

Wind/Wildlife: Harnessing Science and Collaboration

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Midwest Association of Fish and Wildlife Agencies

June 27, 2011



AWWI's Purpose

A unique collaboration of wind industry, nonprofit, and state agency leaders, joined in a shared mission:

To facilitate timely and responsible development of wind energy while protecting wildlife and wildlife habitat





AWWI Sustaining Partners and Friends



AES Wind Generation
American Wind Energy Association
Assoc. of Fish & Wildlife Agencies
BP Wind Energy
Clean Line Energy Partners
Defenders of Wildlife
Environmental Defense Fund
enXco
First Wind
GE Energy
Horizon Wind Energy
Iberdrola Renewables
National Audubon Society
National Wildlife Federation

Natural Resources Defense
Council
NextEra Energy Resources, LLC
NRG Systems, Inc.
Pacific Gas & Electric Co.
RES Americas
Ridgeline Energy, LLC
Pattern Energy Group
Shell WindEnergy Inc.
Sierra Club
The Nature Conservancy
Union of Concerned Scientists
Vestas Americas



AWWI Board of Directors

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enXco

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Iberdrola Renewables



AWWI's Vision for Change

The Voice of Science:

Increased, high-quality science will reduce uncertainty and guide the best decision-making about difficult siting issues

The Power of Collaboration:

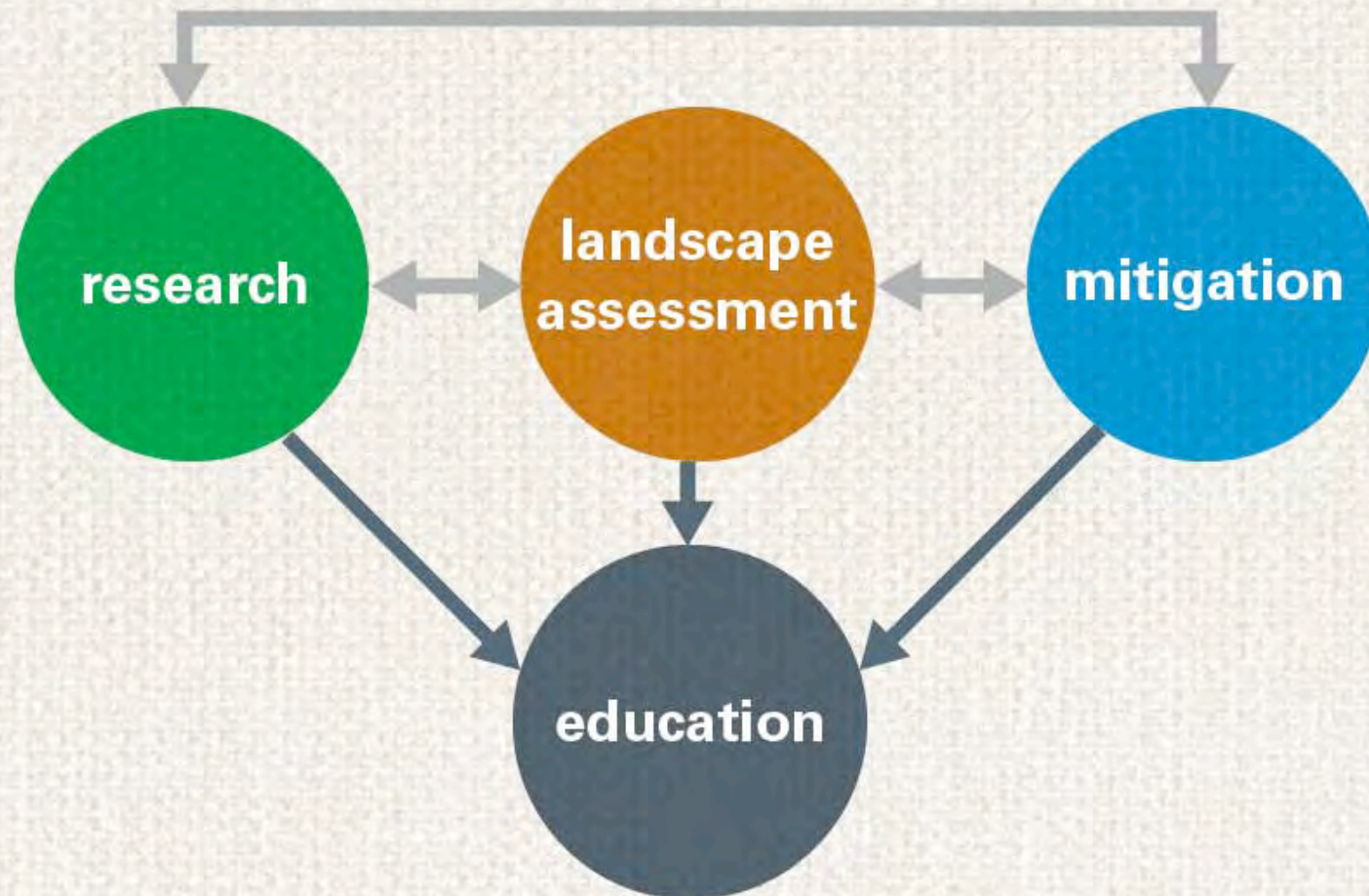
When leaders from the wind industry, environmental nonprofits, and wildlife agencies work together, there is powerful momentum for change

The most creative problem-solving happens through cross-sector collaboration among diverse, committed stakeholders





AWWI Initiatives: Integrated and Evolving





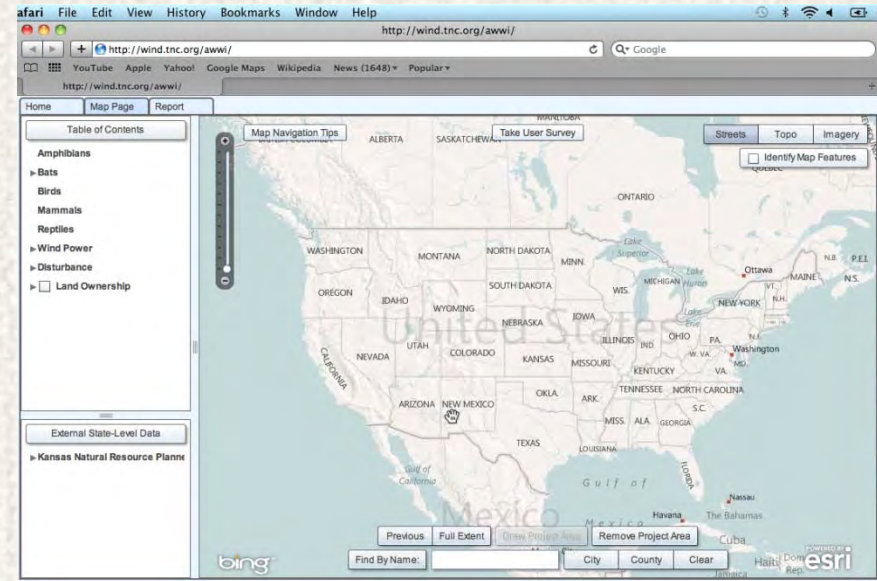
AWWI Initiatives

Landscape Assessment Tool (LAT)

Developed in partnership with The Nature Conservancy to provide preliminary wind-wildlife sensitivity screening

Assess current state of mapping tools to evaluate strengths, challenges, and gaps

Enhance functionality and improve and expand data layers encouraging consolidation of tools rather than proliferation





AWWI Initiatives



Landscape Assessment Tool (LAT) cont.

Planned LAT Enhancements:

- Update wind data

- Integrate additional conservation data layers (e.g., designated critical habitat, state species of concern)

- Improve functionality to allow over-laying of custom project areas and individual, custom reporting



AWWI Initiatives

Wind-Wildlife Research Program



Establish a comprehensive peer-reviewed research agenda

Answer priority questions

Identify future challenges

Build structure that engages experts in research and evaluation



AWWI Initiatives



Wind-Wildlife Research Program cont.

Criteria for Establishing Research Program Priorities

- Emphasizes near term results to inform decision-making and regulation
- Applies across a broad geographic range OR addresses a critical issue
- Leverages existing data (AWWI Research Information System)
- Lays the groundwork to address long-term research questions
- Offers distinctive AWWI role
- Attracts funding from public and private sectors



AWWI Initiatives



Wind-Wildlife Research Program cont.

Identified Research Priorities (review underway)

- Comprehensive, centralized database to support critical research (Research Information System)
- Golden Eagle understanding, conservation, mitigation
- Other projects that meet AWWI Research Plan criteria
- *Timeline:* Presentation to AWWI Board by July 2011 for formal approval



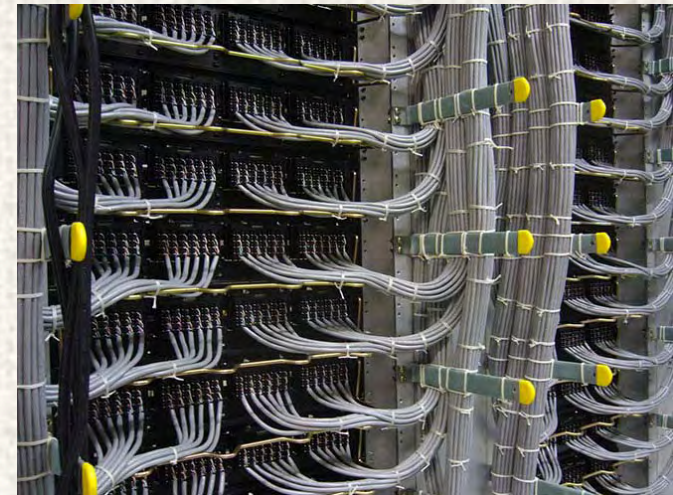
AWWI Initiatives

Research Information System (RIS)

Build centralized database that organizes existing wind-wildlife data

Safeguard confidentiality of proprietary information while preserving validity of technical information

Develop parameters for most effective design for user input and analysis as well as effective management





AWWI Initiatives

Research Information System (RIS) cont.

RIS Pilot – Oregon State University

RIS Task Force

- Provide guidance
- Define key questions and metrics (such as organization of raw data, proper use, proper data entry to avoid bias)
- Establish data policies and procedures

AWWI-industry partner participation

- Provide data to build model



AWWI Initiatives



Research Information System (RIS) cont.



RIS – Many applications, including vision at the landscape level

Analysis across habitat, species, geographic & wind project types

Improved understanding of known impacts, fewer poor assumptions about impacts

Future depiction of preconstruction assessment



AWWI Initiatives

Landscape-Level Assessment with AWWI Tools (Tier 1 and 2)

RIS offers standardization

- Comprehensive data collection
- Documentation of impacts

LAT provides viewing lens

- Platform to graphically depict analysis, combining species distribution models with wind energy impacts

RIS and LAT combined

- Apply what we already know
- Evolve from 'impact' analysis to accurate predictions of project risk assessment



AWWI Initiatives



Mitigation and Compensation



Design and support mitigation projects to address unavoidable wildlife impacts

Facilitate targeted research and build technical expertise to identify new, effective mitigation measures

Determine framework for action, supporting widespread implementation in the field



AWWI Initiatives



Mitigation and Compensation cont.

Commissioned and published a report on the state of the art for compensatory mitigation. The report was released in June 2010

Helping define mitigation projects for Golden Eagle and/or for other nationally recognized



AWWI Initiatives



Education and Collaboration

Become the trusted source for peer-reviewed wind-wildlife research and best practices

Improve the rate of practical application of new scientific findings in the field

Convene technical workshops to define research gaps and coordinate across research areas

Advance awareness of state-of-the-art assessment tools and other field-honed resources

Establish peer-reviewed science as basis for siting decisions and public policy debate, supporting effective collaboration among regulatory agencies, environmental nonprofits, and industry



Getting Involved in AWWI



How you can help:

Offer input, ideas, and insights to build a strong and vital collaboration

Participate in AWWI

Provide field expertise and data for design of AWWI tools

Help get the word out about AWWI to other stakeholders and partners



Getting Involved in AWWI

Questions?





Contact Us



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