

Executive Summary - Report of the Michigan Great Lakes Wind Council

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Prepared for
Governor Jennifer M. Granholm

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Executive Summary

BACKGROUND

The Great Lakes Wind Council was created in January 2009 as an advisory body within the Michigan Department of Energy, Labor & Economic Growth to examine issues and make policy recommendations related to offshore wind energy development in Michigan. The council consists of key state agency representatives and stakeholders appointed by Governor Jennifer M. Granholm.

The council's first report was issued in September 2009¹ in response to Executive Order No. 2009-1. The September 2009 report discussed offshore wind energy development trends and the impetus for the council. It also recommended criteria and buffer areas (such as sensitive species and habitats, shipping lanes, etc.) to be used in mapping the "least" and "most" favorable areas for offshore wind energy development in Michigan's Great Lakes.² The broad, statewide planning exercise engaged by the council revealed that the placement of turbines in only a small fraction of the state's Great Lakes could produce significant amounts of wind energy, making it possible to generate power in areas with few competing uses of the lakes. Recognizing that Michigan lacked adequate regulatory guidelines to govern such development, the council also recommended that the state enact new laws for the leasing of bottomlands and permitting of offshore wind facilities in Michigan's Great Lakes.

After receiving the 2009 report, Governor Granholm issued Executive Order No. 2009-46, which charged the council to continue its work by identifying and mapping potential leasing areas for offshore wind energy development, providing guidance on model legislation governing such development, and informing and engaging the public on offshore wind energy development issues. The Executive Order (see Appendix A) extended the service of the council until December 31, 2010, and added four members (see Appendix B for a list of council members).

This report summarizes the Phase II activities of the council, and, combined with the 2009 report, concludes the council's reporting in response to the governor's charge. The council remains prepared to provide input on proposed legislation and rulemaking and to perform other functions as requested by Governor Granholm until December 31, 2010.

¹ *Report of the Michigan Great Lakes Wind Council, September 1, 2009* (Lansing, Mich.: Mikinetics Consulting LLC and Public Sector Consultants Inc., 2009); available at www.michiganlowcouncil.org.

² These terms are used throughout this report. The areas designated "most" and "least" favorable are based on the application of the council's mapping criteria that identify features that should be considered in the placement of an offshore wind energy project. The designations do not consider economic variables that would be important in specific siting, such as wind power classification, transmission costs, or water depth.

PHASE II ACTIVITIES AND RECOMMENDATIONS

Public Engagement

The council organized and hosted public events in five communities across Michigan during the spring and summer of 2010 to present and take input on the council's recommendations to date. More than 500 people attended. The council also accepted comments from hundreds of individuals before, during, and after the public meetings. In this report, the council has outlined how the public could and should be engaged in decision-making processes related to offshore wind energy developments in the Great Lakes. The council recognizes that the Great Lakes bottomlands are held in the public trust and that it is essential that offshore wind siting standards be rigorous and that decision-making processes be transparent with ample public engagement at all stages.

In late fall 2009 a private development company proposed a \$3 billion, 1,000-megawatt wind farm consisting of 100–200 turbines in Lake Michigan, close to the shore. While some viewed this proposal as a significant economic development opportunity for Michigan's west coast, the proposal also generated significant public opposition and substantially changed the level of awareness and involvement by the public in offshore wind energy development issues.

Recommended Most Favorable Areas for Leasing

In this second report, the council further refined its data collection and thus also refined the initial recommendations based on the set of 22 criteria established by the council in 2009 to help identify the most and least desirable areas for offshore wind energy development in the state's Great Lakes. Using those criteria and new data, the council identified a total of 13,339 square miles of bottomlands classified as "most favorable" for wind energy development. These areas are at least six miles offshore and avoid shipping lanes, sensitive fish and wildlife habitats, etc.

The findings were further refined based on more current offshore wind energy technology allowing development in "shallow water" up to a depth of 45 meters (148 feet). Of the total 13,339 square miles identified, 565 cover water of 45 meters or less in depth. Additionally, the council determined that to be favorable for development, areas must consist of at least 20 contiguous square miles.

Ultimately, five priority areas were identified. Known as wind resource areas, or WRAs, they are located in Lakes Michigan, Superior, and Huron (see Exhibit 1):

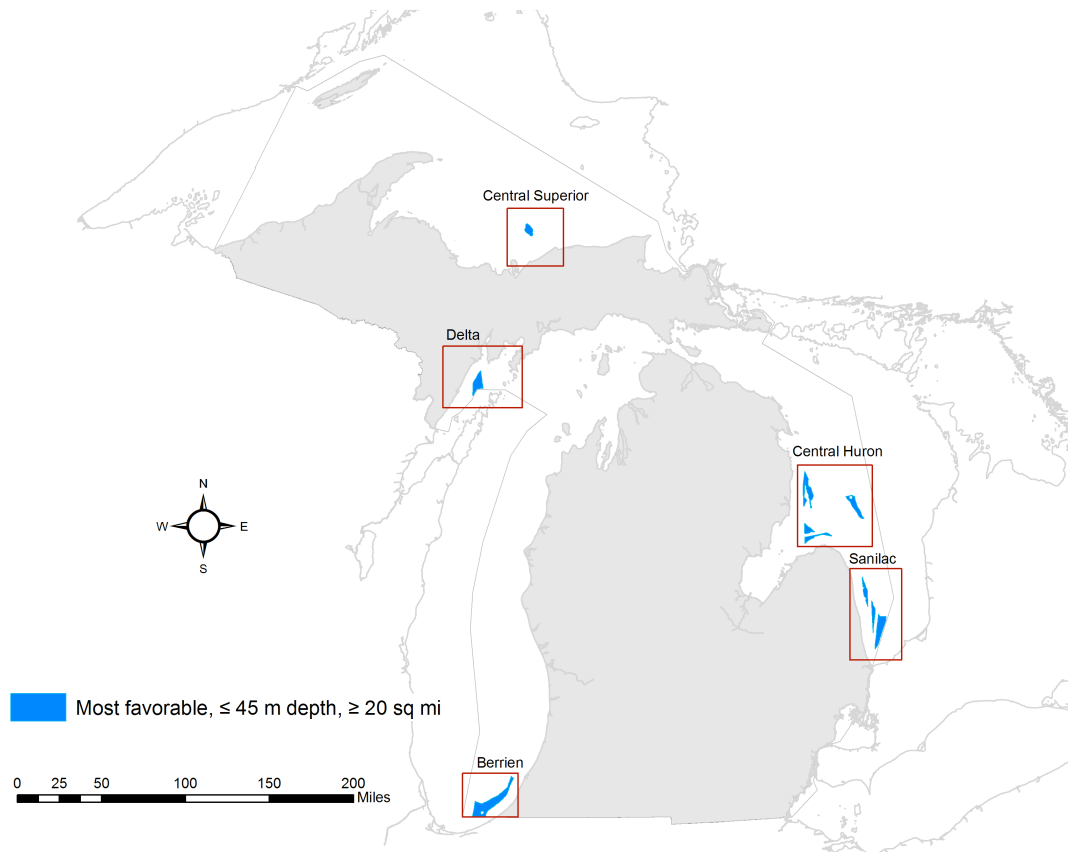
- Southern Lake Michigan near Berrien County
- Northern Lake Michigan near Delta County
- Central Lake Superior near Alger County
- Central Lake Huron (out from Saginaw Bay)
- Southern Lake Huron near Sanilac County

Based on data currently available and included in the mapping tool used by the council, these areas appear to be the most suitable for offshore wind energy leasing. Any area chosen would, however, require extensive, site-specific studies and permitting. Statewide

mapping efforts will continue to evolve as new data become available and the state's leasing and permitting will always use the most recent data available.

EXHIBIT 1

Wind Resource Areas, June 2010



SOURCE: Institute for Fisheries Research, UM/MDNRE, 2010.

Input on Legislation

The council also provided input on a legislative framework for leasing Michigan's Great Lakes bottomlands and permitting offshore wind energy systems. The legislative framework outlined in this report includes a recommendation that the state offer certain parcels of Great Lakes bottomlands within the most favorable wind resource planning areas at a competitive public auction as soon as practicable following enactment of new legislation. It suggests permitting guidelines, leasing methods, and payment structures, and a proposed process for public input in decision-making. The council's recommendations are being considered by legislators and stakeholders in the crafting of state legislation.

CONCLUSION

The council's work is the first step in a long-term process that will ultimately define whether and how offshore wind energy facilities are constructed in the state's Great Lakes. The council's work sets the stage for understanding the most and least favorable areas for leasing and related data needs and recommends criteria and processes for permitting and leasing of offshore wind energy developments. The council was not charged with advocating for or against offshore wind energy development in general or for specific development proposals. With this report, the council is presenting state policymakers a way to establish a balanced permitting and leasing structure. This new structure is necessary to prepare the state to effectively handle future development proposals with clear guidelines and open, transparent processes for all parties.

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