

**Focus on Energy
Environmental and Economic Research and Development Program (EERD)**

2009 Research Exposition

June 23, 2009 | 9:00 AM–12:30 PM

Public Service Commission Building
Pecatonica River Conference Room
610 North Whitney Way, Madison

(There is no charge for attending, but please register – seating is limited: [Registration link](#))

The Focus on Energy EERD Program is pleased to invite you to its 2009 Research Exposition which will feature three recently funded projects. All three projects reflect the mission and the breadth of issues addressed by the EERD Program to study the environmental or economic impacts of energy production or use in Wisconsin.

EXPOSITION AGENDA

(if you wish to attend only part of the program, please plan to enter or leave the session during break times)

8:30 am **Check in, coffee served**

9:00 am–9:10 am **Introduction**, Ingrid Kelley, Program Manager

9:10 am–10:10 am **THE IMPACT OF CLIMATE CHANGE ON WISCONSIN LAKES**
Monitoring the Impact of Climate Change on Water Resources in the Northern Highland American Legion State Forest in Wisconsin, Carl Watras, Wisconsin DNR

In this first phase of a three-phase project, Dr. Watras addresses the challenge of finding and perfecting the right technology to measure incremental biochemical changes as drought, flooding and other climate patterns move water around among lakes and wetlands in the NAHL State Forest. As climate changes accelerate and the chemical composition of these water bodies is disturbed further, there may be profound effects on their ecology in the future.

10:10 am–10:20 am **BREAK**

10:20 am–11:20 am **WISCONSIN'S PARTICIPATION IN TWO NATIONAL NETWORKS FOR MEASURING PARTICULATE AND MERCURY POLLUTION**
Wisconsin NADP National Trends Network (NTN) and the Wisconsin Mercury Deposition Network (MDN), Bruce Rodger, Wisconsin DNR

Wisconsin is part of two national environmental monitoring networks. The NTN collects data on precipitation chemistry and the MDN tracks patterns of mercury accumulation in bodies of water. The Wisconsin Department of Natural Resources was a leader in establishing the national networks and continues to serve researchers and policymakers in Wisconsin and beyond. This presentation explores the origins and importance of these monitoring efforts and examples of how the data is ultimately used in research and policy.

11:20am–11:30 am **BREAK (with refreshments)**

11:30 am–12:30 am **UNDERSTANDING BIRD MIGRATION PATTERNS FOR SAFER SITING OF WIND FARMS**
A Landscape Scale Decision Support Tool for Monitoring Bird and Bat Migration Across Wisconsin, Patricia Heglund, U.S. Fish and Wildlife Service; Manuel Suarez, U.S. Geological Survey

This project makes a unique contribution to the ongoing search for more effective ways to avoid harming flocks of small birds and bats in flight when siting wind turbine towers. Using data captured from an established network of Nexrad Weather Surveillance Radar sites, the research team was able to establish timing, stop-over locations and general pathways of movement of migrating birds and bats in Wisconsin. They present this tool and its stunning graphics to help wind farm developers and managers better understand the movements and habitat use patterns of these species.