
Note

Maneuvering the Headwinds Facing Offshore Wind Development in the Great Lakes: Amending the Coastal Zone Management Act

*Sarah Schenck**

The Great Lakes have played an instrumental role in shaping American commerce and geography, and their vast wind supply could revolutionize American energy. Historically, the Great Lakes steered the travels of Native Americans and European explorers, and the movement of settlers and immigrants to the Midwest in the mid-1800s led to the creation of an inland maritime industry and prosperous port cities.¹ Looking forward, via offshore wind development, the Great Lakes have the potential to change the way in which major Midwestern cities source their energy.

Offshore wind development in the Great Lakes would create a variety of social, health, and economic benefits for the region. Offshore wind resources are “abundant, stronger, and blow more consistently” compared with onshore wind energy.² With the majority of the U.S. population living near oceans or

* J.D. and M.P.H. Candidate 2014, University of Minnesota; B.A. 2009, Emory University. Thank you to Professor Alexandra Klass for her guidance and Professor Bradley Karkkainen for his invaluable insight; the editors and staff of the *Minnesota Law Review*; and friends. Special thanks to my parents, Beth and Jeff Schenck, for their support. Copyright © 2014 by Sarah Schenck.

1. *Great Lakes, Mighty Rivers*, SMITHSONIAN NAT'L MUSEUM OF AM. HIST., http://amhistory.si.edu/onthewater/exhibition/4_2.html (last visited Apr. 11, 2014).

2. *Offshore Wind Research and Development*, U.S. DEP'T OF ENERGY, <http://energy.gov/eere/wind/offshore-wind-research-and-development> (last visited Apr. 11, 2014). *Compare Utility-Scale Land-Based 80-Meter Wind Maps*, OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, U.S. DEP'T OF ENERGY, http://www.windpoweringamerica.gov/wind_maps.asp (last visited Apr. 11, 2014), *with Offshore 90-Meter Wind Maps and Wind Resource Potential*, OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, U.S. DEP'T OF ENERGY, <http://www.windpoweringamerica.gov/windmaps/offshore.asp> (last visited Apr. 11, 2014).

Great Lakes,³ offshore wind energy could provide large amounts of carbon-free power to densely populated cities⁴ with poor air quality levels⁵ in the Great Lakes region,⁶ which disproportionately affect low income communities and communities of color.⁷ Offshore wind in the Great Lakes, unlike onshore wind in the region, would be located closer to densely populated cities, thereby solving some of the transmission and transportation problems common to remote onshore wind farms.⁸ Proponents of offshore wind energy have also pointed to the potential multibillion dollar economic impact of offshore wind development, which would include the creation of thousands of long-term, skilled jobs and the revitalization of the manufacturing sector.⁹ More broadly, offshore wind development in the Great

3. KRISTEN M. CROSSETT ET AL., NOAA, POPULATION TRENDS ALONG THE COASTAL UNITED STATES: 1980–2008, at 1–2 (2004), available at http://csc.noaa.gov/hpdata/SocioEconomic/coastalpopulation_1980_2008.pdf (reporting that approximately 53% of the U.S. population was located in coastal counties in 2003, including counties in the Great Lakes region).

4. U.S. DEP'T OF ENERGY, A NATIONAL OFFSHORE WIND STRATEGY: CREATING AN OFFSHORE WIND ENERGY INDUSTRY IN THE UNITED STATES 6 (2011) [hereinafter WIND STRATEGY], available at http://www1.eere.energy.gov/wind/pdfs/national_offshore_wind_strategy.pdf.

5. Under the Clean Air Act, the Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards for six common air pollutants, which include particle pollution (“particulate matter”), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. 42 U.S.C. § 7409 (2012); *What Are the Six Common Air Pollutants?*, U.S. ENVTL. PROT. AGENCY, <http://epa.gov/air/urbanair/> (last visited Apr. 11, 2014). Most cities in nonattainment for these standards are clustered in the Northeast corridor, major industrial areas of the Great Lakes and Ohio Valley, and California and Arizona. See U.S. ENVTL. PROT. AGENCY, COUNTIES DESIGNATED “NONATTAINMENT” FOR CLEAN AIR ACT’S NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) (2013), available at <http://www.epa.gov/oaqps001/greenbk/map/mapnpoll.pdf>.

6. See *infra* text accompanying note 178.

7. NAACP ET AL., COAL BLOODED: PUTTING PROFITS BEFORE PEOPLE 31 (2012), available at http://naacp.3cdn.net/afe739fe212e246f76_i8m6yek0x.pdf.

8. *Offshore Wind Makes Sense. Far-Offshore Wind Makes Even More Sense*, TRILLIUM POWER WIND CORP., <http://www.trilliumpower.com/energy/offshore-wind-vs-other-energy-sources/> (last visited Apr. 11, 2014).

9. See VALERIE SATHE BRUGEMAN ET AL., CTR. FOR AUTO. RESEARCH, REPURPOSING FORMER AUTOMOTIVE MANUFACTURING SITES 6 (2011), available at <http://www.dol.gov/autocommunities/Repurposing/RepurposedFacilities.pdf> (noting that nearly 65% of all closed automaker and automaker-captive plants are located in the Midwest and discussing how communities have repurposed former automotive manufacturing sites); OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, U.S. DEP'T OF ENERGY, SECURING CLEAN, DOMESTIC, AFFORDABLE ENERGY WITH WIND 1 (2012), available at http://www1.eere.energy.gov/wind/pdfs/eere_wind_water.pdf; Nick Juliano, *DOE*

Lakes would support the United States' goal of energy security and reduce reliance on foreign energy resources.¹⁰

Despite the progress towards offshore wind development on the Atlantic seaboard,¹¹ many loose ends remain for development in the Great Lakes. From a regulatory standpoint, development in the Great Lakes would look very different from development in the Atlantic and Pacific Oceans.¹² Therefore, Great Lakes states cannot simply mimic more advanced regulatory processes developed for Atlantic coastal states.

With at least twenty applicable federal acts and executive orders managed by a dozen different federal agencies,¹³ eight different state coastal zone management programs, and other state and tribal agencies,¹⁴ the regulatory uncertainty and lengthy processes involved in Great Lakes development create significant obstacles for interested stakeholders. Thus, it is imperative that Great Lakes states begin to consider and plan for regulatory and commercial pathways to offshore wind development in order to avoid some of the obstacles that impeded offshore wind development on the Atlantic seaboard for more than

Awards Millions for Demonstration Projects, GOVERNORS' WIND ENERGY COAL. (Dec. 13, 2012), <http://www.governorswindenergycoalition.org/?p=4161>.

10. See, e.g., THE WHITE HOUSE, BLUEPRINT FOR A SECURE ENERGY FUTURE 3–7 (2011), available at http://www.whitehouse.gov/sites/default/files/blueprint_secure_energy_future.pdf.

11. The University of Maine launched the first U.S. floating offshore wind turbine prototype in May 2013. *Maine Project Launches First Grid-Connected Offshore Wind Turbine in the U.S.*, U.S. DEP'T OF ENERGY (May 31, 2013), <http://energy.gov/articles/maine-project-launches-first-grid-connected-offshore-wind-turbine-us>. On December 12, 2012, the Department of Energy announced its selection of seven offshore wind demonstration projects to be sited off the shores of Maine, New Jersey, Ohio, Oregon, Texas, and Virginia. *DOE Wind Program Selects Seven Projects to Demonstrate Next-Generation Wind Technologies*, U.S. DEP'T OF ENERGY (Dec. 12, 2012), http://www1.eere.energy.gov/wind/news_detail.html?news_id=18842. Each project will receive four million dollars to complete planning and evaluation phases in an effort to further diversify the domestic energy portfolio. See Juliano, *supra* note 9. In early 2013 private developers announced plans to build underwater transmission lines off the coast of New Jersey for a chain of offshore wind farms, known as the Atlantic Wind Connection, along the East Coast carrying electricity from New York to Virginia. Nathanael Massey, *N.J. to Host First Leg of Atlantic 'Backbone' for Offshore Wind*, GOVERNORS' WIND ENERGY COAL. (Jan. 17, 2013), <http://www.governorswindenergycoalition/?p=4492>.

12. See *infra* note 19 and accompanying text.

13. See WALTER MUSIAL & BONNIE RAM, NAT'L RENEWABLE ENERGY LAB., LARGE-SCALE OFFSHORE WIND POWER IN THE UNITED STATES: ASSESSMENT OF OPPORTUNITIES AND BARRIERS 211 tbl.1 (2010), available at <http://www.nrel.gov/wind/pdfs/40745.pdf>.

14. See *id.* at 153–55.

a decade.¹⁵ Untangling jurisdictional lines and paving clear regulatory pathways would also lay the foundation for responsible development, minimizing environmental damage. Developing a cohesive framework would catalyze efficient and environmentally-friendly development in the Great Lakes for not only wind energy, but also other evolving renewable energy technologies.

This Note presents a framework through which Great Lakes states can address coastal wind energy. Part I introduces the federal, state, and regional regulatory landscape of offshore wind development in the Great Lakes, giving particular attention to the Coastal Zone Management Act (CZMA). In addition, Part I provides a brief overview of interstate and interagency attempts to plan for offshore wind development in the Great Lakes. Part II examines current state coastal zone management programs in the eight Great Lakes states and their shortcomings. Part III proposes that Congress amend the CZMA and its associated guidance to require states to identify and plan for regulatory laws and complexities unique to offshore wind development in the Great Lakes. This Note concludes that Great Lakes states must develop specialized coastal zone management programs in order to effectively assess and plan for potential offshore wind development.

I. OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES

Regulatory uncertainty and redundancy regarding interagency coordination,¹⁶ foreseeable litigation initiated by various

15. For example, the Cape Wind Project in Massachusetts has faced strong opposition from a wide range of groups, including landowners, environmental advocates, Indian tribes, and fossil fuel magnates. See generally Adam M. Dinnell & Adam J. Russ, *The Legal Hurdles to Developing Wind Power as an Alternative Energy Source in the United States: Creative and Comparative Solutions*, 27 NW. J. INT'L L. & BUS. 535, 545–53 (2007) (discussing the role “not in my backyard” (NIMBY) has played in delaying the Cape Wind Project); Abby Goodnough, *For Controversial Wind Farm Off Cape Cod, Latest Hurdle Is Spiritual*, N.Y. TIMES, Jan. 5, 2010, at A11 (discussing the attempts of the Mashpee Wampanoag of Cape Cod and the Aquinnah Wampanoag of Martha’s Vineyard to have Nantucket Sound listed on the National Register of Historic Places); *Stakeholders*, ALLIANCE TO PROTECT NANTUCKET SOUND, http://www.saveoursound.org/about_us/stakeholders/ (last visited Apr. 11, 2014) (opposing Cape Wind).

16. Cf. *supra* text accompanying notes 13–14 (noting numerosity of federal, tribal, and state agencies).

interest groups,¹⁷ and technological shortcomings¹⁸ present offshore wind developers with serious challenges. This section establishes the regulatory framework under which offshore development in the Great Lakes would operate and presents current interagency attempts to create regional cohesion vis-à-vis offshore wind development. The sheer number and variety of applicable acts and agencies presented in this section illustrate the complexity involved in moving forward with offshore wind development, particularly because Great Lakes development would differ in many respects from development on the Outer Continental Shelf (OCS).¹⁹

Offshore wind development in the United States is important because of its ability to reduce significant amounts of greenhouse gas emissions and other air quality problems plaguing major urban U.S. population centers, and for its potential to stimulate American manufacturing sectors and create jobs.²⁰ Although Denmark installed the world's first offshore wind project in 1991,²¹ the United States has only just deployed its first

17. See Dinnell & Russ, *supra* note 15 (discussing legal challenges to Cape Wind Project).

18. See Diane Cardwell, *Grappling with the Grid*, N.Y. TIMES, Aug. 15, 2013, at B1 (discussing the difficulty wind energy presents in predicting generating capacity due to intermittency and inability to store wind-generated energy cost-effectively).

19. The OCS includes "all submerged lands lying seaward and outside of the area of lands beneath navigable waters," 43 U.S.C. § 1331(a) (2012), but does not include the Great Lakes. See *The Continental Shelf*, BUREAU OF OCEAN ENERGY MGMT., <http://www.boem.gov/Renewable-Energy-Program/Renewable-Energy-Guide/The-Continental-Shelf.aspx> (last visited Apr. 11, 2014). Though the Bureau of Ocean Energy Management (BOEM) is responsible for offshore renewable energy programs on the OCS, *About BOEM*, BUREAU OF OCEAN ENERGY MGMT., <http://www.boem.gov/About-BOEM/index.aspx> (last visited Apr. 11, 2014), it would not be the lead federal permitting agency in the Great Lakes. The Energy Policy Act of 2005 amended the Outer Continental Shelf Lands Act to authorize the Secretary of the Department of the Interior (which delegated its authority to BOEM) to grant leases, easements, or right-of-ways on the OCS if, among other things, those activities "produce or support production, transportation, or transmission of energy from sources other than oil and gas." Pub. L. No. 109-58, 119 Stat. 744-45 (codified as amended at 43 U.S.C. § 1337(p)(1)(C) (2012)). Though BOEM would be the lead agency for offshore wind development in the Atlantic and Pacific Oceans, the Gulf of Mexico, the Bering Sea, and the Gulf of Alaska, it would not have jurisdiction in the Great Lakes. That authority lies with the U.S. Army Corps of Engineers. See WIND STRATEGY, *supra* note 4, at 10-11.

20. *Offshore Wind: America's New Energy Opportunity*, AM. WIND ENERGY ASS'N, <http://www.aweablog.org/uploads/files/OffshoreWind.pdf> (last visited Apr. 11, 2014).

21. *Id.*

offshore wind turbine in 2013.²² There are at least twenty projects in the planning and permitting process in the United States,²³ but large regulatory obstacles remain for development in the Great Lakes.

A. REGULATORY FRAMEWORK

Unfortunately, regulations for offshore wind development in the Great Lakes cannot simply piggyback off existing energy-related industry frameworks²⁴ or current projects in the development phases on the OCS. The more mature oil and gas extractive industries have siting characteristics that are substantially different from those required for offshore wind development,²⁵ and federal and state jurisdiction on the OCS varies from jurisdiction in the Great Lakes.²⁶

This section presents the entwined regulatory scheme that would govern offshore wind development in the Great Lakes in order to show its complexity at each level of government. It focuses in detail on three sections of the CZMA, and briefly presents the greater federal, state, and regional statutory framework applicable to offshore wind development in the Great Lakes.

1. Coastal Zone Management Act

The CZMA has been described as the federal government's "first major experiment with an integrated environmental program."²⁷ Congress enacted the CZMA to "encourage and assist States in developing and implementing management programs to preserve, protect, develop, and where possible, to restore or enhance the resources of our nation's coast by the exercise of planning and control with respect to activities occurring in

22. Matthew L. Wald, *Floating Wind Tower Is Launched Off the Maine Coast*, N.Y. TIMES, June 1, 2013, at B3.

23. MUSIAL & RAM, *supra* note 13, at 2.

24. *Id.* at 133 (discussing the ways in which offshore wind energy differs from oil and gas industries on federal lands and in federal waters, thus requiring a different framework).

25. *See id.*

26. *See generally id.* at 133–62 (discussing federal and state regulations regarding offshore wind facility siting and permitting).

27. Ronald J. Rychlak, *Coastal Zone Management and the Search for Integration*, 40 DEPAUL L. REV. 981, 983 (1991).

their coastal zones.”²⁸ The CZMA supports management of Great Lakes coastal resources and endeavors to balance economic development with environmental conservation.²⁹ Because a lack of funding often prohibited states from developing coastal management programs on their own, Congress created a financial incentive for states to develop coastal management programs.³⁰ Through these incentives, the CZMA encourages states to develop comprehensive plans for managing coastal land and water resources.³¹ Specifically, the CZMA provides for a voluntary federal-state partnership in which the Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), approves state-created coastal zone management programs (CZMPs) designed to manage land and water resources in the Great Lakes.³² States with CZMPs must satisfy nine threshold criteria³³ to receive federal grants for their programs.³⁴ Every five years, the Coastal Zone Enhancement Program encourages states to evaluate their programs, and subsequently develop changes and strategies to enhance them.³⁵ All eight Great Lakes states have their own CZMP.³⁶

a. Section 306: Planning Process for Energy Facilities

Relevant to offshore wind development, Section 306(d)(2)(H)³⁷ requires states to submit, within their coastal zone management program, a “planning process for energy facilities likely to be located in, or which may significantly affect, the coastal zone, including a process for anticipating the man-

28. H.R. REP. No. 96-1012, at 14 (1980) (discussing the purpose of the Coastal Zone Management Act of 1972 and reaffirming the nation’s commitment to it).

29. *Congressional Action to Help Manage Our Nation’s Coasts*, NAT’L OCEANIC & ATMOSPHERIC ADMIN. (NOAA), http://coastalmanagement.noaa.gov/czm/czm_act.html (last visited Apr. 11, 2014).

30. 16 U.S.C. § 1455 (2012).

31. *Id.*

32. *See* Coastal Zone Management Act of 1972, Pub. L. No. 92-583, 86 Stat. 1280 (1972) (codified as amended at 16 U.S.C. §§ 1451–1466 (2012)).

33. 16 U.S.C. § 1455(d)(2) (2012).

34. *Id.* § 1455(b).

35. *Coastal Zone Enhancement Program*, NOAA, <http://coastalmanagement.noaa.gov/enhanc.html> (last visited Apr. 11, 2014).

36. *See States and Territories Working on Ocean and Coastal Management*, NOAA, <http://coastalmanagement.noaa.gov/mystate/welcome.html> (last visited Apr. 11, 2014).

37. § 1455(d)(2)(H).

agement of the impacts resulting from such facilities.”³⁸ NOAA regulations require that the planning process for energy facilities contain: (1) identification of energy facilities that are likely to affect a state’s coastal zone; (2) procedures for assessing the costs and benefits of proposed and alternative sites bearing in mind local, state, and national interests; (3) identification of enforceable state policies and techniques for managing energy facilities and their impacts; (4) and identification of how public and private parties affected by energy facilities will be involved in the planning process.³⁹ In addition, Section 306(d)(8)⁴⁰ requires management programs to consider the national interest involved in planning for and managing the coastal zone.⁴¹ Such planning includes the siting of energy facilities “which are of greater than local significance.”⁴² The Secretary must find that the state has considered “any “applicable national or interstate energy plan or program.”⁴³ Finally, states can address deficiencies by amending their programs, subject to the Secretary’s approval.⁴⁴

b. Section 307: Federal Consistency

Once the Secretary approves a state’s CZMP, federal agencies must comply with the policies included in the program, for both federal activities and activities requiring federal permits or approval.⁴⁵ CZMA § 307, known as the federal consistency provision,⁴⁶ is a powerful tool states can use to influence federal permitting decisions.⁴⁷ Section 307(c) allows a state whose coastal zones are affected by a federal or federally-permitted project to object to the applicant’s certification if the state finds the project to be incompatible with the state’s federally-approved coastal zone management plan.⁴⁸ This provision gives

38. *Id.*

39. 15 C.F.R. § 923.13 (2013).

40. 16 U.S.C. § 1455(d)(8).

41. *Id.*

42. *Id.*

43. *Id.*

44. *Id.* § 1455(e) (“A coastal state may amend or modify a management program which it has submitted and which has been approved by the Secretary under this section, subject to [Secretary approval].”).

45. *Id.* § 1456(c).

46. *Federal Consistency Overview*, NOAA, <http://coastalmanagement.noaa.gov/consistency/> (last visited Apr. 11, 2014).

47. 16 U.S.C. § 1456(c).

48. *Id.* § 1456(c)(3)(A).

each state an opportunity to halt or modify projects in order to bring them into compliance with its CZMP.⁴⁹

Federal activities and activities requiring federal permits are treated differently under Section 307. Federal agency activities affecting the coastal zone's natural resources, land, or water use must be "consistent to the maximum extent practicable with the enforceable policies of approved State management programs."⁵⁰ Activities requiring a federal permit or license, on the other hand, must "comply with the enforceable policies of such state's approved management program and will be carried out in a manner consistent with such program."⁵¹ Thus, private activities necessitating federal permits or licenses require a higher threshold of compliance with state CZMPs than federal activities or projects.

c. Section 309: Coastal Zone Enhancement Grants

Section 309 of the CZMA outlines the coastal zone enhancement grants. These grants encourage state agencies to change or enhance their CZMP in one or more of nine enhancement areas.⁵² One such area is the "adoption of procedures and enforceable policies to help facilitate the siting of energy facilities and Government facilities and energy-related activities and Government activities which may be of greater than local significance."⁵³ NOAA's Office of Ocean and Coastal Resource Management publishes Section 309 Guidance to assist states with the Section 309 grant approval process, which includes assistance with the process and criteria for approval.⁵⁴

2. Other Applicable Acts and Agencies

Numerous other federal and state laws would play important roles in the permitting and siting of any offshore wind facilities. Great Lakes jurisdiction involves a complex and often overlapping set of federal and state regulations administered by a multitude of federal and state agencies. The often redun-

49. *Id.*

50. *Id.* § 1456(c)(1)(A) (emphasis added).

51. *Id.* § 1456(c)(3)(B) (emphasis added).

52. *Coastal Zone Enhancement Program*, *supra* note 35.

53. Coastal Zone Reauthorization Amendments of 1990, Pub. L. No. 101-508, 104 Stat. 1388-310 (1990) (codified as amended at 16 U.S.C. § 1456b(a)(8) (2012)).

54. NOAA, FINAL COASTAL MANAGEMENT ACT SECTION 309 PROGRAM GUIDANCE (2009), available at <http://coastalmanagement.noaa.gov/backmatter/media/guidancefy11309.pdf>.

dant federal and state regulations—on both horizontal and vertical governmental axes⁵⁵—present regulatory obstacles and uncertainty for developers and inefficiencies for government agencies.

a. *Federal Overview*

Offshore wind development in the Great Lakes would trigger a number of federal acts overseen by many different federal agencies.⁵⁶ The United States Army Corps of Engineers

55. The vertical governance axis is comprised of government entities ranging from sublocal to international (e.g., a state Department of Natural Resources and the federal Environmental Protection Agency). Conversely, the horizontal governance axis includes government agencies within each vertical level (e.g., the Environmental Protection Agency, Fish and Wildlife Service, and the Army Corps of Engineers). See Hari M. Osofsky & Hannah J. Wiseman, *Dynamic Energy Federalism*, 72 MD. L. REV. 773, 814–25 (2013).

56. Although these acts and agencies are not analyzed in detail in this Note, existing scholarship lacks a comprehensive regulatory scheme for offshore development in the Great Lakes. Development in the Great Lakes would involve the following acts (overseeing agencies are noted parenthetically): Coastal Zone Management Act (National Oceanic and Atmospheric Administration; Ocean and Coastal Resource Management), 16 U.S.C. §§ 1451–1466 (2012); National Marine Sanctuaries Act (National Oceanic and Atmospheric Administration), 16 U.S.C. §§ 1431–1445c-1 (2012); Endangered Species Act (Fish and Wildlife Service; National Oceanic and Atmospheric Administration), 16 U.S.C. §§ 1531–1544 (2012); Fish and Wildlife Coordination Act (Fish and Wildlife Service), 16 U.S.C. §§ 661–667d (2012); Bald and Gold Eagle Protection Act (Fish and Wildlife Service), 16 U.S.C. § 668 (2012); Migratory Bird Treaty Act (Fish and Wildlife Service; Migratory Bird Conservation Commission), 16 U.S.C. § 703 (2012); Fish and Wildlife Act (Fish and Wildlife Service), 16 U.S.C. §§ 742a–742j (2012); Marine Mammal Protection Act (Fish and Wildlife Service), 16 U.S.C. §§ 1361–1423 (2012); Rivers and Harbors Act (United States Army Corps of Engineers), 33 U.S.C. §§ 403, 408 (2012); Ports and Waterways Safety Act (United States Coastal Guard), 33 U.S.C. §§ 1221–1236 (2012); Clean Water Act (United States Army Corps of Engineers; Environmental Protection Agency), 33 U.S.C. § 1344 (2012); 33 U.S.C. §§ 1254, 1268, 1342, (2012); National Environmental Policy Act (United States Army Corps of Engineers; Fish and Wildlife Service), 42 U.S.C. § 4332(2)(C) (2012); Federal Power Act (Federal Energy Regulatory Commission), 16 U.S.C. § 791–828(c) (2012); Clean Air Act (Environmental Protection Agency), 42 U.S.C. §§ 7401–7671q (2012); Great Lakes Water Quality Agreement (Environmental Protection Agency), 33 U.S.C. § 1268 (2012); see also MUSIAL & RAM, *supra* note 13, at 147–55; *Great Lakes Water Quality Agreement*, ENVTL. PROT. AGENCY, available at <http://www.epa.gov/glnpo/glwqa/> (last visited Apr. 11, 2014) (stating that the purpose of the Agreement is to “restore and maintain the chemical, physical and biological integrity of the Waters of the Great Lakes”); Federal Aviation Act (Federal Aviation Agency), 49 U.S.C. § 44718 (2012); American Indian Religious Freedom Act (National Park Service; Advisory Council on Historic Preservation), 16 U.S.C. §§ 469–469c (2012); National Historic Preservation Act (National Park Service; Advisory Council on Historic Preservation), 16 U.S.C. §§ 470–470w-6 (2012); Archaeological and Historic

(USACE) would likely be the lead federal permitting agency⁵⁷ because the USACE oversees a number of permitting and licensing programs in state-controlled water.⁵⁸

b. State Overview

State agencies would play a large role in offshore wind development. Eight states border the Great Lakes: Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York.⁵⁹ Each Great Lakes state has jurisdiction “three geographical miles distant from . . . the international boundary” and over the submerged bottomlands, which include the land lying below the ordinary high water mark.⁶⁰ States have the “right and power to manage, administer, lease, develop, and use” the lands beneath their navigable waters.⁶¹ However, Congress has reserved jurisdiction over submerged lands to regulate navigation, flood control, and the production of power.⁶²

State permitting processes vary from state to state, which can affect the length of each approval process.⁶³ State agencies determine whether proposed activities are consistent with their state policies, including their CZMPs.⁶⁴ If the state agency finds that the proposed project is consistent with the CZMP, federal agencies can issue their licenses and permits.⁶⁵ If the state

Preservation Act (National Park Service; Advisory Council on Historic Preservation), 42 U.S.C. § 1996 (2012); Exec. Order No. 13186 (Fish and Wildlife Service; Environmental Protection Agency; United States Army Corps of Engineers); Exec. Order No. 13186, 3 C.F.R. 719 (2002) (clarifying federal agency responsibility to protect migratory birds under the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, the Fish and Wildlife Coordination Act, the Environmental Species Act, and the National Environmental Policy Act).

57. MUSIAL & RAM, *supra* note 13, at 155. *But see* Hanna Conger, Note, *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, 778–82 (2011) (discussing why USACE authority to issue permits in state waters for renewable energy projects remains “murky”).

58. *E.g.*, 33 U.S.C. § 1344(g) (2012).

59. Thirty-five tribal nations have rights in and around the Great Lakes shores, MUSIAL & RAM, *supra* note 13, at 155, and the Canadian province Ontario also borders four Great Lakes.

60. Submerged Lands Act, Pub. L. No. 83-31, 67 Stat. 29, 29–30 (1953) (codified as amended at 43 U.S.C. § 1312 (2012)).

61. 43 U.S.C. § 1311(a)(2) (2012).

62. *Id.* § 1311(d).

63. MUSIAL & RAM, *supra* note 13, at 153.

64. *See supra* Part I.A.1.b.

65. 15 C.F.R. § 930.62(c) (2013).

agency finds the proposed project is inconsistent with the state's CZMP, however, the applicant has two avenues to move forward on its project. First, the state can negotiate conditions with the applicant.⁶⁶ Alternatively, the applicant can request the Secretary of Commerce to override the state decision.⁶⁷

Some states have their own NEPA-like regulations and public review processes. Presently, of the eight Great Lakes states, Minnesota, Wisconsin, Indiana, and New York have state NEPA-like environmental planning requirements.⁶⁸ These four states may collaborate with federal agencies to combine documents into one report.⁶⁹

The Great Lakes states also possess property rights under the public trust doctrine. The public trust doctrine provides that lands beneath the tidal waters are held in trust by the sovereign (the state) for present and future generations.⁷⁰ In the landmark case, *Illinois Cent. R.R. v. Illinois*, the Supreme Court extended the public trust doctrine to include the Great Lakes and held that the state's title to the land under the navigable waters "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."⁷¹ States and other parties have used the public trust doctrine to protect public resources for the benefit of current and future generations,⁷² and could present issues for stakeholders interested in installing wind turbines in the Great Lakes. Though all eight Great Lakes states have recognized the public trust doctrine, their codifications and applications vary, adding complexity to offshore wind development projects.⁷³

66. *Id.* § 930.4.

67. *Id.* § 930.129(b).

68. IND. CODE §§ 13-12-4-1 to 10 (2013); MINN. STAT. § 116D.01-.11 (2013); N.Y. ENVTL. CONSERV. §§ 8-0101 to -0117 (2013); WIS. STAT. § 1.11 (2013).

69. MUSIAL & RAM, *supra* note 13, at 154; *see, e.g., Permitting Update, CAPE WIND*, <http://www.capewind.org/article72.htm> (last visited Apr. 11, 2014) (describing the combined agency report for Cape Wind).

70. *See* Alexandra B. Klass, *Renewable Energy and the Public Trust Doctrine*, 45 U.C. DAVIS L. REV. 1021, 1023 (2012).

71. 146 U.S. 387, 452 (1892).

72. Klass, *supra* note 70, at 1028-31.

73. Elaine Sterrett Isely & Victoria Pebbles, *U.S. Great Lakes Policy and Management: A Comparative Analysis of Eight States' Coastal and Submerged Lands Programs and Policies*, 37 COASTAL MGMT. 197, 208 (2009).

Finally, states control the use of their submerged lands through permitting, licensing, leasing, and easements and may delegate this authority to local planning and zoning boards.⁷⁴

c. Regional Overview

In addition to strictly federal and state statutory frameworks, regional transmission organizations (RTOs) play a key role in managing the transmission grid⁷⁵ on a regional basis throughout North America.⁷⁶ RTOs provide nondiscriminatory access to transmission,⁷⁷ plan and operate the transmission grid, and coordinate additions and upgrades.⁷⁸ There are four RTOs in the Great Lakes region: Midcontinent Independent System Operator, PJM Interconnection, Independent Electricity System Operator, and New York Independent System Operator.⁷⁹ While states manage their own siting procedures for transmission lines, each state interacts with RTOs for grid management and engages in regional cooperation.⁸⁰

B. COLLABORATIVE ATTEMPTS TO PLAN FOR OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES

In order to foster communication and collaboration between state and federal agencies, regional interstate and inter-agency agreements are being used to address offshore wind development. The Great Lakes Basin Compact, which includes all eight Great Lakes states, Ontario, and Quebec, is an interstate agreement aimed at promoting “the orderly, integrated, and comprehensive development, use, and conservation of the water resources of the Great Lakes Basin.”⁸¹ The Great Lakes Basin

74. See Robert W. Eberhardt, Note, *Federalism and the Siting of Offshore Wind Energy Facilities*, 14 N.Y.U. ENVTL. L.J. 374, 382–83 (2006).

75. A transmission grid is made up of a network of power stations, transmission lines, and substations. See Alexandra B. Klass & Elizabeth J. Wilson, *Interstate Transmission Challenges for Renewable Energy: A Federalism Mismatch*, 65 VAND. L. REV. 1801, 1805–08 (2012).

76. See Hari M. Osofsky & Hannah J. Wiseman, *Hybrid Energy Governance*, U. ILL. L. REV. (forthcoming 2014); N. AM. ELEC. RELIABILITY CORP., <http://www.nerc.com/Pages/default.aspx> (last visited Apr. 11, 2014).

77. FERC Order No. 888; *Regional Transmission Organizations (RTO)/Independent System Operators (ISO)*, FED. ENERGY REGULATORY COMM’N, <http://www.ferc.gov/industries/electric/indus-act/rto.asp> (last visited Apr. 11, 2014) [hereinafter *Regional Transmission Organizations*].

78. FERC Order No. 2000, at 323–24.

79. *Regional Transmission Organizations*, *supra* note 77.

80. Klass & Wilson, *supra* note 75, at 1814.

81. GREAT LAKES COMMISSION, GREAT LAKES BASIN COMPACT art. I, § 1

Compact created the Great Lakes Commission, which is a body made up of three to five commissioners from each party state.⁸² The Great Lakes Commission may make recommendations regarding offshore wind development, but “no action of the Commission shall have the force of law in, or be binding upon, any party state.”⁸³ The Great Lakes Commission also staffs the Great Lakes Wind Collaborative, a multi-sector collaboration comprised of wind energy stakeholders committed to facilitating “sustainable development of wind power in the binational Great Lakes region.”⁸⁴ The Great Lakes Wind Collaborative seeks to address “technical, environmental, regulatory, educational and financial issues” associated with offshore wind development.⁸⁵

On February 22, 2012, another Great Lakes coalition formed when a number of federal agencies and five states signed a memorandum of understanding (MOU) in order to “support the efficient, expeditious, orderly and responsible review of proposed offshore wind energy projects in the Great Lakes,” as well as to enhance federal and state agency coordination.⁸⁶ Notably absent from the MOU were Wisconsin, Ohio, and Indiana.⁸⁷ The MOU outlines the responsibilities of the participants and each participant’s mission and statutory authority.⁸⁸ The MOU parties hope that the agreement will facilitate “collaboration on innovative ways to address significant market barriers to offshore wind deployment” in the Great Lakes.⁸⁹ In addition, the parties wish to emulate the Atlantic

(n.d.), available at <http://www.glc.org/files/main/GreatLakesBasinCompact.pdf> (last visited Apr. 11, 2014).

82. *Id.* at art. IV.

83. *Id.* at art. VI, § N.

84. *Great Lakes Wind Collaborative*, GREAT LAKES COMM’N, <http://www.glc.org/projects/energy/wind/.html> (last visited Apr. 11, 2014).

85. *Id.*

86. Memorandum of Understanding Among the White House Council on Env’tl. Quality, the U.S. Dep’t of Energy, the U.S. Dep’t of Def., the U.S. Dep’t of the Army, the Advisory Council on Historic Pres., the U.S. Coast Guard, the U.S. Env’tl. Prot. Agency, the U.S. Fish and Wildlife Serv., the Fed. Aviation Admin., the Nat’l Oceanic and Atmospheric Admin., the Commonwealth of Pa. and the States of Ill., Mich., Minn., N.Y. (Feb. 22, 2012), available at http://www1.eere.energy.gov/wind/pdfs/great_lakes_offshore_wind_energy_consortium_mou.pdf.

87. *See id.*

88. *Id.* at 2–6.

89. OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, U.S. DEP’T OF ENERGY, FACT SHEET—GREAT LAKES OFFSHORE WIND ENERGY CONSORTIUM

Offshore Wind Energy Consortium MOU, which has been deemed successful in “spurring cooperation” and increasing wind development efficiencies in the Atlantic OCS.⁹⁰

II. THE COASTAL ZONE MANAGEMENT ACT AND PRO-WIND COALITIONS FAIL TO MARSHAL OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES REGION

This Part considers the shortcomings of both the CZMA and hybrid coalitions as regulatory catalysts for offshore wind development in the Great Lakes. Section A analyzes the differences in Great Lakes states’ CZMPs and Section 309 Enhancement Programs. Section B evaluates the shortcomings of the CZMA as a regulatory tool for offshore wind development in the Great Lakes. Finally, Section C addresses the deficiencies in current interstate and interagency attempts to plan for offshore wind development.

A. VARIATION IN ATTENTION TO WIND IN STATE CZMPs AND SECTION 309 ENHANCEMENT PROGRAMS

The spectrum of attention to wind in state CZMPs and Section 309 Enhancement Programs reveals that the CZMA has the potential to be either an effective conduit or a hammer without a head for offshore wind development. Though several provisions of the CZMA support energy facility siting and planning,⁹¹ the resulting CZMPs vary substantially in their attention to offshore wind.⁹² In fact, most of the CZMPs do not address offshore wind at all⁹³ despite the requirement in Section 306 to provide for adequate consideration of energy facilities.⁹⁴

Despite the offshore wind-deficient CZMPs, seven of the Great Lakes states created Section 309 Enhancement Programs under the Coastal Zone Enhancement Program for the 2011–2015 period. All seven of the participating Great Lakes states addressed offshore wind development in their 309 As-

1 (n.d.), available at http://www1.eere.energy.gov/wind/pdfs/gl_mou_fact_sheet.pdf (last visited Apr. 11, 2014).

90. *Id.*

91. *See, e.g., supra* notes 42–43 and accompanying text.

92. *See infra* notes 122–32 and accompanying text.

93. *See infra* notes 103, 105, 108, 110, 112, 114, 116 and accompanying summary.

94. 16 U.S.C. § 1455(d)(8) (2012).

sessments,⁹⁵ four of which designated the “energy and government facility siting” enhancement as a “high” priority, citing offshore wind development as a key reason.⁹⁶

The CZMP with the most robust discussion of offshore wind development is that of Illinois. Of the eight Great Lakes states’ CZMPs,⁹⁷ only Illinois’s CZMP explicitly discusses offshore wind development.⁹⁸ This is likely due to the fact that Illinois just recently joined the other seven Great Lakes states in the National Coastal Zone Management Program in 2012.⁹⁹ Pennsylvania amended its CZMP to include wind as a new type of energy facility due to increased interest in offshore wind development in Lake Erie and availability of federal funding for green energy projects.¹⁰⁰ New York’s CZMP also discusses wind, but it merely touches upon alternative energy siting.¹⁰¹

95. See *infra* notes 104, 106, 109, 111, 113, 115, 117 and accompanying summary.

96. See *infra* notes 109, 111, 113, 115 and accompanying summary.

97. Though states refer to their CZMPs by different names (i.e., “coastal resources management program,” *infra* note 115, or “coastal management program,” *infra* note 98), this Note will refer to each state’s program as “CZMP.”

98. See ILL. DEP’T OF NATURAL RES., STATE OF ILLINOIS COASTAL MANAGEMENT PROGRAM 148 (2011), available at <http://www.dnr.illinois.gov/cmp/Documents/ICMPPD.pdf>.

99. *Ocean and Coastal Management in Illinois: Illinois’ Coastal Program*, NOAA, <http://coastalmanagement.noaa.gov/mystate/il.html> (last visited Apr. 11, 2014).

100. PA. DEP’T OF ENVTL. PROT., SECTION 309 ASSESSMENT AND STRATEGY OF PENNSYLVANIA’S COASTAL RESOURCES MANAGEMENT PROGRAM 112 (2011), available at <http://www.dep.state.pa.us/river/reference/docs/309Feb2010.pdf> [hereinafter PENNSYLVANIA 309].

101. OFFICE OF COASTAL ZONE MGMT., NOAA & N.Y. DEP’T OF STATE, NEW YORK STATE COASTAL MANAGEMENT PROGRAM AND FINAL ENVIRONMENTAL IMPACT STATEMENT II-5, 23 & II-7, 1 (2006), available at http://www.dos.ny.gov/opd/programs/pdfs/NY_CMP.pdf.

Summary of Great Lakes States' CZMP Attention to Off-shore Wind

| State | Year of CZMP Approval ¹⁰² | Does CZMP Include Wind? | Does 309 Program Include Offshore Wind? | 309 Program Offshore Wind Development Level of Priority | Plans to Develop Offshore Wind Strategy under 309 Energy Enhancement Program |
|-------|--------------------------------------|-------------------------|-----------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------|
| MN | 1999 | No ¹⁰³ | Yes ¹⁰⁴ | Medium | No |
| WI | 1978 | No ¹⁰⁵ | Yes ¹⁰⁶ | Low | No |
| IL | 2012 | Yes ¹⁰⁷ | N/A | N/A | N/A |
| IN | 2002 | No ¹⁰⁸ | Yes ¹⁰⁹ | High | Yes |

102. *States and Territories Working on Ocean and Coastal Management*, NOAA, <http://coastalmanagement.noaa.gov/mystate/welcome.html> (last visited Apr. 11, 2014) (providing links for each state that give the year of CZMP approval).

103. See OFFICE OF OCEAN & COASTAL RES. MGMT., NOAA & MINN.'S LAKE SUPERIOR COASTAL PROGRAM, MINN. DEP'T OF NATURAL RES., COMBINED COASTAL MANAGEMENT PROGRAM AND ENVIRONMENTAL IMPACT STATEMENT FOR THE STATE OF MINNESOTA Part V (1999), available at http://files.dnr.state.mn.us/waters/lakesuperior/feis/mlscp_feis.pdf (making no mention of offshore wind energy).

104. MINN. DEP'T OF NATURAL RES., SECTION 309 ASSESSMENT AND STRATEGIES FOR 2011–2015, at 46–49 (n.d.) [hereinafter MINNESOTA 309], available at <http://files.dnr.state.mn.us/waters/lakesuperior/coastalenhancement/309as2011.pdf> (last visited Apr. 11, 2014). Though Minnesota does not directly mention offshore wind in its discussion of enhancement area prioritization, it can be inferred that “data acquisition” refers to Minnesota “currently lack[ing] data related to potential off-shore wind farms.” See *id.* at 44, 49.

105. DIV. OF INTERGOVERNMENTAL RELATIONS, WIS. DEP'T OF ADMIN., WISCONSIN COASTAL MANAGEMENT PROGRAM: A STRATEGIC VISION FOR THE GREAT LAKES (2007), available at <http://www.doa.state.wi.us/documents/DIR/Coastal%20Management/Program%20Docs/WCMP%20Strategic%20Vision%20for%20Great%20Lakes%202007.pdf> (making no mention of offshore wind energy).

106. WIS. DEP'T OF ADMIN., WISCONSIN COASTAL MANAGEMENT PROGRAM: NEEDS ASSESSMENT AND STRATEGY 2011–2015, at 67–72 (2010) [hereinafter WISCONSIN 309], available at <http://www.cdm16119.contentdm.oclc.org/cdm/ref/collection/p267601coll4/id/3455>.

107. See *supra* note 98 and accompanying text.

108. OFFICE OF OCEAN & COASTAL RES. MGMT., NOAA & IND. DEP'T OF NATURAL RES., COMBINED COASTAL PROGRAM DOCUMENT AND FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE STATE OF INDIANA (2002), available at <http://www.in.gov/dnr/files/lmcp-feis.pdf> (making no mention of offshore wind energy).

| | | | | | |
|----|------|--------------------|--------------------|--------|-----|
| MI | 1978 | No ¹¹⁰ | Yes ¹¹¹ | High | Yes |
| OH | 1997 | No ¹¹² | Yes ¹¹³ | High | Yes |
| PA | 1980 | Yes ¹¹⁴ | Yes ¹¹⁵ | High | No |
| NY | 1982 | Yes ¹¹⁶ | Yes ¹¹⁷ | Medium | No |

Illinois's CZMP "Energy Facility Planning Process" section states that the Illinois Department of Water Resources participates in the Great Lakes Wind Collaborative, which is a regional organization coordinating the development of wind resources in the Great Lakes.¹¹⁸ The CZMP asserts that "state

109. IND. DEP'T OF NATURAL RES., INDIANA LAKE MICHIGAN COASTAL PROGRAM: COASTAL ZONE MANAGEMENT 309 ENHANCEMENT GRANT PROGRAM 59–62 (2010), *available at* <http://coastalmanagement.noaa.gov/mystate/docs/in3092011.pdf>.

110. *Cf.* OFFICE OF OCEAN & COASTAL RES. MGMT., NOAA, FINAL EVALUATION FINDINGS: MICHIGAN COASTAL MANAGEMENT PROGRAM SEPTEMBER 2002 THROUGH APRIL 2006, at 18 (2006), *available at* <http://coastalmanagement.noaa.gov/mystate/docs/MichiganCMP2006.pdf> ("Offshore wind farms in the Great Lakes are a subject of considerable interest, yet Michigan's Great Lakes bottomlands are under state ownership, held in trust for all citizens of the state. Substantial research, public discussion and debate, and legislative action would be needed to site and operate commercial wind projects in Michigan's Great Lakes waters.").

111. MICH. DEP'T OF ENVTL. QUALITY, SECTION 309 ASSESSMENT AND FIVE-YEAR STRATEGY FOR COASTAL ZONE MANAGEMENT PROGRAM ENHANCEMENT: FISCAL YEARS 2012–2016, at 54–62, 82–88 (2011), *available at* http://www.michigan.gov/documents/deq/deq-ogl-mcmp-Section309Strategy2012-2016_369789_7.pdf.

112. *See* OFFICE OF OCEAN & COASTAL RES. MGMT., NOAA & OFFICE OF COASTAL MGMT., OHIO DEP'T OF NATURAL RES., COMBINED COASTAL MANAGEMENT PROGRAM AND FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE STATE OF OHIO (2007), *available at* <http://www.dnr.state.oh.us/LinkClick.aspx?fileticket=GEHCgXISK8A%3D&tabid=9260> (making no mention of offshore wind energy).

113. *See* OHIO DEP'T OF NATURAL RES., OHIO COASTAL MANAGEMENT PROGRAM ASSESSMENT AND MULTI-YEAR STRATEGY 2011–2015, at 74–79 (2010), *available at* <http://www.dnr.state.oh.us/LinkClick.aspx?fileticket=XQi%2f7mGR5zg%3d&tabid=20483>.

114. *See supra* note 100 and accompanying text.

115. PA. DEP'T OF ENVTL. PROT., SECTION 309 ASSESSMENT AND STRATEGY OF PENNSYLVANIA'S COASTAL RESOURCES MANAGEMENT PROGRAM 108–14 (2011), *available at* <http://www.dep.state.pa.us/river/reference/docs/309Feb2010.pdf> [hereinafter PENNSYLVANIA 309].

116. *See supra* note 101 and accompanying text.

117. N.Y. DEP'T OF STATE, NEW YORK STATE COASTAL MANAGEMENT PROGRAM: 309 ASSESSMENT AND STRATEGIES 76–82 (2010), *available at* <http://coastalmanagement.noaa.gov/mystate/docs/ny3092011.pdf> [hereinafter NEW YORK 309].

118. *See supra* note 84 and accompanying text.

policy guidelines are under development governing the siting of offshore wind projects in Illinois coastal waters.”¹¹⁹ In outlining energy policy and planning authorities and initiatives, the CZMP lists Governor Executive Orders and Initiatives aimed at energy efficiency and enhancing the use of wind.¹²⁰ In addition, the CZMP touches upon the Illinois Power Agency Act, which created an objective to obtain at least 75% of the renewable energy resources from wind generation.¹²¹

Of the seven states with Section 309 Programs, Wisconsin is the only state that has given offshore wind development strategizing a “low” level of prioritization.¹²² Though acknowledging that offshore wind energy facility siting “may become more contentious in the future and require a strategy,” the Wisconsin Coastal Management Program believes that “adequate measures are already in place” for future siting and it does not expect to receive any offshore wind siting proposals in the next several years.¹²³

Minnesota and New York both listed offshore wind strategy as having a “medium” level of prioritization in their Section 309 Enhancement Programs and neither state CZMP plans to develop an offshore wind strategy.¹²⁴ Minnesota has decided not to develop a strategy for the energy and government facility siting enhancement area because it has found that “the pieces are in place in energy and government facility siting” and can address program partner roles through grants under Section 306.¹²⁵ New York has decided not to develop any strategies for the energy siting enhancement area because it will conduct activities related to energy and government facility siting “outside of federal 309 funding.”¹²⁶ However, New York is developing an Offshore Management Plan focused on the area from Long Island out to the Atlantic continental shelf edge¹²⁷ and has outlined gaps that need to be addressed, including policies related to offshore siting criteria for wind development in the

119. ILL. DEPT OF NATURAL RES., STATE OF ILLINOIS COASTAL MANAGEMENT PROGRAM 148 (2011), available at <http://www.dnr.illinois.gov/cmp/Documents/ICMPPD.pdf>.

120. *Id.* at 146.

121. *Id.* at 145.

122. WISCONSIN 309, *supra* note 106, at 72.

123. *Id.*

124. *See supra* notes 104, 117 and accompanying text.

125. MINNESOTA 309, *supra* note 104, at 49.

126. NEW YORK 309, *supra* note 117, at 82.

127. *Id.* at 72.

Great Lakes.¹²⁸ New York's CZMP lists some of the benefits of its 309 strategies for coastal management: better "informed decisions on offshore wind proposals," and the ability to "effectively seek enhanced protection measures for critical offshore habitats[] and avoid . . . conflicts with existing ocean uses."¹²⁹

While the energy facility siting enhancement area is a priority for Pennsylvania's CZMP, it does not plan to develop a strategy for it.¹³⁰ The 309 Assessment states that Pennsylvania updated its CZMP's "Enforceable Policy" for energy siting "to include "[w]ind as a new type of energy facility that may impact the resources of the Coastal Zone."¹³¹ Pennsylvania has chosen not to develop a strategy for the energy siting enhancement area because "it does not have sufficient data and mapping to properly evaluate the effects of offshore wind development on coastal resources."¹³²

The significant variation and overall lack of offshore wind planning in the CZMPs undermine the CZMA policy to provide for priority consideration for "orderly processes for siting major facilities related to . . . energy,"¹³³ and reveals a need for statutory reform in order to achieve the intended goals of the CZMA.

B. SHORTCOMINGS OF THE CZMA AS A REGULATORY CATALYST FOR PLANNING OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES

Thus far, the CZMA has been an underutilized and overlooked resource for Great Lakes states interested in offshore wind development. Though the CZMA is considered a moderately successful act in terms of its impact on the integration of environmental protection, resource management, and development,¹³⁴ the CZMA has come up short in terms of developing a coherent U.S. coastal policy.¹³⁵ For example, despite the requirement in CZMA § 306(d)(8) for the Secretary of Commerce to find that each state give "consideration to *any* applicable na-

128. *Id.* at 109–10.

129. *Id.* at 110.

130. PENNSYLVANIA 309, *supra* note 115, at 113–14.

131. *Id.* at 112.

132. *Id.* at 114.

133. 16 U.S.C. § 1452(2)(D) (2012).

134. See Rychlak, *supra* note 27, at 990 n.49.

135. Rusty Russell, *Neither Out Far Nor in Deep: The Prospects for Utility-Scale Wind Power in the Coastal Zone*, 31 B.C. ENVTL. AFF. L. REV. 221, 253 (2004).

tional or interstate energy plan or program” and “adequate consideration” to energy facilities “which are of greater than local significance,”¹³⁶ only one Great Lakes program has actually done so.¹³⁷ The Secretary of Commerce approved four of the eight Great Lakes states’ CZMPs from 1978–1982,¹³⁸ well before the first offshore wind turbine entered Danish water in 1991,¹³⁹ and approved two other CZMPs¹⁴⁰ before Cape Wind Associates first announced its plan to construct wind turbines in Nantucket Sound.¹⁴¹ Importantly, the CZMA does not require states to update their CZMPs to account for changes in technology related to energy facilities, and so states have chosen not to update them.¹⁴²

In addition, the CZMA does not require Great Lakes states to create a regional process for energy facility siting.¹⁴³ Presently, the Great Lakes states’ CZMPs lack a comprehensive regional approach to offshore wind policies.¹⁴⁴ The absence of a regional policy creates regulatory uncertainty and potentially inconsistent requirements for developers, creating avoidable impediments to efficient industry development and turbine siting. The CZMA also lacks required structured planning for Great Lakes states with multiple coastlines that border multiple Great Lakes or the Atlantic Ocean and one or more Great Lake.¹⁴⁵ The regulatory pathways at local, state, and federal levels for such states will differ and thus require separate planning.

Proposed amendments to the CZMA are not new. Critics of the CZMA have suggested that, in order to address gaps and deficiencies in state CZMPs, the Act must be further supplemented by federal policy guidance, the Act must be amended to better integrate programs, and states must be encouraged to

136. 16 U.S.C. § 1455(d)(8) (2012) (emphasis added).

137. See *supra* notes 97–101 and accompanying text.

138. This includes Wisconsin, Michigan, Pennsylvania, and New York. See *supra* note 102 and accompanying summary.

139. See *supra* note 21 and accompanying text.

140. This includes Ohio and Minnesota. See *supra* note 102 and accompanying summary.

141. FRED BOSSELMAN ET AL., ENERGY, ECONOMICS AND THE ENVIRONMENT: CASES AND MATERIALS 857 (3d ed. 2010).

142. See 16 U.S.C. § 1455 (2012) (providing no such requirement).

143. See *id.* (providing no such requirement).

144. See *supra* notes 122–32 and accompanying text.

145. See 16 U.S.C. § 1455 (providing no special structuring requirements for states with multiple coastlines).

amend their CZMPs to respond specifically to offshore wind development considerations.¹⁴⁶ However, such proposals have not offered specific solutions for how to address these gaps and deficiencies¹⁴⁷—they tell us to tie a bowline knot, but don't show us how it's done. One recommended solution includes amending the CZMA to include an explicit mandate for offshore wind power in “appropriate locations,”¹⁴⁸ though such a mandate does not expedite the necessary and costly environmental review processes, nor does it make fuzzy regulatory pathways any more certain for development in the Great Lakes.

C. INADEQUACIES OF CURRENT APPROACHES TO OFFSHORE WIND DEVELOPMENT IN THE GREAT LAKES

Despite the CZMP variability and other deficiencies, the Great Lakes states' CZMPs would still be a better vehicle through which to plan, coordinate, and/or prohibit offshore wind development than other current interstate programs, compacts, and MOUs because they already integrate federal and state laws and agencies, are designed to both protect and develop coastal zones, and require planning for energy facilities. Specifically, the CZMA provides for cooperative federalism between federal and state agencies under Section 307,¹⁴⁹ funding and incentives for continued innovation under Sections 307 and 309,¹⁵⁰ as well as energy facility siting under Section 306.¹⁵¹

Moreover, unlike the Great Lakes Commission and the Great Lakes MOU, the CZMA and CZMPs have legal force at the state and federal levels of government. The Great Lakes Commission is “solely a consultative and recommendatory agency which will cooperate with the agencies of the United

146. *E.g.*, Russell, *supra* note 135, at 254–57; Erica Schroeder, Note, *Turning Offshore Wind On*, 98 CALIF. L. REV. 1631, 1663–64 (2010).

147. *See, e.g.*, Russell, *supra* note 135, at 255–59 (discussing potential solutions very generally); Schroeder, *supra* note 146, at 1661–64 (proposing that Congress or the Secretary of Commerce instruct states to revise their CZMPs, but only specifically suggesting that states update their CZMPs to be in compliance with author's unrealistic recommendation to amend the CZMA to “include an explicit mandate to states to permit . . . offshore wind”).

148. Schroeder, *supra* note 146, at 1660–64 (arguing that the CZMA should be amended to “include an explicit mandate for offshore wind power development where appropriate and feasible on all U.S. coasts; [t]o require revisions to CZMPs in accordance with this new mandate; and [t]o increase funding and other incentives for offshore wind power development”).

149. *See supra* Part I.A.1.b.

150. *See supra* Part I.A.1.

151. *See supra* Part I.A.1.a.

States.”¹⁵² Similarly, offshore wind proponents are skeptical of the ability of interagency coordination attempts such as the MOU to actually move offshore wind development forward because the federal government does not have exclusive jurisdiction over the Great Lakes waters, and not all Great Lakes states signed the MOU.¹⁵³ MOUs and coalitions such as the Great Lakes Wind Collaborative are crucial for bringing together agencies, industries, and stakeholders relevant to offshore wind development, but state and regional planning under the CZMA for offshore wind development would likely be the most efficient and effective way of getting turbines into the water.

The complex federal and state regulatory scheme governing development in the Great Lakes poses a significant barrier to stakeholders interested in offshore development. Current approaches—as seen on the Atlantic Seaboard and through the current state CZMPs—have been disjointed and inefficient.¹⁵⁴ With an amendment to Section 306 and appropriate modifications to Section 309 Enhancement Programs, states should be set on a trajectory towards offshore wind development in an efficient and timely manner.

III. AMENDING THE COASTAL ZONE MANAGEMENT ACT

The analysis above illustrates that energy law in the United States can be “complex and deeply fragmented.”¹⁵⁵ Refining the CZMA would allow public and private stakeholders to more adroitly maneuver the different federal, state, and local regulatory schemes. The coastal zone management program is the principal means through which federal, state, and local agencies and political units addressing coastal issues collaborate and attempt to balance often contradictory goals: coastal preservation and development.¹⁵⁶ With some reasonable modifi-

152. Act of July 24, 1968, Pub. L. No. 90-419, 82 Stat. 414, 419 (1968) (discussing the limited consent given by Congress to the Great Lakes Basin Compact).

153. See, e.g., Lawrence Hurley, *Great Lakes Projects Founder as Political Winds Shift*, GREENWIRE (May 16, 2012), <http://www.eenews.net/greenwire/stories/1059964494>.

154. See *supra* notes 20–21 and accompanying text (noting U.S. offshore wind programs as being more than twenty years behind those in other countries); *supra* notes 102–32 (discussing disjointed approaches of Great Lakes states).

155. Osofsky & Wiseman, *supra* note 76, at 1.

156. See *supra* Part I.A.1.

cations and increased funding, the CZMA is well-positioned to channel the needs of the different levels of government and ensure that both goals are met.

States should be required to update their CZMPs to account for the titanic changes in energy technology that could affect the Great Lakes coastal zone. Though CZMA § 306(e) allows states to amend or modify their programs,¹⁵⁷ as currently written, CZMA §§ 306(d)(2)(H) and (d)(8)¹⁵⁸ do not require states to update program elements to account for significant changes in energy technology.

Because energy infrastructure will involve many federal, state, and local agencies with varying approaches to managing offshore energy,¹⁵⁹ it is important to improve facilitation between and amongst these governmental agencies. The CZMA could be used for better interagency and cross-jurisdictional coordination of renewable energy siting and permitting in the Great Lakes. For example, states that have coastlines in both the Great Lakes and Atlantic Ocean should develop regional strategies and policies that account for the different regulatory schemes on each coast.

With rapidly evolving technology and the country's desire to become more energy independent, the CZMA would be an excellent mainframe for horizontal and vertical governance coordination for offshore wind development policy and planning. Regardless of Great Lakes states' decisions to develop offshore wind in the immediate future, increasing state and regional planning through modest changes to the CZMA and its guidance would establish a valuable framework for making determinations later down the road. Moreover, major federal legislative or programmatic changes are unlikely to be politically feasible anyway.¹⁶⁰ It is unnecessary to buy a new sail when a few patches will significantly improve boat speed.

157. 16 U.S.C. § 1455(e) (2012).

158. 16 U.S.C. § 1455(d)(2)(H), (d)(8).

159. See NAT'L OCEAN & ATMOSPHERIC ADMIN., ENVISIONING THE FUTURE OF COASTAL MANAGEMENT: STAKEHOLDER DISCUSSION SUMMARY BY TOPIC: ENERGY AND OCEAN USES (n.d.), available at <http://coastalmanagement.noaa.gov/czm/media/EnergyOceanUse.pdf> (last visited Apr. 11, 2014).

160. See TIMOTHY BEATLEY ET AL., AN INTRODUCTION TO COASTAL ZONE MANAGEMENT ACT 298 (2d ed. 2002).

A. INCREASING STATE AND REGIONAL PLANNING THROUGH CZMPs

With some specific modifications to Section 306 and Section 309 Guidance, the coastal zone management scheme could better facilitate paving clear regulatory pathways to offshore wind development.

1. Modifications to Section 306 Planning Processes for Energy Facilities

Statutorily requiring states to update their CZMPs would be the most efficient way to ensure that states plan for offshore wind development. This proposed solution further expands on existing recommendations to improve the prospects of utility-scale wind power in the coastal zone by amending the CZMA to respond to the potential for offshore wind development.¹⁶¹ Congress should amend the CZMA to require states whose CZMPs were approved before January 1, 2013 to update their CZMPs to account for the significant changes in what types of energy facilities might affect coastal zones. Part III.B includes a model amendment to Section 306.

Updated CZMPs under an amended Section 306 would necessarily include consideration of the planning process or a “process for anticipating the management of the impacts resulting from such facilities”¹⁶² for offshore wind development. Planning for offshore wind development would include not only turbine and lakebed transmission line siting and local, state, and federal permitting, but also onshore grid connection.¹⁶³ With 114 coastal power plants located within two kilometers of the Great Lakes shoreline that use coal, natural gas, oil, nuclear, and biomass,¹⁶⁴ states would have to consider which power plants could take on the more variable offshore wind energy. Milwaukee and Green Bay, Wisconsin; Chicago, Illinois; Toledo and Cleveland, Ohio; Erie, Pennsylvania; and Buffalo and Rochester, New York all border a Great Lake and have popula-

161. See, e.g., Schroeder, *supra* note 146, at 1660–64 (recommending amending the CZMA).

162. 16 U.S.C. § 1455(d)(2)(H).

163. See U.S. DEPT OF ENERGY, *supra* note 9 (discussing a number of logistics issues, including grid integration).

164. *Coastal Power Plants*, GREAT LAKES ENVTL. ASSESSMENT & MAPPING PROJECT, http://www.greatlakesmapping.org/great_lake_stressors/4/coastal-power-plants (last visited Apr. 11, 2014).

tions greater than one hundred thousand.¹⁶⁵ Many of these industrial cities are in counties designated nonattainment for one or more criteria pollutant,¹⁶⁶ and offshore wind development could simultaneously provide these cities with both clean energy and manufacturing opportunities.¹⁶⁷

2. Modifications to Implementation of Section 309 Enhancement Programs

In addition to the Section 306 amendment requiring states to refurbish their CZMPs, Section 309 can and should be used for offshore wind development planning. To maximize the utility of Section 309 Enhancement Programs, NOAA's Office of Ocean and Coastal Resource Management, which oversees the National Coastal Zone Management Program,¹⁶⁸ must modify its 309 Guidance to facilitate clearer intrastate and regional governmental coordination, planning, and policy related to offshore wind development. This section proposes three concrete modifications to Section 309 Guidance that would catalyze intrastate, regional, and multi-coast planning.

a. Intrastate Governmental Coordination

State agencies that manage CZMPs will begin applying for Section 309 Enhancement Programs in 2014. NOAA's Final Coastal Zone Management Act Section 309 Guidance for the next 309 Enhancement Program period (2016–2020) should require states applying for coastal zone enhancement grants to outline several regulatory schemes.

First, the Section 309 Guidance should require states to outline in detail what state agency coordination would look like for the offshore wind siting and permitting process. This process would include coordination amongst various state agencies as well as relevant federal agencies. For example, four Great Lakes states—Minnesota, Wisconsin, Indiana, and New York—

165. See *State & County QuickFacts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/index.html> (last visited Apr. 11, 2014).

166. *Currently Designated Nonattainment Areas for All Criteria Pollutants*, ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oaqps001/greenbk/anc13.html> (last updated Dec. 5, 2013) (including Milwaukee, Chicago, Cleveland, Buffalo, and Rochester); see sources cited *supra* note 5.

167. See U.S. DEP'T OF ENERGY, *supra* note 9 (discussing benefits of wind energy for the environment as well as the workforce).

168. *Coastal Programs: Partnering with States to Manage Our Coastline*, NOAA, <http://coastalmanagement.noaa.gov/programs/czm.html> (last visited Apr. 11, 2014).

have NEPA-like environmental planning requirements.¹⁶⁹ By requiring states to outline agency coordination, Section 309 Guidance would compel these states to outline whether they will require independent state NEPA documents or plan to combine environmental planning documents into one report with federal agencies.¹⁷⁰ Outlining agency coordination for offshore wind siting and permitting processes in the Great Lakes would also facilitate financing.¹⁷¹

Second, the Section 309 Guidance should require state agencies to outline which municipal agencies and tribal authorities would be involved in offshore wind siting and permitting and what role they would play. State applications for development in Great Lake water and permitting, licensing, leasing, and easements that may be delegated to local planning and zoning boards are not uniform across state lines and municipalities.¹⁷² Mapping out the regulatory process under Section 309 would assist interested developers in moving projects forward. Moreover, because some Great Lakes states have multiple coasts, as is addressed in Part III.A.2.c, the number of municipal agencies involved will vary state-to-state, coast-to-coast. By sketching the pecking order and respective roles in Section 309 Enhancement Programs and working with (instead of around) tribal authorities, Great Lakes state agencies and developers can address likely conflicts on the front end and avoid some of the legal quagmire that stalled development in Nantucket Sound.¹⁷³

Third, the Section 309 Guidance should require states to outline which shoreline transmission systems could connect to offshore wind turbines and whether the construction of new transmission infrastructure would be necessary to take on the additional load from offshore wind. Offshore wind resources in the Great Lakes region are located near many urban centers

169. See *supra* note 68 and accompanying text.

170. See *supra* text accompanying notes 68–69.

171. Having siting and permitting processes in place can dramatically reduce the time it takes for projects to be approved, making potential financiers and lenders more inclined to lend to project developers and reducing costs of local manufacturing and sourcing. Michael Conathan & Richard W. Caperton, *Clean Energy from America's Oceans: Permitting and Financing Challenges to the U.S. Offshore Wind Industry*, CTR. FOR AM. PROGRESS (June 1, 2011), <http://www.americanprogress.org/issues/green/report/2011/06/01/9720/clean-energy-from-americas-oceans/>.

172. See *supra* notes 73–74 and accompanying text.

173. See *supra* note 15 and accompanying text.

that use a lot of energy and already have many power plants and transmission systems in place.¹⁷⁴ With coastal population density expected to continue to increase,¹⁷⁵ states should be required to include in their Section 309 Enhancement Programs a plan for how offshore wind energy would connect to onshore distribution and transmission systems.

b. Regional Coordination

In order to forge stronger regional coordination, Section 309 Guidance should offer states additional funding for regional policies that specifically address energy facility siting. A regional policy that focuses on offshore wind development in the Great Lakes region would spur innovative ways to address market barriers to offshore wind development specific to the Great Lakes and would facilitate paving clear federal and state regulatory pathways. Regional planning could allow for streamlined processes, particularly if states chose to adopt similar siting and permitting requirements. Regionalization would also allow the four RTOs operating in the Great Lakes region¹⁷⁶ to address intermittency issues caused by increased use of renewable energy sources that energy utilities have struggled to solve¹⁷⁷ and plan for interconnection with neighboring RTOs, transmission capacity, necessary upgrades, and how to allocate transmission rates among utilities.

Moreover, regionally-based planning could aid in revitalizing the manufacturing sector in the Midwest that has been heavy-hit by the recent auto industry bankruptcies that caused dozens of automaker and automaker-captive plants to close in Michigan, Ohio, and Indiana.¹⁷⁸ Wind turbines consist of over eight thousand component parts, the majority of which are manufactured domestically.¹⁷⁹ Regional coordination could entice manufacturers to set up shop in the region through tax incentives and access to raw materials and a skilled workforce. In

174. See GREAT LAKES ENVTL. ASSESSMENT & MAPPING PROJECT, *supra* note 164.

175. KRISTEN M. CROSSETT ET AL., NOAA, POPULATION TRENDS ALONG THE COASTAL UNITED STATES: 1980–2008, at 1 (Sept. 2004), *available at* http://oceanservice.noaa.gov/programs/mb/pdfs/coastal_pop_trends_complete.pdf.

176. See *supra* note 77 and accompanying text.

177. See *supra* note 18 and accompanying text.

178. See BRUGEMAN ET AL., *supra* note 9, at 6 (discussing closed plants in these areas and attempts to repurpose them).

179. U.S. DEP'T OF ENERGY, *supra* note 9.

sum, reducing information barriers and increasing proactive regional planning would allow stakeholders and regulators to make better decisions and improve the quality and availability of environmental and socioeconomic data necessary for effective and efficient permitting.¹⁸⁰

c. Multi-Coastal State Coordination

The 309 Guidance should require states with multiple coastlines to include offshore wind planning specific to each coast. Regulatory pathways to offshore wind development in the Atlantic Coast and Great Lakes will differ within states such as Pennsylvania and New York, which have coasts along the Atlantic Ocean and Great Lakes, and Michigan and Wisconsin, which border multiple Great Lakes. Local land use and siting laws will also differ within these states for development in different coastal waters.¹⁸¹

New York would profit in particular from multi-coastal planning under Section 309 because it has large cities—Buffalo, Rochester, and New York City—on three different coasts. All three cities are in nonattainment under the National Ambient Air Quality Standards for one or more criteria pollutants¹⁸² and thus would greatly benefit from improved air quality from clean, offshore wind energy.

180. See U.S. DEPT OF ENERGY, A NATIONAL OFFSHORE WIND STRATEGY: CREATING AN OFFSHORE WIND ENERGY INDUSTRY IN THE UNITED STATES 28–29, 31 (2011), available at http://www1.eere.energy.gov/wind/pdfs/national_offshore_wind_strategy.pdf (discussing the importance of addressing these issues).

181. See *supra* Part I.A.2.b (discussing the way these issues can vary between as well as within states).

182. *Currently Designated Nonattainment Areas for All Criteria Pollutants*, ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oaqps001/greenbk/ancl.html#NEW%20YORK> (last updated Dec. 5, 2013). Buffalo, located in Erie County, is designated as “moderate” for 8-hour ozone 1997; Rochester, located in Monroe County, has slightly better air quality but is still designated as “marginal” for 8-hour ozone 1997; and New York City, located in New York County, is designated as “nonattainment” for PM-2.5 1997 and PM-2.5 2006, “moderate” for 8-hour ozone 1997 and PM-10, and “marginal” for 8-hour ozone 2008. *Currently Designated Nonattainment Areas for All Criteria Pollutants*, ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oaqps001/greenbk/ancl.html#NEW%20YORK> (last updated Dec. 5, 2013).

B. PROPOSED AMENDMENT

In order to set Great Lakes offshore wind developers and stakeholders on a swift course, Congress should revise CZMA § 306(b) in the following way (edits noted in bold):

(b) Grants to coastal states; requirements

(1) The Secretary may make a grant to a coastal state under subsection (a) of this section only if the Secretary finds that the management program of the coastal state meets all applicable requirements of this chapter and has been approved in accordance with subsection (d) of this section.

(2) States whose programs were approved prior to January 1, 2013 whose planning process includes energy facilities likely to be located in, or which may significantly affect, the coastal zone must update their programs by January 1, 2016 to account for changes in the types of energy facilities that may affect the coastal zone.

While this proposed amendment would increase intrastate governmental coordination and clarify regulatory pathways to offshore wind development state-by-state, it does not address regional coordination or multi-coastal planning. Regional coordination and multi-coastal planning, as discussed in Part III.A.2, would be more appropriately addressed under CZMA § 309(a)(8), the purpose of which is to help facilitate the siting of energy facilities and energy-related activities “which may be of greater than local significance.”¹⁸³

Energy facility siting planning regarding wind turbines would likely be more expensive than traditional energy facility siting planning because of research related to wind speed, ice floes, migratory bird patterns, and effects of turbine placement on lakebeds and aquatic life.¹⁸⁴ Increased funding for the proposed CZMA § 306(b)(2) as well as CZMA § 309 Enhancement Programs would therefore also be necessary.

Requiring states to plan for offshore wind energy in the Great Lakes may not produce tangible results—states may decide that offshore wind energy is not a priority or that resources could be better spent on other projects. However, drafting the blueprints for the planning and siting processes will allow states to move forward more efficiently and effectively on other renewable energy projects in the Great Lakes or if they

183. See *supra* note 53 and accompanying text.

184. *C.f., e.g.*, MICH. DEPT OF ENVTL. QUALITY, *supra* note 111, at 61–63; OHIO DEPT OF NATURAL RES., *supra* note 113, at 78–79; PENNSYLVANIA 309, *supra* note 115, at 113–14.

later decided to install offshore wind turbines when the technology is further advanced.

Regional coordination already exists through entities such as the Great Lakes Basin Compact,¹⁸⁵ MOUs,¹⁸⁶ and RTOs,¹⁸⁷ so mandating regional and multi-state coordination through Section 309 Guidance may be redundant. As discussed in Part II.C., however, these current approaches lack the legal force necessary to catalyze coordinated planning in all Great Lakes states.

Admittedly, changes to the Section 309 Guidance are likely more feasible than getting an amendment through Congress. Moreover, increasing funding for Section 306 planning and Section 309 Enhancement Programs would likely be politically challenging to accomplish given the current political cold war.¹⁸⁸ But with the CZMA's pre-existing framework for cooperative federalism and its dual goals of coastal preservation and development, the Act is well-positioned to serve as a stalwart mast—with all levels of government and political units threading to it like stays—in the development of offshore wind energy.

CONCLUSION

As evidenced by the sprawling number of agencies, acts, and regulations at federal, state, and regional levels involved in offshore wind development in the Great Lakes, it is clear that energy law in the United States is disjointed. The development and deployment of offshore wind energy must be supported and developed through regulatory reform in order to avoid regulatory uncertainty, inefficiencies and unnecessary environmental damage. The CZMPs could help navigate the slew of applicable laws, regulations, and agencies by facilitating intrastate, interstate, and regional coordination for offshore wind development planning. Currently, however, there is significant variation in state CZMPs and Section 309 Enhancement Programs, and collaborative interstate and interagency attempts have come up

185. See *supra* note 81 and accompanying text.

186. See *supra* note 86 and accompanying text.

187. See *supra* notes 76–79 and accompanying text.

188. Robert B. Reich, Op-Ed, *The Real Price of Congress's Gridlock*, N.Y. TIMES, Aug. 14, 2013, at A23, available at <http://www.nytimes.com/2013/08/14/opinion/the-real-price-of-congresss-gridlock.html> (“With just 15 bills signed into law so far this year, the 113th Congress is on pace to be the most unproductive since at least the 1940s.”).

short of passing concrete offshore wind-specific state legislation.¹⁸⁹

In order to efficiently and effectively plan for potential offshore wind development in the Great Lakes, federal and state agencies should begin coordinating regulatory schemes and data gathering in order to reduce uncertainty and risk that currently deters potential project developers and financiers. Under the Coastal Zone Management Act, Great Lakes states have the opportunity to get their sails hoisted and lines untangled. However, without some modifications to the CZMA and its Section 309 Guidance, states may be reluctant to proceed, leaving them unprepared to face the headwinds that lie ahead. The snarled web of regulatory authorities, acts, and regulations must be sorted out now so that when the technological and infrastructural challenges are worked out, offshore deployment can take off in smooth, charted waters.

189. Hurley, *supra* note 153.