Mapping Work Group Progress Report

January 14, 2010

The Mapping Work Group met on November 30, 2009. The purpose of the meeting was to review and discuss the status of existing criteria and data layers contained in the Lakebed Alteration mapping tool, data gaps, marketability factors (e.g., proximity to deep port), and public accessibility of the data layers contained in the mapping tool (i.e., threatened and endangered species).

The work group received an update on the data layers contained in the tool by staff from the Institute for Fisheries Research (IFR). The tool currently contains numerous data layers from a variety of sources that are designed to help map area-wide offshore wind suitability. With the recognition that the tool has limitations and remains a work-in-progress, its developers have continued to assist with the integration of additional layers that were not available at the time of the Council's September 2009 report. The most significant task was incorporating migratory bird and bat data.

While most of the data layers are considered adequate for area-wide planning, there is a recognized need for continuing refinement of site-specific data when siting any particular offshore project. It is envisioned that the council will help shape ongoing modifications of the tool and its data inputs through its recommendations.

An update was also provided on agency responses to a matrix of the mapping criteria that was forwarded by staff to further help define the quality of existing data layers necessary to help the state define environmental and biological study requirements for leasing and permitting.

Summary

Data Gaps

- Work group participants agreed that a commercial fishing layer would be helpful to incorporate into the Lakebed Alteration Tool.
- Work group participants agreed for lease purposes, a grid cell map would be comprised of 1 degree of latitude by 1 degree of longitude or a one-minute quadrangle. See attached description below.
- The current threatened and endangered species layer is acceptable for public consumption without an increased risk to species. It does not provide detailed locations of species occurrences; rather it highlights broad areas of habitation.

- The inclusion of additional biological data has reduced the geographic coverage of the Wind Resource Areas that are most "favorable." An update will be provided during the January 19 Council meeting.
- IFR staff committed to incorporating additional biological data layers into the tool.
- The work group will offer additional guidance for providing public access to the tool.

Proposed Description of Offshore Wind Energy Legal Description for Lease Purposes

The mapping work group recommends that a one-minute grid cell map be developed to describe the location of a wind energy facility offshore in the Great Lakes. This grid cell map would be comprised of 1 degree of latitude by 1 degree of longitude. The four corners of each quadrangle can be easily described with latitude/longitude coordinates to the minute. The area of a one-minute quadrangle is approximately 634 acres.

One-minute quadrangle cells would then be grouped into blocks of 20-minutes by 20-minute quadrangles (400 one-minute quadrangles maximum). Within each 20-minute block, the one-minute quadrangles would be numbered 1 through 400. Each 20-minute block would also be numbered.

In addition, the location would be described in each Great Lake by the following abbreviations:

LH – Lake Huron; LM – Lake Michigan; LS – Lake Superior; LSC – Lake St. Clair; LE – Lake Erie

As an example, a proposed lease area in Lake Huron could then be described as:

LH Block 1 – Quads 1–55

Global Positioning Systems (GPS) is the commonplace navigation system utilized on the Great Lakes using latitude and longitude for location purposes. Also, the NOAA lake navigation charts are marked in latitude and longitude. In the case of offshore wind energy development, boat crews (consultants, construction, maintenance, state, federal, etc.), U.S. Coast Guard and others would be using GPS for access to and from the facility. Therefore, describing the grid cells by latitude and longitude provides for consistency with the current navigation method and eliminates the need for a separate system. The applicant will also be required to provide the location of all structures using latitude/longitude coordinates.

The State of Ohio utilizes one-minute quadrangles for its offshore wind energy leasing grid cell map.