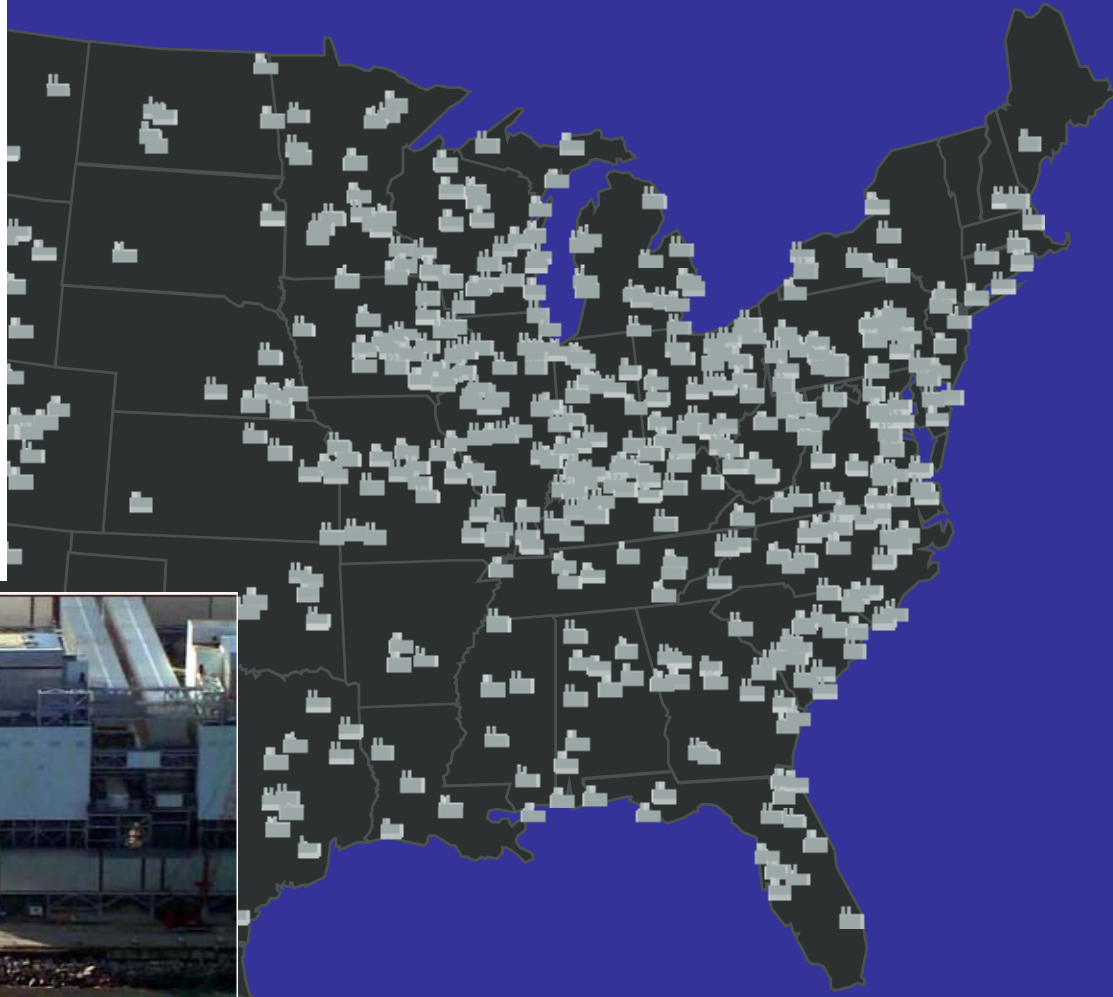


Great Lakes Offshore Wind: Can We Protect the Lakes and Build a New Energy Future?



Jack Darin, Director, Sierra Club, Illinois Chapter

If we want to address climate change, and protect the Great Lakes, we have to move beyond coal

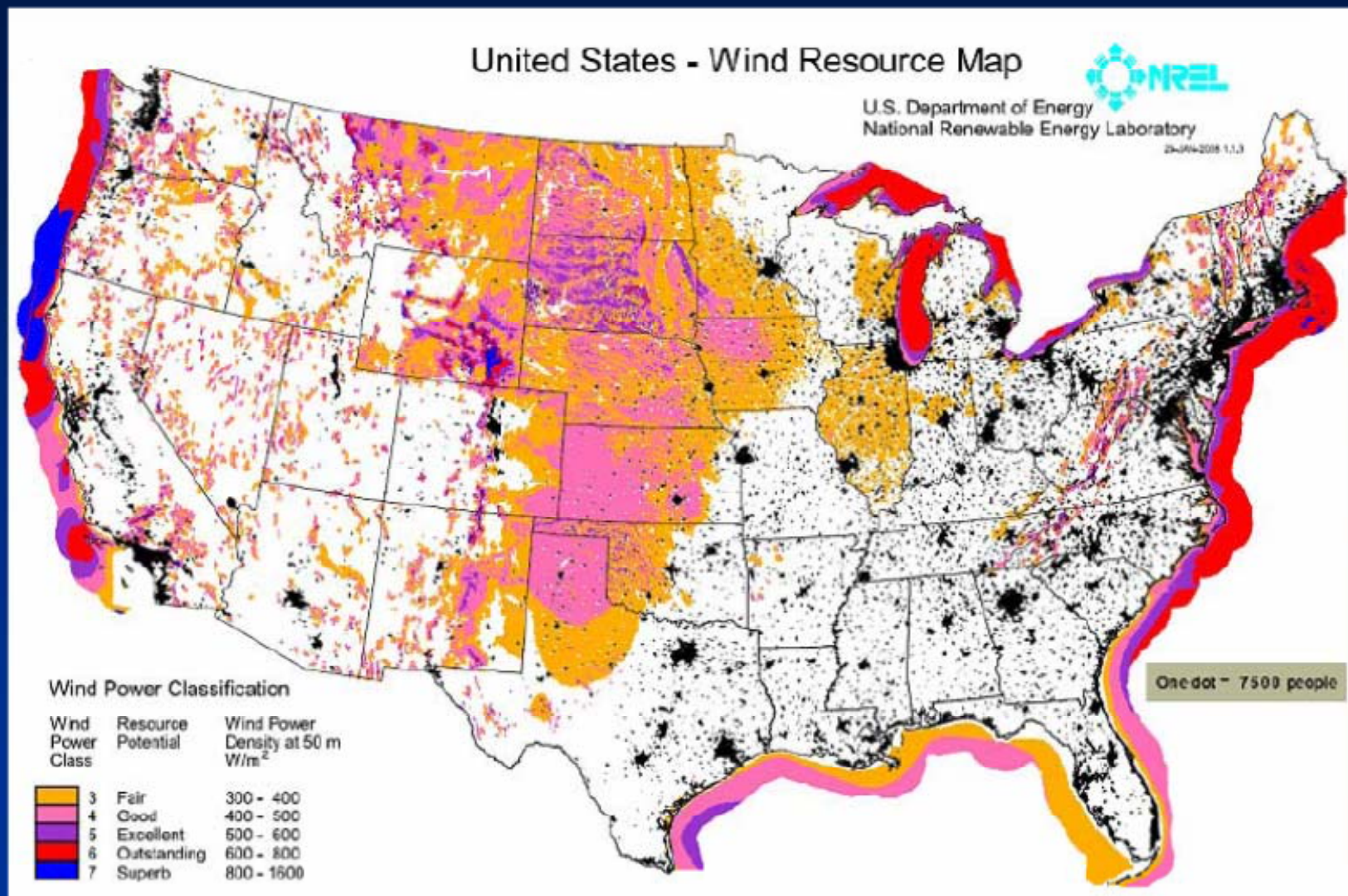


Existing coal plants



Source: The Sierra Club

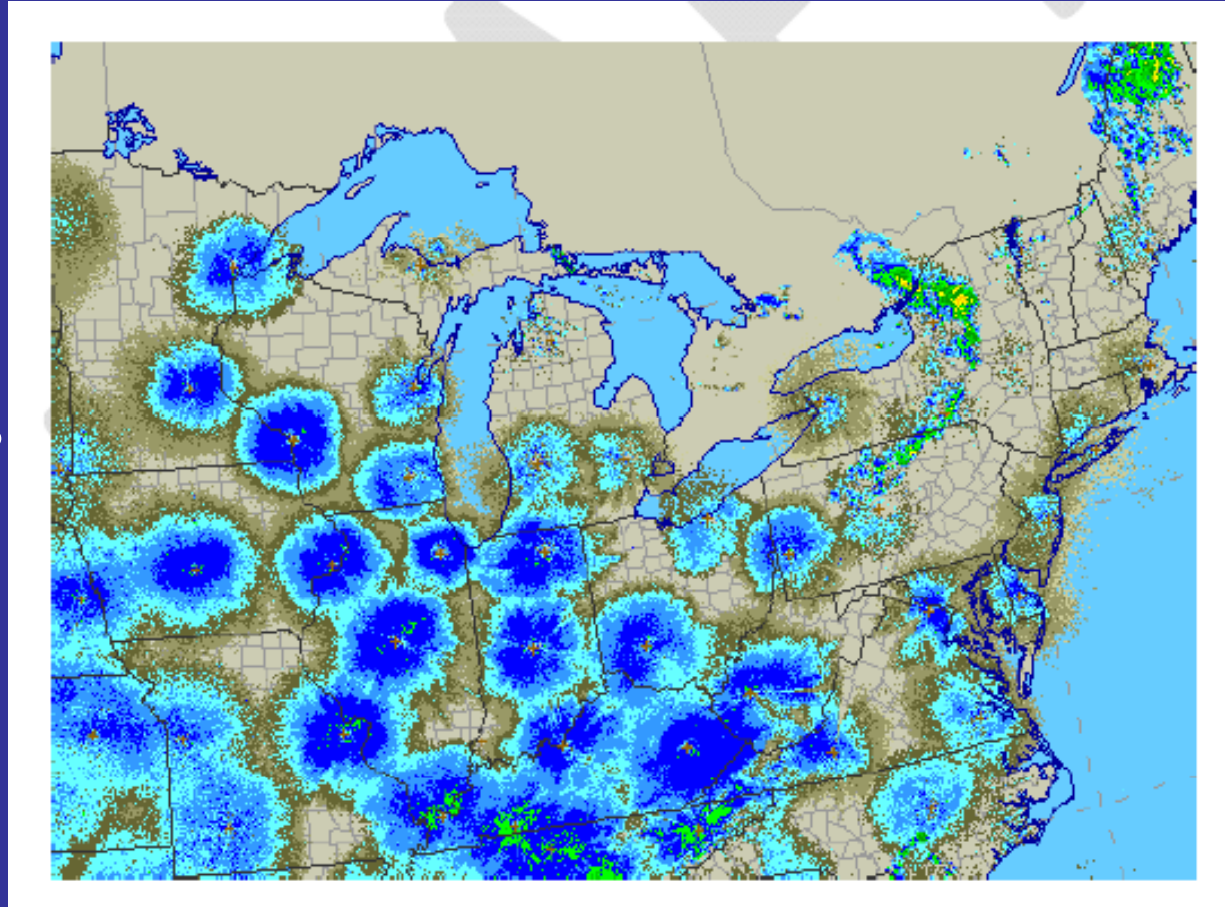
US Offshore Wind Resources Located Near Coastal Metropolitan Load Centers



Issues: Ecological Impacts

Bird and bat migration

- We don't know much about offshore migration routes or use of offshore areas by waterbirds
- Most species seem to concentrate very nearshore or along the shoreline
- We need more research and very careful siting to ensure that offshore wind farms do not have major wildlife impacts



- Fisheries and aquatic habitat

Great Lakes aquatic ecosystems already stressed

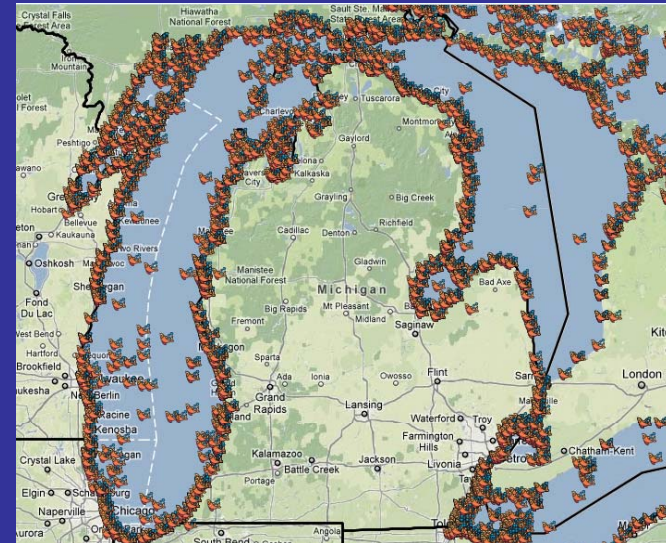
- Nearshore waters
 - Many fish species concentrate here
 - Most spawning and sensitive aquatic habitat is found in nearshore waters

- Deep basins/offshore reefs

- Lake trout spawning on mid-lake plateau
- Perhaps fewer impacts, but not barren

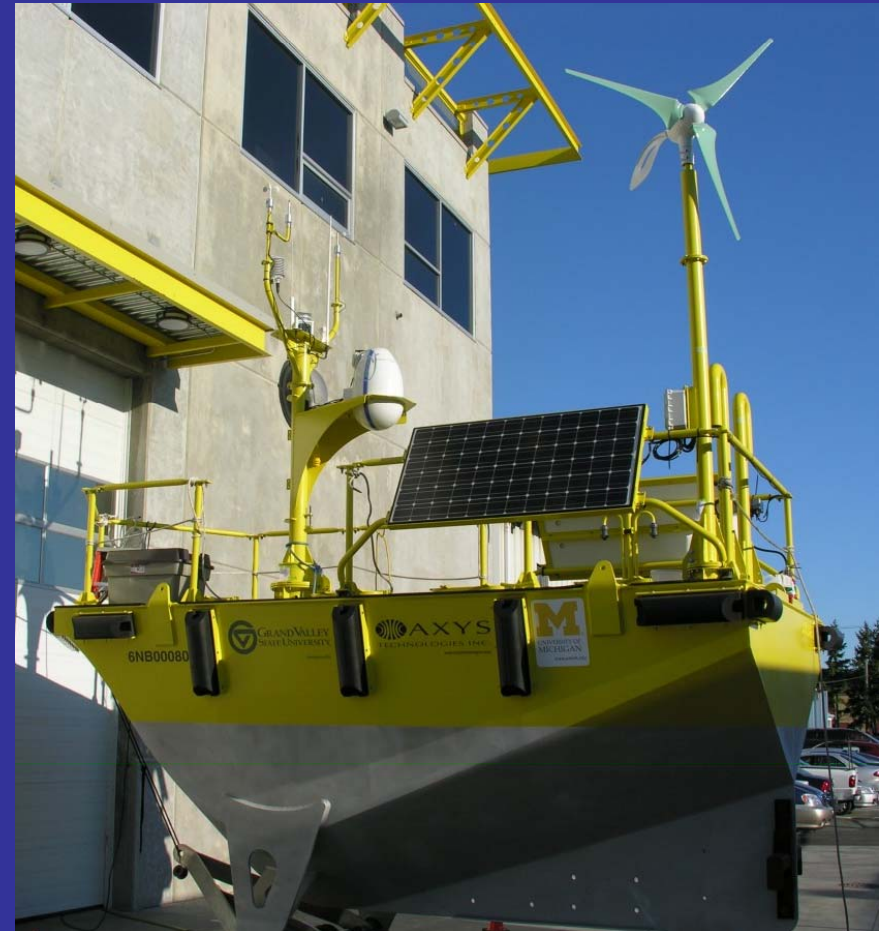
- Other issues needing more investigation

- Aquatic invasive species
- Lake currents, nutrient flows
- Contaminated sediments

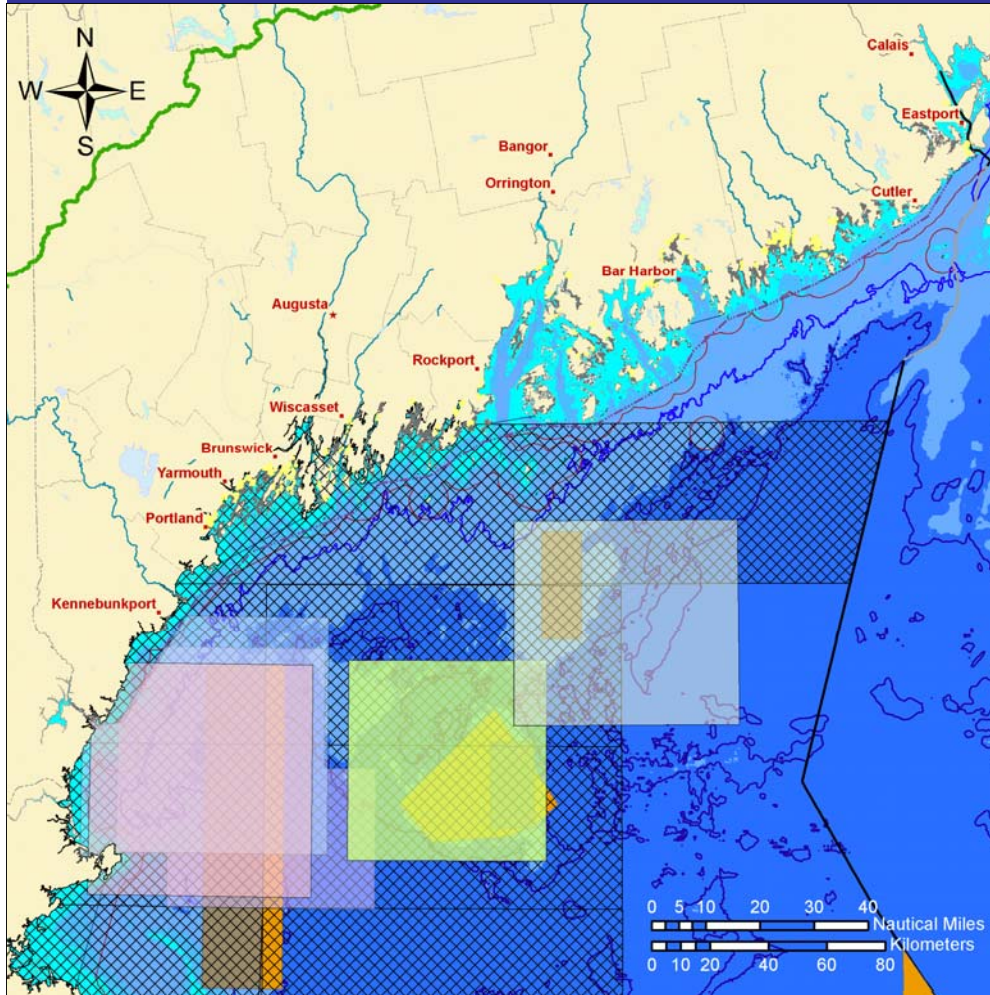


Path Forward—Siting

- **Adopt smart siting principles to ensure that projects are sited appropriately**
 - **5 mile set-back from shore for avian migration**
 - **Avoid islands/migratory pathways**
 - **Time construction to avoid spawning periods**



Path Forward—Siting



- Build a comprehensive, regional GIS tool to support good siting decisions
- Compilation of Maine OWEGIS system, Ohio Favorability Analysis, NOAA Lakebed Alteration Tool, Great Lakes Wind Atlas
- 650+ data layers
 - Physical environment
 - Coastal hazards
 - Environmental impacts & wildlife
 - Cultural & aesthetic features
 - Legal, permitting boundaries
- Common, publicly accessible platform with robust, current datasets allows for sustainable siting across the region

Path Forward—Permitting

- **Develop state policy on bottomlands leasing and offshore wind permitting**
- **Ensure strong public involvement, environmental review**
- **Make consistent between states, more efficient in wind development zones**



Path Forward—Public Opinion

- **Facilitate community conversations, public dialog to find good solutions**
 - **Educate communities and decision-makers about environmental, economic impacts and discuss pros and cons**
 - **Dispel misconceptions**
 - **Build partnerships with new allies**
 - **Ensure transparency and broad engagement in decision-making to build trust, public acceptance and ensure smart, acceptable siting**



Questions?

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