

WPA All States Summit

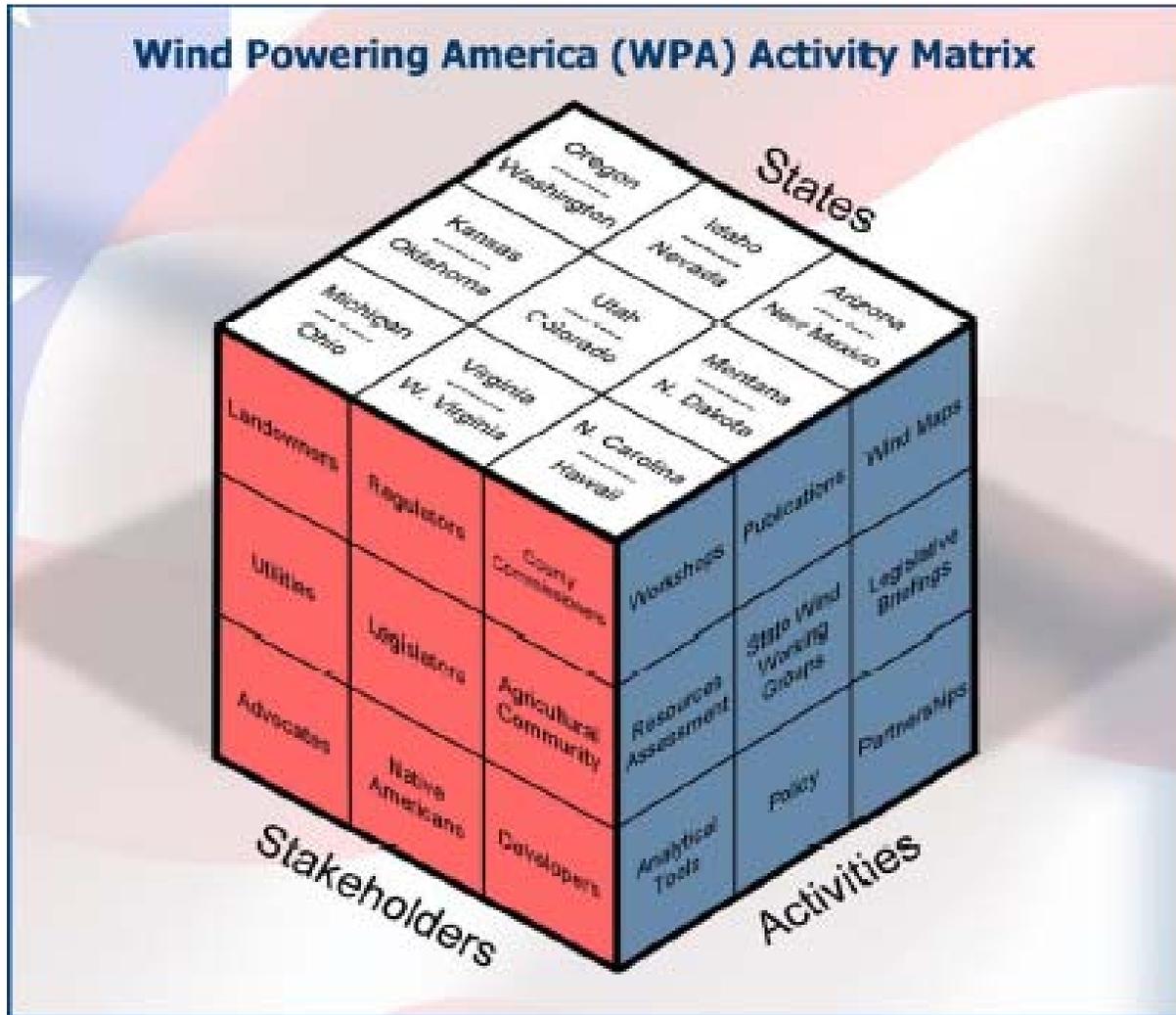


Larry Flowers

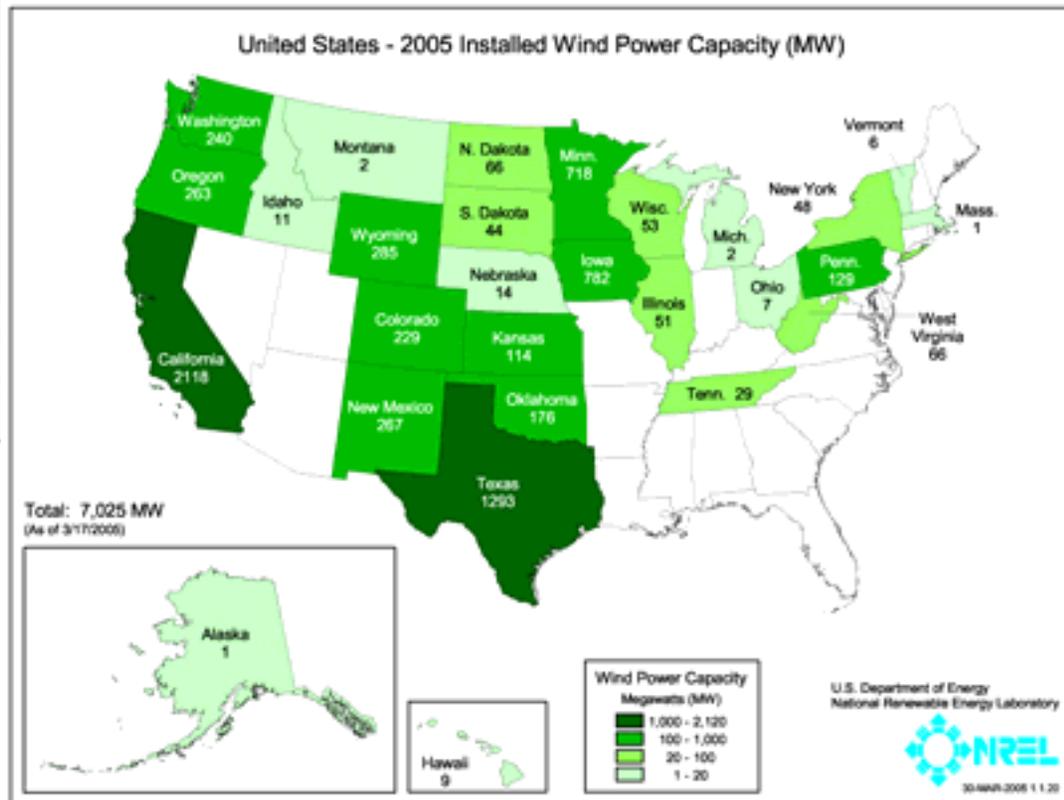
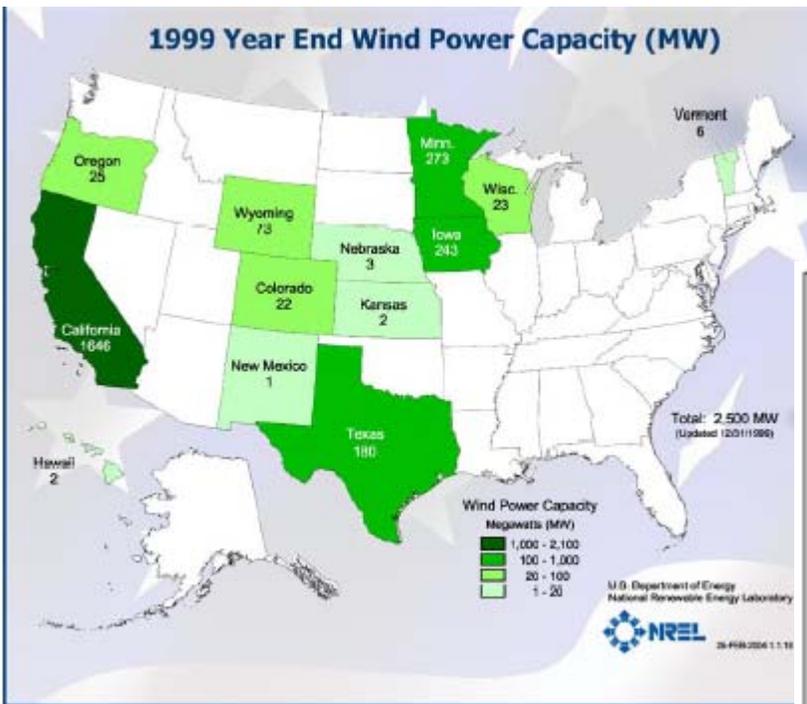
National Renewable Energy Laboratory

May 19, 2005

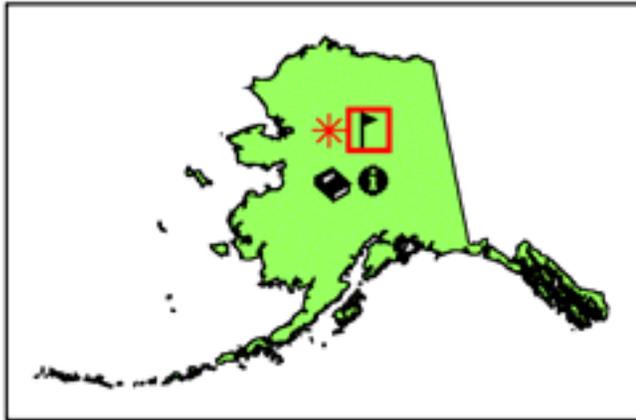
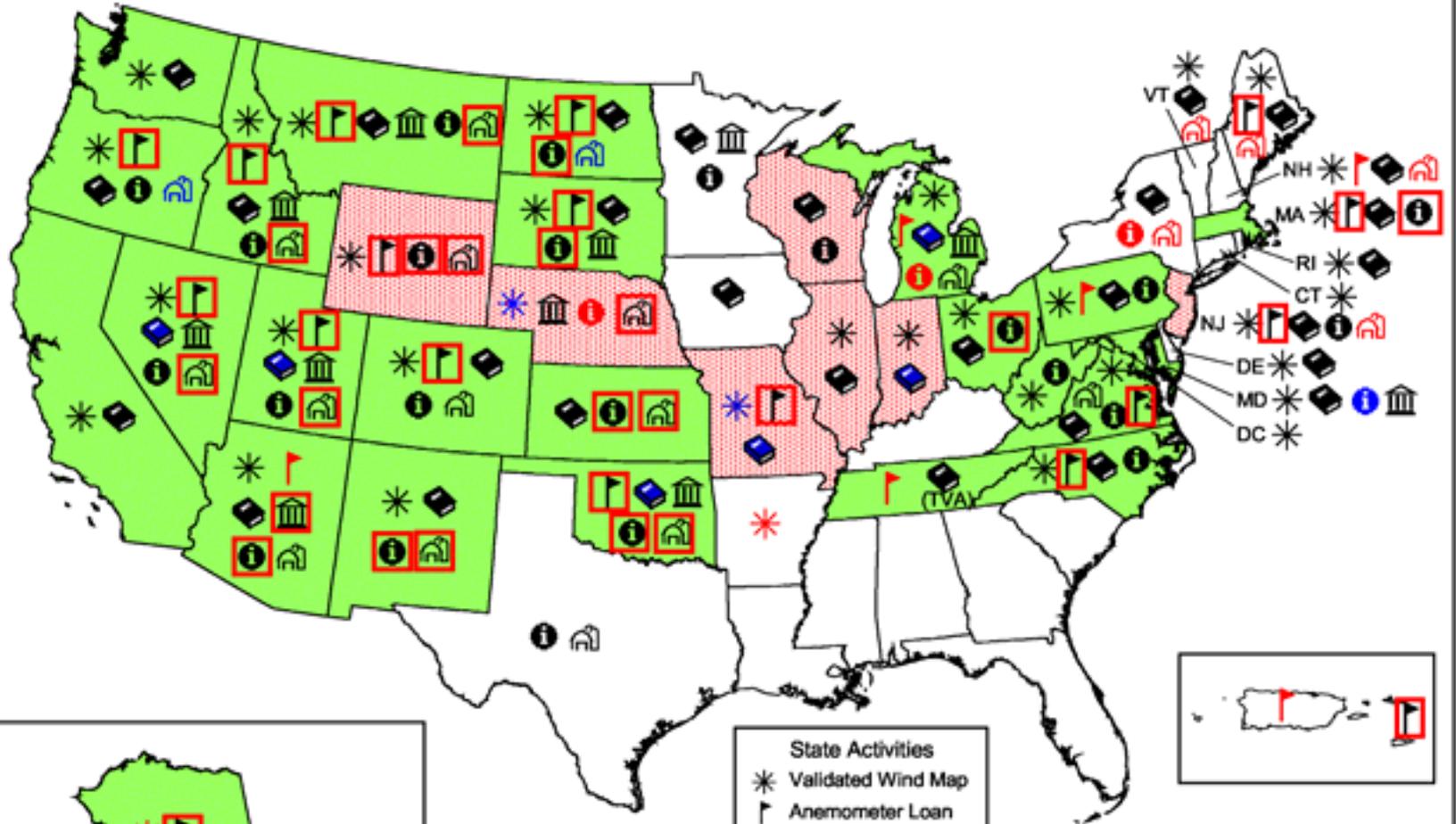
WPA Activity Matrix



Installed Wind Capacities (1999-3/05)



Wind Powering America State Activities



- State Activities**
- * Validated Wind Map
 - ↑ Anemometer Loan
 - ◆ Small Wind Guide
 - ⌘ Legislative Briefing
 - ⓘ Wind Workshop
 - ⌋ Farm Bill Outreach
 - Wind Working Group
-
- Completed pre-FY05
 - Completed in FY 2005
 - Planned for FY 2005

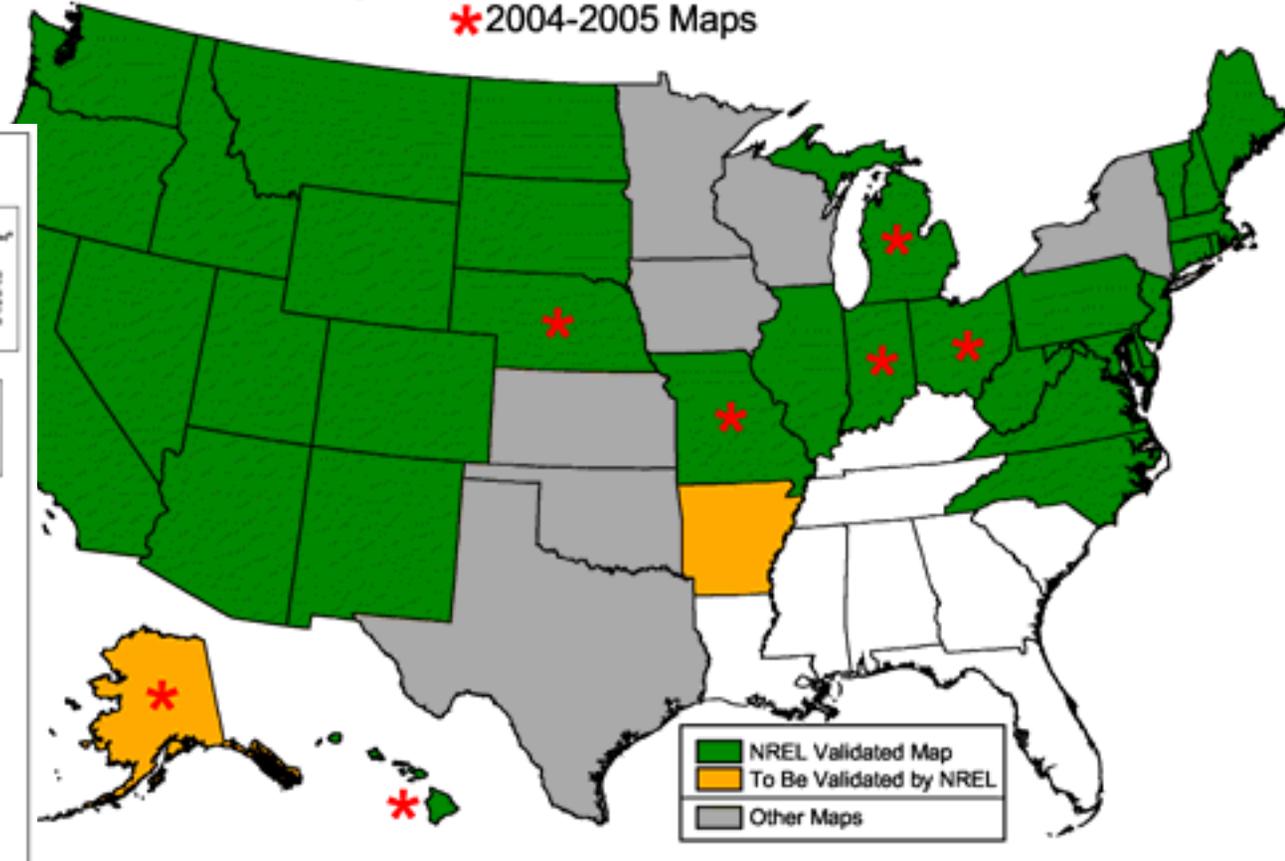


U.S. Department of Energy
National Renewable Energy Laboratory

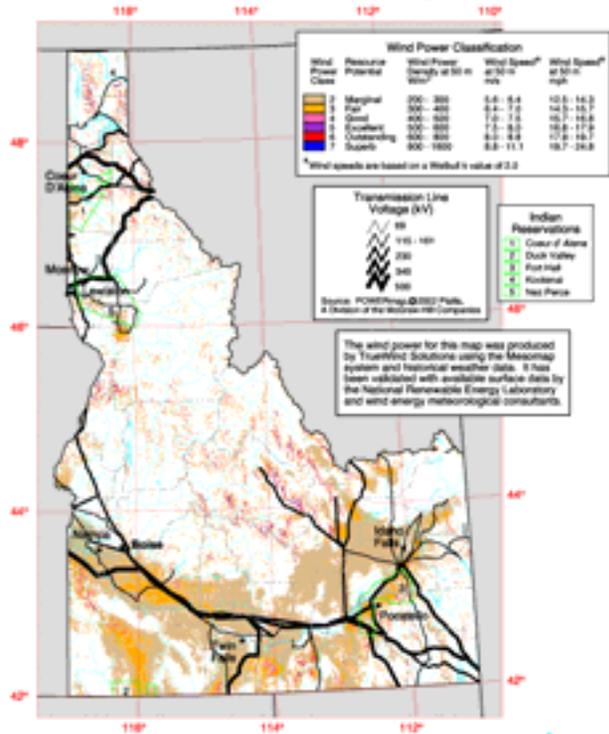


Wind Resource Mapping

United States - High Resolution Wind Resource Assessment Status
 *2004-2005 Maps

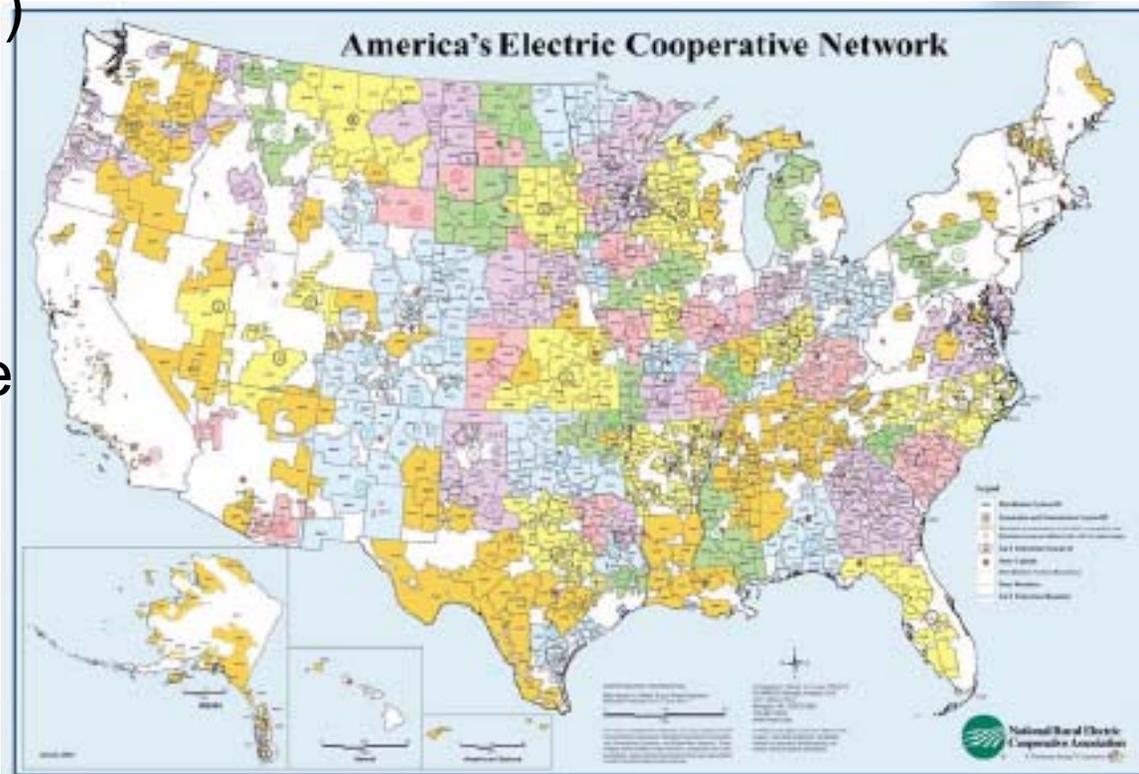


Idaho - Wind Resource Map



Utility Partnerships

- NRECA workshops
- APPA/NRECA meetings participation
- Wind Energy Finance (WEF) tool
- Co-op TA (e.g., AVEC)
- Targeted publications
- Deliberative polling
- UWIG participation
- Public Power Web site
- PMA Green Tags
- Annual Awards
- WAPA Collaboration



Utility Awards



Western Farmers Electric
Cooperative, Wind Co-op of
the Year Award 2004
(NRECA)



Ft. Collins Utilities, Public Power
Wind Pioneer Award 2004 (APPA)

Native American Tribal Outreach

- Anemometer loan program
- NAWIG
- DOE/TEP wind projects technical assistance
- WEATS
- Wind-diesel workshop
- Wind Powering Native America video



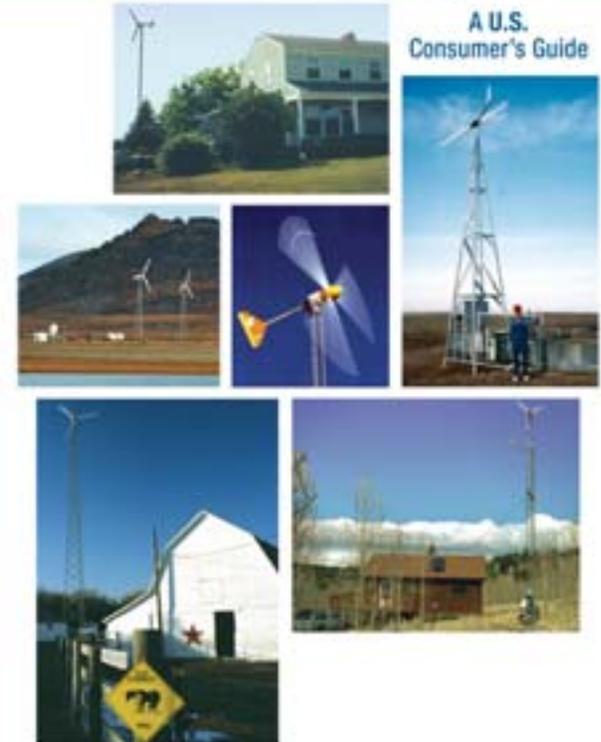
Outstanding Technology Acceptance Award



Distributed (Small) Wind

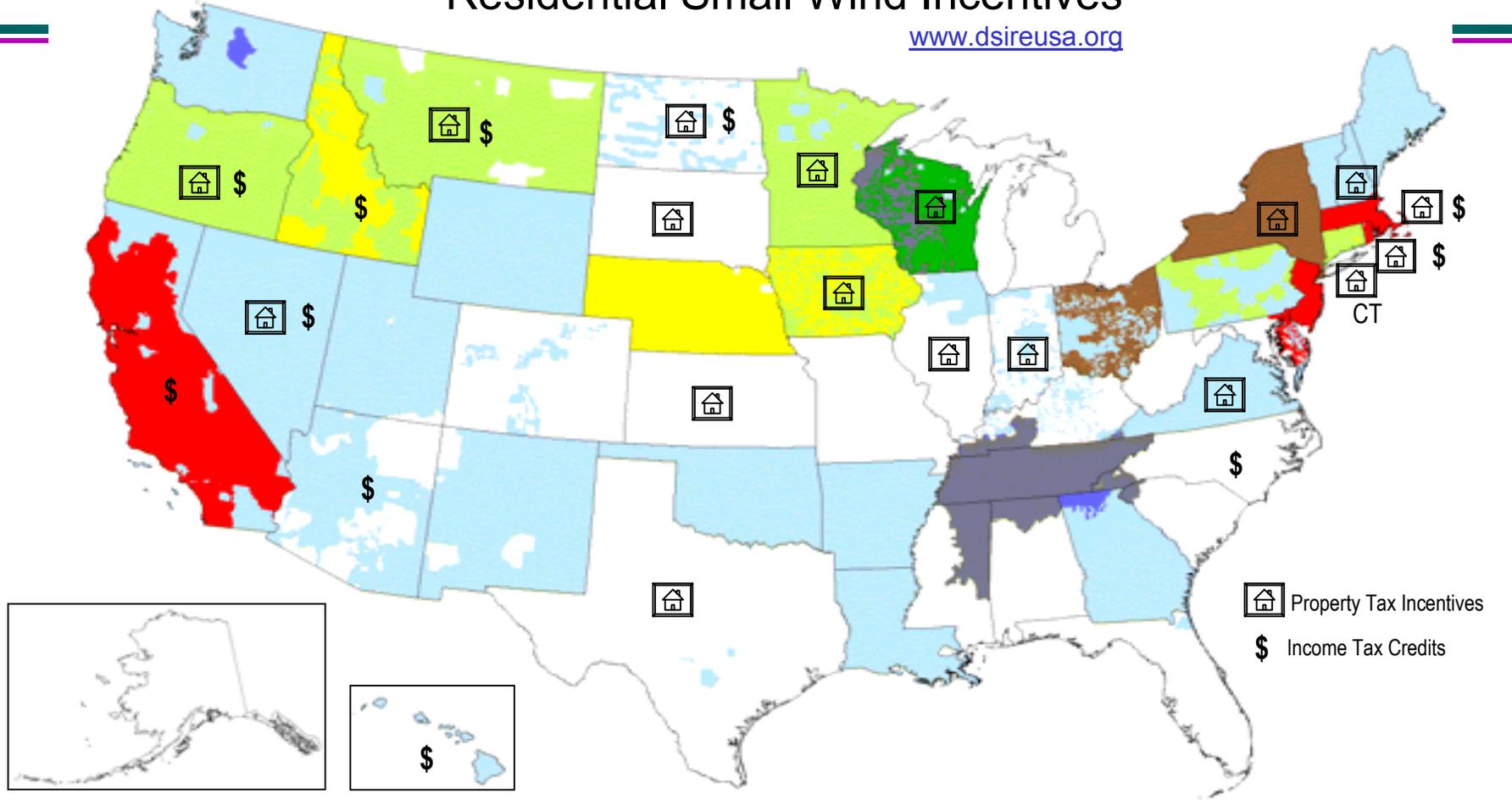
- Small wind consumer's guides
- Targeted state workshops
- Interstate Renewable Energy Council state network
- Global WINDPOWER workshop
- Agricultural outreach
- Point-and-click analysis tool
- Farm Bill

Small Wind Electric Systems



Residential Small Wind Incentives

www.dsireusa.org



Property Tax Incentives
 Income Tax Credits

BUYDOWNS	PROD. INCENTIVES	MINOR INCENTIVES	
Buydown & Net Metering	Productivity Incentives & Loans	Loans	Net Metering & Loans*
Buydown, Net Metering, & Loans	Net Metering, Loans & Prod. Incentives	Net Metering & Prod. Incentives	Net Metering

*In Minnesota, loans apply only to farmers.
 Grants available in Connecticut, Virginia and Pennsylvania (First Energy and Penelec SEF)

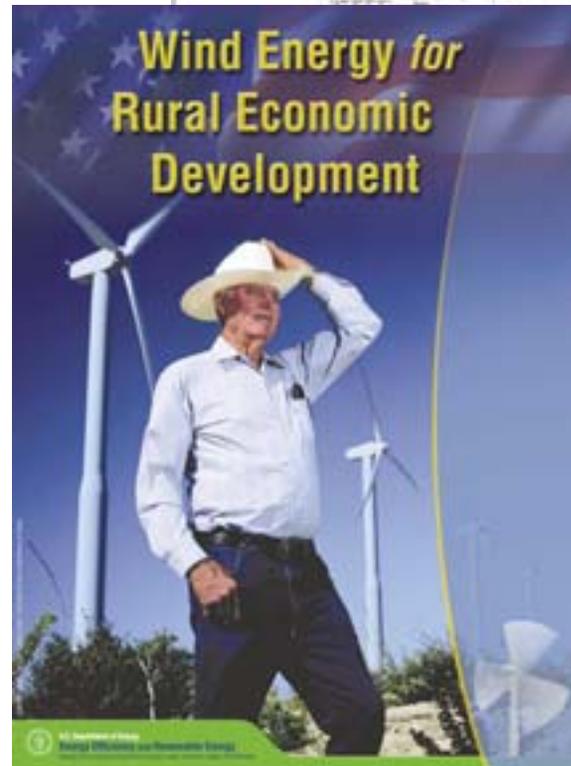
WPA Economic Development

- Outreach to ag sector and rural communities
- Farm Bill
- Job and Economic Development Impact (JEDI) model
- Economic development information database
- Comparative analysis of generation sources
- Economic impact of ownership options



General

- Strategy team
- WPA Web site
- Communications and outreach
- Wind for schools pilot project
- BLM/USFS policy and analysis
- FEMP support



WPA Management Activities

- Strategy team
- State Summit
- BLM/USFS policy & analysis
- WPA Web site
- Schools pilot
- WEF technical support
- Advocates awards
- FEMP technical assistance
- State Lands policy
- Energy/Air nexus analysis
- Community wind analysis
- Comparative economics of bulk power options
- Publications
- NWCC participation
- Stakeholder interviews
- WINDPOWER '04 paper



Wind-Water Nexus



Irrigation



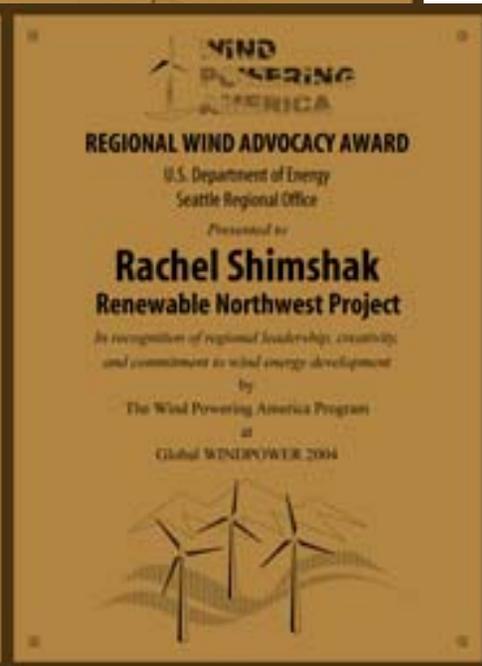
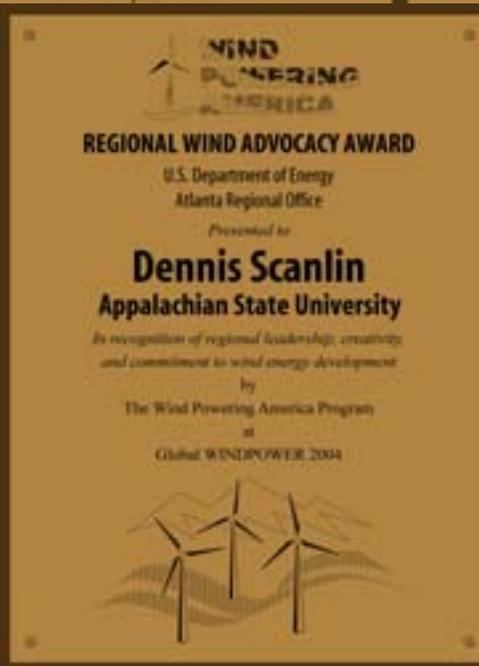
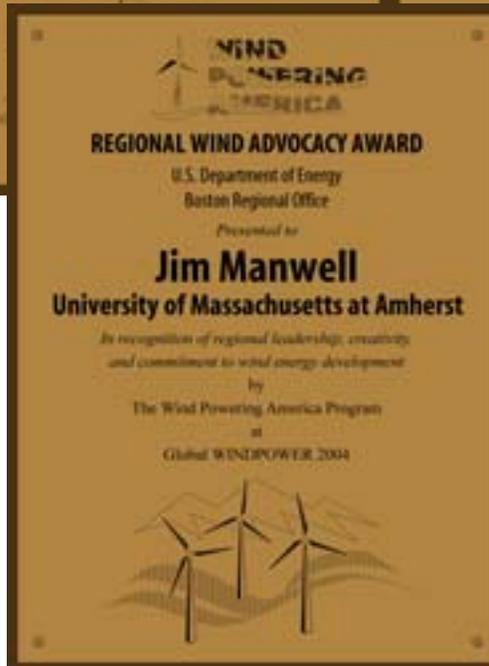
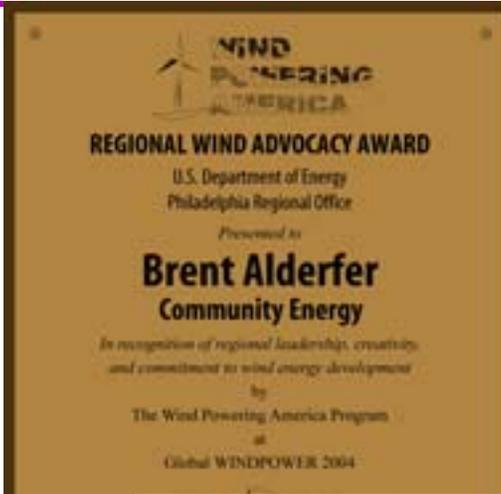
Thermal Generation



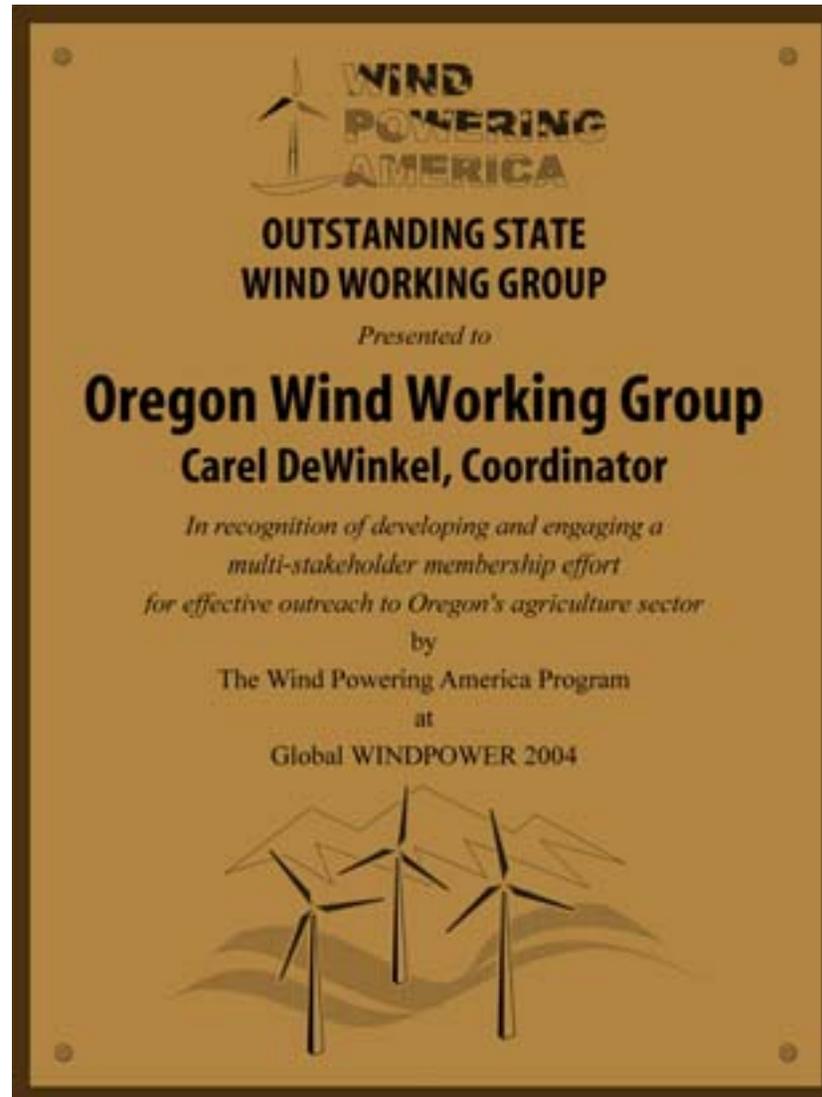
Desalination

- Opportunity: Pumping; Cleaning; Desalting; Saving H₂O
- Challenge: Strategic Intersections
- Stakeholders: Ag Sector; Municipalities; Power Administrations; Water Research Community; USDA; BuRec; States
- Activities: Analysis; Collaboration; Strategic Investments

Regional Wind Advocacy Awards



Outstanding State Wind Working Group Award





Carpe Ventem/EIEIO

www.windpoweringamerica.gov