

**Public Service Commission of Wisconsin &
The Statewide Energy Efficiency and Renewables
Administration**

Environmental and Economic Research and Development Program

Executive Summary

July 2009

Evaluating Bird and Bat Migration in the Upper Mississippi River Valley and Its Implications for Siting Wind Energy Facilities: A Workshop Series for Resource Agencies and Wind Developers

Prepared by:

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EXECUTIVE SUMMARY

Date of Report: July 2009

Title of Project: *Evaluating Bird and Bat Migration in the Upper Mississippi River Valley and Its Implications for Siting Wind Energy Facilities: A Workshop Series for Resource Agencies and Wind Developers*

Project Coordinators:

Brian Bub	Senior Scientist, Natural Resources Consulting, Inc.
Jon Gumtow	Principal Scientist, Natural Resources Consulting, Inc.
Terry VanDeWalle	Principal Scientist, Natural Resources Consulting, Inc.

Facilitator:

Barbara Behlke	President, Behlke Consulting, Inc.
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Grant Administrator:

Richard Purdy, Ph.D.	President, River Country Resource Conservation and Development (RC&D) Council, Inc.
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Collaborators:

Sherrie Beyer	River Country RC&D Council, Inc.
Curt Bjurlin	EcoEnergy Wind
Noel Cutright, Ph.D.	Wisconsin Society for Ornithology
Jenny Davenport	DeTect, Inc.
Bruce Ehresman	Wildlife Diversity Program, Iowa DNR
Jeff Gosse, Ph.D.	Region 3, US Fish & Wildlife Service
Kim Grveles	Bureau of Endangered Resources, Wisconsin DNR
Tex Hawkins	Upper Miss. River Fish & Wildlife Refuge, US Fish & Wildlife Service
Pat Heglund, Ph.D.	Region 3 National Wildlife Refuge System, US Fish & Wildlife Service
Pam Herdrich	River Country RC&D Council, Inc.
Karen Kalvelage	Environmental Analysis and Review, Wisconsin DNR
Shari Koslowsky	Office of Energy, Wisconsin DNR
Jim Naleid	AgWind Energy Partners, LLC
John Oswald	RMT, Inc.
Dave Redell	Bureau of Endangered Resources, Wisconsin DNR
John Schladweiler	Ecological Services, Minnesota DNR
Keith Shank	Ecosystems and Environment Division, Illinois DNR
Jill Utrup	Wisconsin Ecological Services Office, US Fish & Wildlife Service
Michael Vickerman	RENEW Wisconsin
Ric Zarwell	Natural Resources Consulting, Inc.
Amber Zuhlke	Wind Capital Group

Research Category:

Environmental and/or Economic Impacts of Renewable Energy and Energy Efficiency Initiatives

Project Period:

January 2009 to July 2009

Project Goal and Objectives:

The goal of this project was to execute a workshop series to develop a collaborative approach for gathering future scientific data to guide the responsible siting of wind energy facilities within and along the Upper Mississippi River Valley.

The project objectives included: 1) identify and organize a diverse stakeholder group, 2) identify specific data gaps concerning micro- and macro-scale avian and bat migration patterns within the Upper Mississippi River Valley, 3) use a structured decision-making process to prioritize research needs and build consensus on an appropriate study design and methodology, 4) develop a framework for standardized survey methodologies that can be used to evaluate avian and bat migration patterns within the Upper Mississippi River Valley to determine the implications for siting wind energy facilities, and 5) document the process by which decisions were made and share results and information obtained from this project with other resource agency staff and the wind industry.

Summary of Activities:

1. Identified 26 participating collaborators including four Federal agency personnel, seven State agency personnel, three wind development company representatives, one wind energy advocate, seven consultants, and four members of conservation organizations.
2. Created collaborator database.
3. Created, surveyed, and correlated results of pre-workshop participant survey.
4. Scheduled and facilitated two workshops on March 4, 2009 and April 1, 2009.
5. Prepared PowerPoint presentations summarizing project results.
6. Identified two wind energy forums to present project results.
7. Presented summary of project at the 2009 Wisconsin Renewable Energy Summit on March 26, 2009 and at the Illinois Wind Working Group's Advancing Wind Power in Illinois 3rd Annual Conference on July 16, 2009.
8. Prepared summary report.

Conclusions and Recommendations:

During the workshops, stakeholders identified and prioritized information needs for understanding potential impacts to birds and bats from siting wind energy facilities along the Upper Mississippi River Valley. Lack of sufficient information prevented the stakeholders from developing a framework for standardized study designs and survey methodologies; however, the workshops set the foundation for continued stakeholder cooperation within the Upper Mississippi River Valley. It is recommended that the stakeholder group continue to work together to assemble critical mapping information, organize subgroups of bird and bat species experts to analyze species groups and behaviors, look for cooperative opportunities to partner with other wind-wildlife initiatives, and acquire funding to support the group's efforts.