as discussed above. For example, in *Friends of Parks v. Chicago Park District*, a grant of public trust land to the Chicago Bears was found to not be in violation of the doctrine because "the park district will continue in its previous capacity as landlord under a lease agreement with the Bears and will continue in its existing role as owner of the remainder of the Burnham Park property."¹⁵³ Cases such as these stand for the fact that simply because a transaction leaves trust land benefitting private parties, it does not mean that there will be a violation of the doctrine.¹⁵⁴ However, this exception continues to be restrictively applied in certain circumstances. For example, the court found in *Lake Michigan Federation v. U.S. Army Corps of Engineers* that Illinois' retention of a right of reentry and other conditions of conveyance was not sufficient to constitute retention of public control over the public trusts lands with which Loyola would take ownership.¹⁵⁵

Another generally applied consideration under this exception is the magnitude of the land grant. In *Illinois Central*, the Court takes special note of the fact that the grant to the railroad encompassed more than 1,000 acres and the impact of this land on the commerce of Chicago.¹⁵⁶ Throughout the opinion, the Court acknowledges that the public trust has been violated when a purely private corporation has been granted, in essence, a monopoly as the railroad had been.¹⁵⁷ Therefore, smaller magnitude trust conveyances, where there remains a degree of private control, seemly set forth an example of the type of project that, even under the public trust doctrine uncertainty, pass

¹⁵² *Illinois Central*, 146 U.S. at 453 (emphasis added).

¹⁵³ *Friends of Parks v. Chicago Park Dist.*, 786 N.E.2d 161, 170 (Ill. 2003).

¹⁵⁴ *Id.* ("The results do not violate the public trust doctrine even though the Bears also benefit from the completed project."). See also Sax, *supra* note 29, at 486-87 ("The first point that must be clearly understood is that there is no general prohibition against the disposition of trust properties.").

¹⁵⁵ *Lake Michigan Federation*, 742 F. Supp. at 445.

¹⁵⁶ *Illinois Central*, 146 U.S. at 454 ("The area of the submerged lands proposed to be ceded by the act in question to the railroad company embraces something more than 1,000 acres, being, as stated by counsel, more than three times the area of the outer harbor, and not only including all of that harbor, but embracing adjoining submerged lands, which will, in all probability, be hereafter included in the harbor. It is as large as that embraced by all the merchandise docks along the Thames at London; is much larger than that included in the famous docks and basins at Liverpool; is twice that of the port of Marseilles, and nearly, if not quite, equal to the pier area along the waterfront of the city of New York.").

¹⁵⁷ See Kearney, *supra* note 31, at 805. While Kearney and Merrill ultimately conclude their in-depth analysis of the history of *Illinois Central* that the railroad was not given the equivalent of a monopoly, they note, "Field's chosen narrative drew a picture of a powerful and privileged corporation endowed by a short-sighted legislature with unprecedented powers over a traditionally public resource."

muster.¹⁵⁸

2. Public Purpose or Non-impairment of Public Interest

An additional common thread exemplified in the discussion above is that public trust scrutiny can be overcome if the conveyance is for a public purpose, or the conveyance will not impair the public interest in the land. Generally, a transaction may survive public trust doctrine scrutiny if the conveyance promotes an interest of the public.¹⁵⁹ Again, the exception is generally found in *Illinois Central*, where the Court states,

The control of the State for the purposes of the trust can never be lost, except as to such parcels as are used in promoting the interests of the public therein or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining.¹⁶⁰

The most common defense to a transfer being attacked under the public trust doctrine is that the land will be used in promoting the public interest. Throughout the Great Lakes states, courts have found conveyances of public trust land to be valid notwithstanding the public trust doctrine on these grounds, as shown above.¹⁶¹ In Wisconsin, the grant of public trust land to a steel corporation for private purposes was not invalidated by the public trust doctrine because the grant was part of a broader project which served a public purpose of navigation and commerce.¹⁶² Illinois found the expansion of Lake Shore Drive over public trust lands was not in violation because the purpose of the statute was a direct public benefit.¹⁶³ While questions remain as to the standard for analyzing public interest or to what the extent the public interest must be,¹⁶⁴ and there is a great deal of variance and confusion between states, there is no question that projects in the public interest have the capability to overcome public trust doctrine concerns.¹⁶⁵

B. How International Agreements with States Adopting Principles Through Interstate Compact Can Overcome Public Trust Concerns.

The public trust doctrine has been shown to be generally unpredictable

¹⁵⁸ Blumm, *supra* note 150, at 660-61.

¹⁵⁹ *E.g.*, *Illinois Central*, 146 U.S. at 453. *See also supra* Part II (analyzing the public trust doctrine of each of the Great Lakes states).

¹⁶⁰ *Illinois Central*, 146 U.S. at 453.

¹⁶¹ *See supra* Part II (analyzing the public trust doctrine of each of the Great Lakes states).

¹⁶² *See City of Milwaukee v. Wisconsin*, 214 N.W. 820, 830 (Wis. 1923).

¹⁶³ *See People v. Kirk (Lakeshore Drive Case)*, 45 N.E. 830, 836 (Ill. 1896) (holding that the main purpose of the act conveying the land was to allow public officials to construct a needed extension of Lake Shore Drive for direct public benefit).

¹⁶⁴ *See Kilbert, supra* note 58, at 31 n.188.

¹⁶⁵ For a brief discussion about the exceptions to the public trust doctrine based on public purpose, see Blumm, *supra* note 150, at 660-62.

and full of confusion, and in each of the eight states, it is both difficult to define and a barrier to development of submerged lands. Nonetheless, there is a distinct possibility that an international agreement between the United States and Canada, with all Great Lakes states adopting through interstate compact, can serve to minimize public trust scrutiny and maximize the potential to overcome these barriers. Recognizing that there are common exceptions sewn into the public trust doctrine both generally and in each of the Great Lakes states, such an agreement has the potential to provide a framework for overcoming public trust doctrine concerns, thus bringing more certainty to developers moving forward with these projects.

It must first be understood whether such a solution is legally possible and the precedential backdrop with which these agreements would be made. There is no question that the United States and the states therein have the power to enter into a treaty and an interstate compact, respectively. The President is given the power, pursuant to consent of the Senate, to make treaties.¹⁶⁶ While Article I, Section 10, precludes states from entering into any treaty themselves,¹⁶⁷ States were conferred the power to, with the consent of congress, enter into agreements or compacts with other states.¹⁶⁸

Looking at history, it is clear that the United States and Canada, as well as the Great Lakes states, have significant precedent for making agreements such as the one proposed here. With regard to substantive legal agreements between the United States and Canada, the Boundary Waters Treaty¹⁶⁹ and the Great Lakes Water Quality Agreement¹⁷⁰ provide two key examples. The Boundary Waters Treaty established a legal framework between the two countries with regard to obligations for navigability, commerce, and pollution.¹⁷¹ Furthermore, it delineated the powers of each government, giving each nation the power to carry on “governmental works in boundary waters . . . wholly on its own side of the line.”¹⁷² The Great Lakes Water Quality Agreement worked in addition to this treaty, reinforcing a collaborative approach to water quality in the Great Lakes and defining

¹⁶⁶ U.S. CONST. art. II, § 2, cl. 2. (“He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur.”).

¹⁶⁷ U.S. CONST. art. I, § 10, cl. 1. Note, Congress has generally not been favorable to allow state compacts to include binding agreements with Canadian provinces with regard to the Great Lakes. See Noah D. Hall & Benjamin C. Houston, *Law and Governance of the Great Lakes*, 63 DEPAUL L. REV. 723, 744-51 (2014), https://www.greatlakeslaw.org/files/law_and_governance_of_the_great_lakes.pdf.

¹⁶⁸ U.S. CONST. art. I, § 10, cl. 3.

¹⁶⁹ The Boundary Waters Treaty of 1909, Gr. Brit.-U.S., Jan. 11, 1909, 36 Stat. 2448, [https://ijc.org/sites/default/files/2018-07/Boundary Water-ENGFR.pdf](https://ijc.org/sites/default/files/2018-07/Boundary%20Water-ENGFR.pdf).

¹⁷⁰ Great Lakes Water Quality Agreement, Ca.-U.S., Sept. 7, 2012, https://www.canada.ca/content/dam/eccc/migration/main/grandslacs-greatlakes/a1c62826-72be-40db-a545-65ad6fcea92/1094_canada-usa-20glwqa-20_e.pdf.

¹⁷¹ The Boundary Waters Treaty of 1909, Gr. Brit.-U.S., art. II and III, Jan. 11, 1909, 36 Stat. 2448, [https://ijc.org/sites/default/files/2018-07/Boundary Water-ENGFR.pdf](https://ijc.org/sites/default/files/2018-07/Boundary%20Water-ENGFR.pdf).

¹⁷² *Id.*

specific objectives that each party would be bound to under the agreement.¹⁷³

Generally, these major treaties can inform the structure of a treaty between the nations with regard to offshore wind development. First, they establish precedent on behalf of both nations to engage in legally binding agreements which put forth new legal regimes with regard to the topic of the Great Lakes. Furthermore, each agreement is structured in a way to demonstrate the benefit of the agreement prior to putting forth the specific terms of the agreement.¹⁷⁴ This will become critical, as discussed below, in maximizing the treaty to set forth a favorable legal regime in the Great Lakes.

The Great Lakes states further have an established practice of entering into interstate compacts with regard to the Great Lakes. Primarily, the Great Lakes Basin Compact¹⁷⁵ set forth collaborative agreements between the Great Lakes states on the development, conservation, and maximization of benefits of the Great Lakes and the basin surrounding. Furthermore, these states very recently showed a willingness to specifically support offshore wind development in the lakes through the Great Lakes Offshore Wind Energy Consortium Memorandum of Understanding signed in 2012.¹⁷⁶ Again, these agreements highlight the benefits brought by the Compact the states were entering into and then go on to establish the means by which this will be accomplished and the obligations on the parties to the agreement.

Based on the foregoing discussion about the difficulties in overcoming the public trust doctrine and the common exceptions to the doctrine, the treaty and subsequent interstate compact (“the agreements”) adopting the principles should primarily inform any public trust doctrine analysis. Generally, the agreements should be structured to establish a process by which, as part of the “Great Lakes Offshore Wind Development Project,”¹⁷⁷ the United States (and the respective states) and Canada work with developers to develop offshore wind generation farms in the Great Lakes in conformity and recognizing these current legal boundaries.

First, the agreements should unequivocally declare, and highlight, the public interest and benefits that are seen through the proliferation of offshore wind development. As discussed in the introduction to this analysis, the

¹⁷³ Great Lakes Water Quality Agreement, Ca.-U.S., Sept. 7, 2012, https://www.canada.ca/content/dam/eccc/migration/main/grandslacs-greatlakes/a1c62826-72be-40db-a545-65ad6fcaee92/1094_canada-usa-20glwqa-20_e.pdf.

¹⁷⁴ *E.g.*, The Great Lakes Water Quality Agreement begins with acknowledgements of “the vital importance of the Great Lakes to the social and economic well-being of both countries, the close connection between quality of the Waters of the Great lakes and the environment and human health, as well as the need to address the risks to human health posed by environmental degradation.” *Id.* at 3.

¹⁷⁵ Great Lakes Basin Compact Congressional Consent, Pub. L. No. 90-419 (1968), <https://www.glc.org/wp-content/uploads/GLC-GreatLakes-Basin-Compact-2019.pdf>.

¹⁷⁶ Memorandum to Create a Great Lakes Offshore Wind Energy Consortium (2012), https://www1.eere.energy.gov/wind/pdfs/great_lakes_offshore_wind_energy_consortium_mou.pdf.

¹⁷⁷ This name is inserted simply for the sake of this argument.

development of renewable energy, but especially offshore wind energy generation, provides distinct benefits to the public at large. Some scholars have made the argument that there should be no public trust doctrine issues at all with offshore wind simply based on the climate change mitigation impacts and the public benefit that come with the development of these generating facilities.¹⁷⁸ Without a doubt, renewable energy development serves to benefit the public from impending climate implications.¹⁷⁹ The additional environmental benefits such as clean water and clean air also cannot be overlooked. Distributed generation and renewable generation also contribute to economic stability, energy security, and national security.¹⁸⁰ These factors all point to the public interest and benefit of such projects.

Furthermore, the agreements should emphasize that the development of offshore wind will be done with minimal intrusion into navigation or enjoyment of the lakes.¹⁸¹ As noted above, the exceptions to public trust scrutiny factor in the impairment of the public interest, including navigation and enjoyment.¹⁸² Certain processes can be implemented and steps can be taken to develop offshore wind to minimize impacts on navigation, not only including maritime navigation, but also air transportation and radar.¹⁸³ With regards to maritime navigability, the farms can be developed in a fashion to allow vessels to easily maneuver through the development with minimal intrusion and continuing in a straight path.¹⁸⁴ Because the actual footprint of the turbine is relatively small and because the turbines are quite a distance out into the lakes, these steps will ensure that there is very little impact on navigability and obstruction to other public enjoyment will likely be

¹⁷⁸ E.g., Conger, *supra* note 145; Klass, *supra* note 27. As discussed in the introduction, distributed generation in the Great Lakes has the potential to overcome many barriers presented by the current electricity grid, including shorter transmission and renewable generation near major metropolitan centers. These benefits have been argued to make renewable energy generation automatically in the public interest.

¹⁷⁹ Andrew S. Ballentine, *How the Public Trust Doctrine's Fiduciary Duty Requirement Requires States' Proactive Response to Promote Offshore Power Generation*, 6 SEATTLE J. OF ENVTL. L. 65 (2016), <https://digitalcommons.law.seattleu.edu/cgi/viewcontent.cgi?article=1060&context=sjel>. Ballentine goes so far to say that, not only the public trust doctrine should not be a barrier, but the public trust doctrine actually *compels* renewable energy development because of the need to protect the environment. As Sax stated long ago, the heart of the public trust doctrine is protecting these natural resources.

¹⁸⁰ See, e.g., NATIONAL OFFSHORE WIND STRATEGY, *supra* note 9, at 19-22. See also, *supra* Part I.

¹⁸¹ This goes to the second part of the *Illinois Central* statement, in which public trust lands can be conveyed “without any substantial impairment of the public interest in the lands and waters remaining.” *Illinois Central*, 146 U.S. at 453.

¹⁸² *Illinois Central*, 146 U.S. at 453.

¹⁸³ E.g., JON VANDERMOLEN & ERIK NORDMAN, WIND FARMS AND NAVIGATION (2014), <https://www.michiganseagrant.org/wp-content/uploads/2018/08/Wind-Brief-9-Navigation.pdf>.

¹⁸⁴ *Id.* at 8-9. It is found that a boat's necessity to navigate through the harbor allows it to easily maneuver through the offshore wind farm grids.

minimal.¹⁸⁵ By putting processes in place which are codified in these agreements, the certainty with regards to overcoming public trust scrutiny can be maximized.

Agreements emphasizing these benefits further comport with the public trust doctrine caselaw and the interpretation of the exceptions to the doctrine. As we have seen throughout the jurisprudence of the eight Great Lakes states, one controlling factor in any conveyance to private parties is whether the public interest is the primary purpose or incidental. The dichotomy created by *City of Milwaukee v. Wisconsin* and *People ex rel. Scott v. Chicago Park Dist.* shows how these agreements can emphasize offshore wind projects as part of a greater project for the benefit of the public. Both cases analyzed conveyance of public trust lands to steel corporations, but *Chicago Park District*, citing and distinguishing from *City of Milwaukee*, noted how a critical aspect was the larger plan which brought a benefit to the public.¹⁸⁶ Structuring the offshore wind agreements as an international and regional plan for offshore development underscores the public interest and public benefit and is itself evidence of the “larger plan” that has been held to comport with the doctrine. Indeed, some states have squarely stated a broad interpretation of the public interest exception, with Wisconsin going so far as to reference benefits to public welfare.¹⁸⁷ An international framework for offshore wind development, citing and highlighting these benefits explicitly, should fit well within this exception.

The process for development established by these agreements should then focus on the second exception to public trust doctrine scrutiny. The agreements should set forth a process by which each state or province, working in conjunction with their national government under the framework of this treaty, conveys land to the developers. Because the foundation of the United States public trust doctrine is to prevent abdication of control of public trust lands, this process should highlight methods by which this conveyance can be done to preserve some public control of the lands, namely in the form of leases with control and regulatory rights remaining in the hands of the respective governmental unit¹⁸⁸ (for domestic U.S. development the state which title to the land is held would retain title).¹⁸⁹ Structuring the

¹⁸⁵ *Id.*

¹⁸⁶ Compare *City of Milwaukee v. Wisconsin*, 214 N.W. 820, 826 (Wis. 1923), with *People ex. rel. Scott v. Chicago Park District*, 360 N.E.2d 773, 781 (1976).

¹⁸⁷ *City of Milwaukee*, 214 N.W. at 826.

¹⁸⁸ For an example of how this regulatory capacity can be structured one can look to the current non-Great Lakes U.S. approach to offshore wind energy development through the Department of the Interior’s Bureau of Ocean Energy Management (BOEM). *Renewable Energy on the Outer Continental Shelf*, BUREAU OF OCEAN MANAGEMENT, <https://www.boem.gov/renewable-energy/renewable-energy-program-overview>; NATIONAL OFFSHORE WIND STRATEGY, *supra* note 9, at 4.

¹⁸⁹ This structure considers the exceptions to the public trust doctrine while respecting the constitutional nature of the equal footing doctrine. As a baseline, no treaty could circumvent the equal footing doctrine to remove title of these lands from the individual states.

conveyances to preserve public control, such as a lease structure as opposed to a sale, should further insulate an offshore wind project from public trust scrutiny, especially if the leases are granted in an open public process, with input from the public as to the location and use of the leased land.¹⁹⁰ One can also look to other international agreements for examples of a governance and support structure that collaboratively supports offshore wind farms.¹⁹¹

A lease structure is directly in line with the state caselaw discussed above. For example, in *State v. Longyear Holding Co.*, the Minnesota court found that a lease conveyance was not in violation of the public trust doctrine because it did not alienate the lands in question from public hands or public control.¹⁹² The court stated, “[i]t is clear in the instant case that the state has acted pursuant to statutory authority; that it has not parceled or alienated the lands in question,” in regards to a lease conveyance.¹⁹³ Given that a foundational public trust doctrine concern is that a state cannot wholly abdicate its public trust responsibilities, this structure of leases and public oversight will make it much more likely that an agreement will survive public trust scrutiny.

Mindful of the “anti-monopoly” language of *Illinois Central*, these agreements should also be structured to ensure diverse engagement by developers, rather than any one project or company holding pseudo-monopolies on the wind farms in the Great Lakes. Looking back to the foundational principles of *Illinois Central*, it is clear that the Court strongly factored in the sheer breadth of land granted, more than 1,000 acres of the Chicago Harbor, worrying about a monopolization of public trust lands.¹⁹⁴ The very notion of land being held in public trust means that no one person or corporation could hold exclusive rights to those lands.¹⁹⁵ Beyond *Illinois Central*, this theme is threaded into public trust cases from the doctrine’s

¹⁹⁰ *Kootenai Environmental Alliance, Inc. v. Panhandle Yacht Club, Inc.*, 671 P.2d 1085, 1096 (Idaho 1983). The court in *Kootenai* stated, “[i]n light of the Director’s findings and conclusions, coupled with the fact of the notice and public hearing, and the fact of compliance by the State Land Board with its statutory authority, and our above articulation of the public trust doctrine, we hold that the issuance of this encroachment permit and license to the Panhandle Yacht Club does not violate the public trust doctrine,” which shows the importance of the public nature of the process in determining public trust compliance. Structuring the process for granting leases in this fashion maximizes the conformity with this factor of the public trust analysis that is seen across the Great Lakes states.

¹⁹¹ *North Seas Energy Cooperation*, EUROPEAN COMMISSION (2020), https://ec.europa.eu/energy/topics/infrastructure/high-level-groups/north-seas-energy-cooperation_en#political-declaration; Lamy Moosa, “*The Energy Capital of the East Coast? Lessons Virginia Can Learn from Cape Wind Failure and European Success in Offshore Wind Energy*,” 39 WM. & MARY ENVTL. L. & POL’Y REV. 713 (2015).

¹⁹² *State v. Longyear Holding Co.*, 29 N.W.2d 657, 670 (Minn. 1947).

¹⁹³ *Id.* at 670.

¹⁹⁴ See Kearney, *supra* note 31, at 805; see also Michael C. Blumm & Aurora Paulsen Moses, *The Public Trust as an Antimonopoly Doctrine*, 44 B.C. ENVTL. AFF. L. REV. 1 (2017), <https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=2215&context=ealr>.

¹⁹⁵ Blumm & Moses, *supra* note 194, at 7.

foundation. For example, in *Arnold v. Mundy*, the Supreme Court of New Jersey used the public trust doctrine to prohibit the monopolization of tidal lands for oyster harvesting.¹⁹⁶ Again in *Martin v. Waddell's Lessee*, the Court extended this principle and held that the state holds all submerged lands as a sovereign owner, preventing monopolization of the trust resources.¹⁹⁷ As the public trust doctrine has expanded into other areas of natural resources, these same antimonopoly considerations have been key to public trust analyses.¹⁹⁸

Accordingly, to address this antimonopoly factor in public trust analysis, the agreements should establish a structure to ensure diverse corporate and private engagement and landholdings. The agreements should set guidelines and metrics to explicitly monitor this factor and proactively prevent any such monopolized landholdings, which will, in turn, minimize public trust risk.

Finally, structuring the agreement as an international treaty serves to set a foundation for any future findings that, at the federal level, offshore wind development is in the public benefit. This further reinforces the fact that the offshore wind projects done pursuant to the treaty are in the public benefit, for a public purpose, and should survive public trust scrutiny.

C. An International Agreement and Interstate Compact Would Exemplify Public Interest.

Beyond the support from the language and structure of the agreements, additional support for wind energy meeting these public trust exceptions lies in the solution itself. First, the simple fact that an international treaty and an interstate compact have been reached and ratified exemplifies that the development of wind energy in the great lakes is in the public interest. . While there is no requirement for treaties to be in the public interest, the Supreme Court has alluded to the idea that treaties themselves exemplify the public interest. For example, in upholding the Migratory Birds Treaty and Migratory Bird Treaty Act of 1918 the Court noted, “[h]ere a national interest of very nearly the first magnitude is involved. It can be protected only by national action in concert with that of another power.”¹⁹⁹ The Court explicitly tied the national interest in the subject matter to the power of the President, with the consent of Congress, to enter into an international treaty.²⁰⁰ Courts have further acknowledged that “there is a significant public interest in complying with international treaty obligations.”²⁰¹

¹⁹⁶ *Arnold v. Mundy*, 6 N.J.L. 1, 78 (N.J. 1821); Blumm & Moses, *supra* note 194, at 9.

¹⁹⁷ *Martin*, 41 U.S. at 417-18; Blumm & Moses, *supra* note 194, at 9.

¹⁹⁸ Blumm & Moses, *supra* note 194 (discussing how the public trust doctrine has prevented monopolization of wildlife resources in tidal and inland waters and protected from monopolization of other public trust resources).

¹⁹⁹ *State of Missouri v. Holland*, 252 U.S. 416, 435 (1920).

²⁰⁰ *Id.*

²⁰¹ *E.g.*, In re Any & all funds or other assets in Brown Bros. Harriman & Co. Account No. 8870792 in the name of Tiger Eye Investments Ltd., No. CIV.A. 08-MC-0807, 2009 WL

Additionally, adopting an international treaty requires congressional approval and entering an interstate compact requires approval of each state legislature. The fact that Congress must overcome the inherent difficulty in approving legislation should not be overlooked in the public interest analysis. Furthermore, there is a school of public trust scholarship that notes that states have significant leeway to set and enforce their public trust doctrines.²⁰² The caselaw of the various states discussed above similarly alludes to state legislatures having a role in public trust determinations.²⁰³ Four out of the eight Great Lakes states²⁰⁴ explicitly reference legislative power to determine public interest and public benefit for public trust lands. By reaching such an interstate compact and recognizing the importance of an international treaty, these states would be making an explicit statement that they believe it is unequivocally within the public interest, under the frameworks established by the treaty and compact, for offshore wind energy to be developed in the Great Lakes. The inherent public interest of such agreements show the strength of this solution for overcoming public trust risk. In addition, compared to solely inter-state cooperation, the international framework suggested here provides an extra layer of reasoning to overcome public trust concerns.²⁰⁵

IV. QUESTIONS MAY ARISE AS ENERGY MAY BE PRODUCED FOR OUT OF STATE OR INTERNATIONAL CONSUMERS; HOWEVER, EXISTING PROPERTY DOCTRINE MAY PROVIDE A WINDOW INTO HOW THESE ARGUMENTS MAY BE OVERCOME.

As we have seen, an international treaty with a corresponding interstate agreement has tremendous potential to overcome the public trust uncertainties that pose a barrier to offshore wind development in the Great Lakes. A treaty can be structured in a way to satisfy the exceptions to the public trust doctrine by setting forth a regime that subjects the development to public control and also signifies how such development would be in the public interest. However, there is one foreseeable issue that would be

613717, at *2 (D.D.C. Mar. 10, 2009).

²⁰² See *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 475 (1988) (“[I]t has been long established that the individual States have the authority to define the limits of the lands held in public trust and to *recognize private rights in such lands as they see fit.*”) (emphasis added); see also ELLIOTT, *supra* note 38, at 11-14.

²⁰³ E.g., *Nedtweg v. Wallace*, 208 N.W. 51, 54 (Mich. 1926) (“It is competent for the supreme legislative power to authorize and regulate grants of the same for public, or such other purposes as it may determine to be for the best interests of the state.”); *ABKA Ltd. P’ship v. Wisconsin Dep’t of Nat. Res.*, 635 N.W.2d 168, 177 (Wis. Ct. App. 2001) (noting the regulation and enforcement of the public trust doctrine rests with the legislature and Department of Natural Resources).

²⁰⁴ Illinois, New York, Pennsylvania, and Wisconsin. See *supra* part II.

²⁰⁵ Compare with Conger, *supra* note 145. Conger argues that offshore wind energy in the Great Lakes should occur through multi-state cooperation. The proposed international framework here provides an extra layer to overcoming public trust concerns.

especially salient with any regional and multinational agreement regarding energy production. Due to the nature of electricity generation and the power grid, the energy that is generated on public trust lands in one state may be exported to and consumed by individuals outside of that state.

One possible reading of the public trust doctrine is that it reserves public trust resources for the people of the state in which the public trust resources are held. In *Illinois Central*, for example, the Court stated, “the ownership [of the lands under navigable waters] is a subject of public concern to the whole people of the state . . . being held by the whole people for purposes in which the whole people are interested.”²⁰⁶ While this language is somewhat vague, the notion that public trust resources may be reserved only for citizens of that state owning the land is further supported by the vesting of the rights to navigable waters and the lands underneath in the “people” of that state as an outgrowth of the equal footing doctrine.²⁰⁷ Courts have stated this generally as, “the public trust doctrine applies to lands . . . which are held by the State in fee simple for the trust of its citizens.”²⁰⁸ Even when state public trust doctrines define “its citizens” broadly, such as “the state holds public trust lands for the benefit of all citizens,”²⁰⁹ because the public trust doctrine is an outgrowth of the equal footing doctrine and individual state title, it seems as though the citizens for which the lands are held are only the citizens of the state which owns the land. Courts have considered the implications of the use of public trust resources by non-state citizens in analyzing public trust concerns. For example, in *White Bear Lake Restoration Association ex rel. State v. Minnesota Department of Natural Resources*, the court stated that it was unwilling to hold groundwater use affecting a public trust lake to be in violation of the public trust doctrine in part because “homeowners did not allege that water has been diverted out of the state.”²¹⁰ Thus, use of public trust resources in a manner not reserved for the citizens of that state raises public trust concerns.

If a court chose to apply the doctrine in a way that restricts use of public trust resources to citizens of that state, there might be a significant problem with respect to offshore wind projects due to the nature of electricity generation and the grid system in the United States. While oftentimes the power generated by these offshore wind turbines would be consumed by citizens of that state, for example, a wind turbine off the shore of Milwaukee generating power consumed by residents of Milwaukee, there is a chance that

²⁰⁶ *Illinois Central*, 146 U.S. at 455-56.

²⁰⁷ *Martin v. Waddell*, 41 U.S. 367, 410 (1842).

²⁰⁸ *State v. Oliver*, 727 A.2d 491, 496 (N.J. Super. Ct. App. Div. 1999) (citing *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 294 A.2d 47 (N.J. 1972)).

²⁰⁹ For example, such a broad statement is made by the state of Virginia, but the phrase “all citizens” is a reference to the citizens of that state. See *Palmer v. Commonwealth Marine Res. Comm’n*, 628 S.E.2d 84, 89 (Va. Ct. App. 2006).

²¹⁰ *White Bear Lake Restoration Association ex rel. State v. Minnesota Department of Natural Resources*, 946 N.W.2d 373, 385 (Minn. 2020).

the energy would enter the grid and the end user would be a non-resident of the state. This is because the energy grid in the United States is split into three interconnections²¹¹ and within those interconnections further split into regional wholesale electricity markets.²¹² These interconnections inherently mean that once the electricity is put into the grid, there is no certainty²¹³ that the end user will, or will not, be a resident of the state in which the energy was produced. While most often power generated will be consumed within a close proximity, this may still mean that energy travels across borders.²¹⁴

One possible solution could be to establish a mechanism to account for renewable generation in the state the power is produced and establish new distribution and transmission infrastructure which ensures use in the state in which the public trust land is held. However, with the current interconnected grid system, these solutions would likely be impractical or economically unfeasible, and would seriously undermine the benefits of large-scale offshore wind projects by limiting the magnitude of energy production.

However, this issue of cross-border transmission does not necessarily spell disaster for offshore wind projects, especially due to the inability to truly know where the generated energy is being used, and thus whether this public trust principle of use by a particular state's citizens will be violated in any particular case. Even if a court adopts the most restrictive version of this doctrine—that public trust resources may only benefit citizens of that state alone—developers have a strong potential argument that wind projects should pass muster. This proffered argument is based on the notion that just as energy may be leaving the state because of how the grid works, there is an equally likely chance that energy generated from similar renewable energy developments elsewhere is coming into the state. By the very nature of a regional approach to offshore wind development and the grid interconnectivity, there will likely be reciprocity between states.

This notion of reciprocity is the key to understanding how developers can overcome this particular hurdle. Indeed, elsewhere in the law, such as within U.S. domestic takings law, arguments about reciprocity also serve to overcome similar public interest limitations. In takings law, there is a general rule that a regulation that goes “too far” will be recognized as a taking of a

²¹¹ Western Interconnection, Eastern Interconnection, and Texas Interconnection. *U.S. Electricity Grid & Markets*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (June 26, 2020), [https://www.epa.gov/greenpower/us-electricity-grid-markets#:~:text=According%20to%20the%20U.S.%20Energy,country%20\(EIA%2C%202016\)](https://www.epa.gov/greenpower/us-electricity-grid-markets#:~:text=According%20to%20the%20U.S.%20Energy,country%20(EIA%2C%202016).).

²¹² *Id.*

²¹³ Even estimates of energy use by the U.S. Environmental Protection Agency categorize energy profiles by region rather than by state. *Power Profiler: How clean is the electricity you use?*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (Nov. 12, 2020), <https://www.epa.gov/egrid/power-profiler#/>. There is no clear way to track energy from production to consumption.

²¹⁴ See *About the U.S. Electricity System and its Impact on the Environment*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (Oct. 22, 2020), <https://www.epa.gov/energy/about-us-electricity-system-and-its-impact-environment> (explaining the transmission grid).

property right, and therefore must meet the constitutional requirements that it be done for a public purpose and that the government fairly compensate the holder.²¹⁵ In making such a determination of whether a regulation goes “too far,” courts will compare the benefits of a regulation with the burden on the individual property owner.²¹⁶ One of the benefits of a regulation to Property Owner A, for example, might cause a burden on a neighboring Property Owner B. This is the concept of “Average Reciprocity of Advantage.”²¹⁷ In other words, a regulation does not amount to a taking so long as it is applied over a broad cross-section of land on the theory that, while the regulation does burden the property owner by shrinking their rights, that same individual will benefit from the regulation’s impact on others in the area.²¹⁸ So “while zoning at times reduces individual property values, the burden is shared relatively evenly and it is reasonable to conclude that on the whole an individual who is harmed by one aspect of the zoning will be benefited by another.”²¹⁹ In *Plymouth Coal*, the seminal decision concerning average reciprocity of advantage, the court found that a regulation on coal mining requiring mining companies to leave a support strip of coal was not a taking.²²⁰ While the regulation certainly took away property rights to mine all the coal in that support strip, the safety benefits, which were provided to the coal miners from this regulation on all coal mining operations in the area, brought a sufficient average reciprocity of advantage as to not amount to an unconstitutional taking.²²¹

While not perfectly analogous to the public trust doctrine, this concept may be looked to by courts to deal with the uncertainties regarding the public trust concerns noted above. The law has recognized the reciprocity of certain actions in determining whether there has been a violation of an individual’s rights. Just as an individual might reap the benefits and face the burden of a regulation or zoning ordinance, the Great Lakes states might produce energy on public trust land that goes to another state and might equally receive energy through the grid that was produced on another state’s public trust lands. This sort of average reciprocity offsets concerns that public trust resources of one state are being used to benefit non-state residents in violation of the public trust doctrine. Such reciprocity is inherent in the regional approach to offshore wind development, which can be set forth in the agreements. Thus, one can reasonably conclude that, on the whole, the burden and benefits are shared evenly by the Great Lakes states, and

²¹⁵ *E.g.*, *Penn Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

²¹⁶ *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 133 (1978).

²¹⁷ *Penn Coal Co.*, 260 U.S. at 415 (citing *Plymouth Coal Co. v. Pennsylvania*, 232 U.S. 531 (1914)).

²¹⁸ *K & K Const., Inc. v. Dep’t of Env’tl. Quality*, 705 N.W.2d 365, 384 (Mich. Ct. App. 2005).

²¹⁹ *Penn Cent. Transp. Co.*, 438 U.S. at 147 (Rehnquist, J., dissenting).

²²⁰ *Plymouth Coal Co. v. Pennsylvania*, 232 U.S. 531, 540 (1914).

²²¹ *Id.*

therefore, there is no violation of the public trust doctrine for reason of the energy being consumed outside of the state it was produced in.

CONCLUSION

The Great Lakes hold a remarkable potential for distributed renewable energy generation through offshore wind farms. Yet the existing domestic legal regime in the United States has served as a barrier to the proliferation of such wind energy developments. The waters of the Great Lakes and the corresponding submerged lands are subject to the public trust doctrine, which has confounded legal scholars and courts for decades. Generally, the doctrine prohibits states from conveying public trust property for private development, as the land is held in trust for the public's use and enjoyment. Questions arise as to the grounding of the doctrine and the role states play in setting public trust principles. Conflicting decisions both within states and between states further blur any principles set forth in the doctrine, which inherently breeds uncertainty and risk for developers. The mere threat of litigation and the inability to have any semblance of certainty with regards to the outcome of a public trust claim inhibits the ability for wind developers to begin, much less complete, projects.

Notwithstanding this confusion, there have been two fairly consistent exceptions minimizing findings of public trust violations in the doctrine's jurisprudence. Courts have found that a conveyance of property rights to private interests are not in violation of the doctrine if (1) the state remains able to control the land or keeps title to the land; and/or (2) the project is indisputably in the public benefit or does not impair the public interest.

Considering these exceptions, this note proposes that an international treaty with a subsequent interstate compact between the Great Lakes states might allow offshore wind development in the Great Lakes to overcome public trust doctrine scrutiny. These agreements should be structured in a way to emphasize the public benefits of offshore wind and establish a framework for conveyance and regulatory control, which maximize the changes of satisfying the exceptions set forth in the doctrine. Doing so will provide additional certainty to project developers that offshore wind projects in the Great Lakes will not be prohibited by public trust doctrine concerns. While there may be a secondary concern because the energy grid may transport energy outside of the state of generation, developers have a strong argument to import other legal principles, such as average reciprocity of advantage, to overcome this uncertainty and avoid violation of the public trust doctrine. These agreements and the proposed framework have the potential to aid the Great Lakes in realizing their vast potential in offshore wind energy generation, greatly aiding the nation in meeting its renewable energy goals and energy needs and reaping the vast additional benefits of distributed renewable energy generation.