

Wind Power on Native American Lands: Process and Progress

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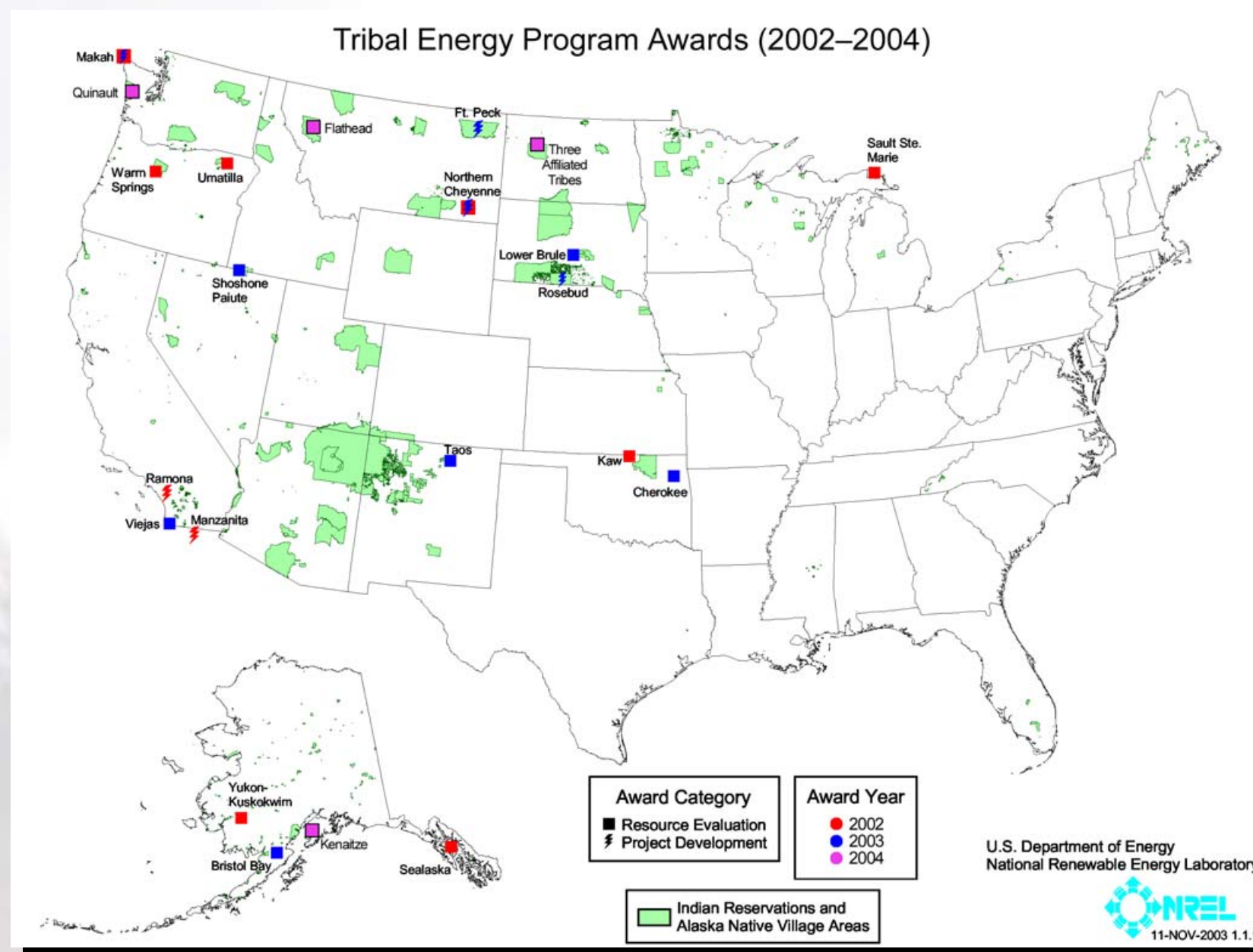
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Tribal Energy Program

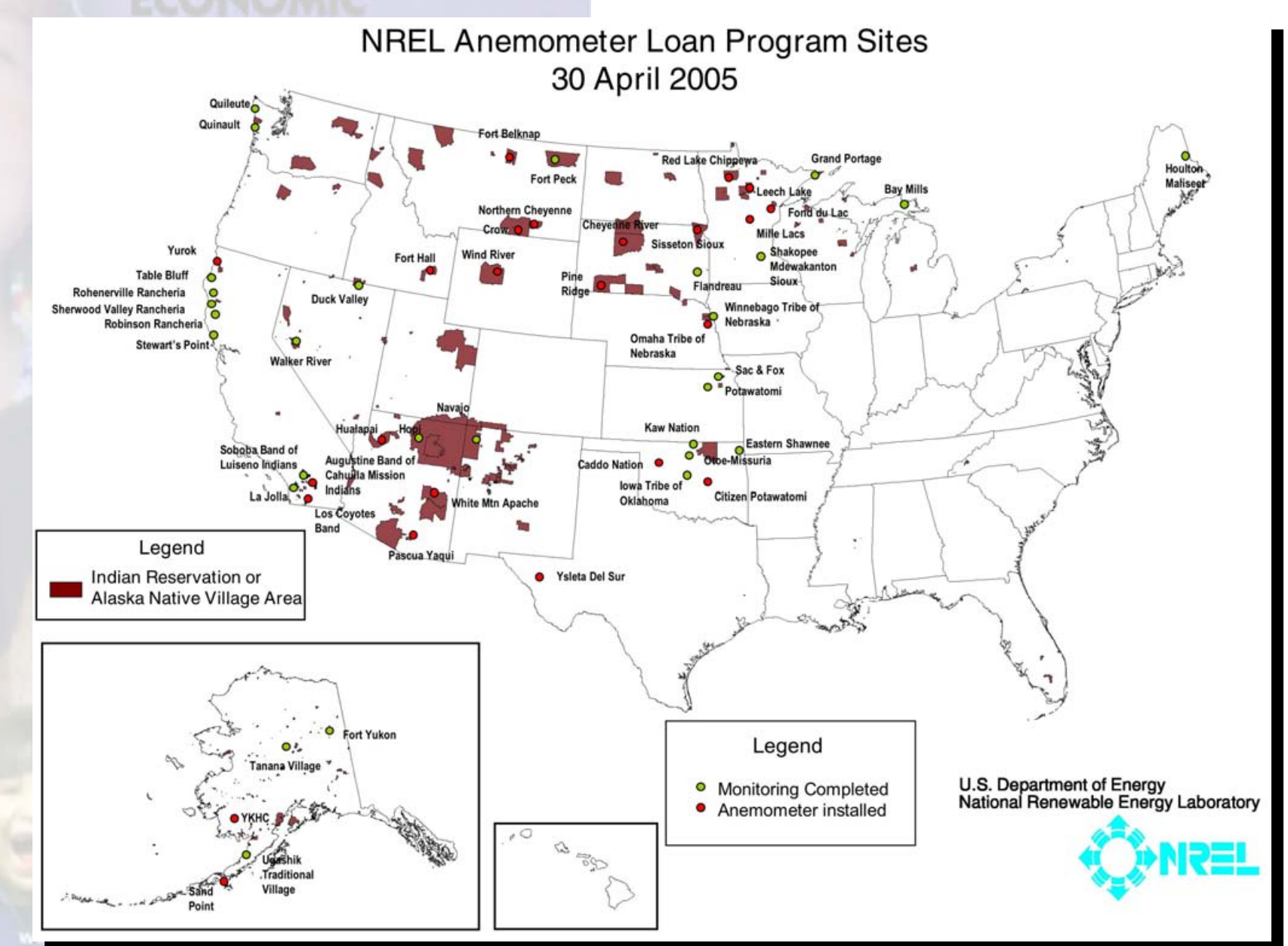
Funding for:

- Strategic planning
- Resource assessment
- Project feasibility studies
- Project development



Wind Powering America

- Anemometer Loan Program
- Wind Energy Applications and Training Symposium (WEATS)
- Native American Wind Interest Group (NAWIG)
- Wind Powering Native America video
- Presence at workshops and conferences
- Technical assistance



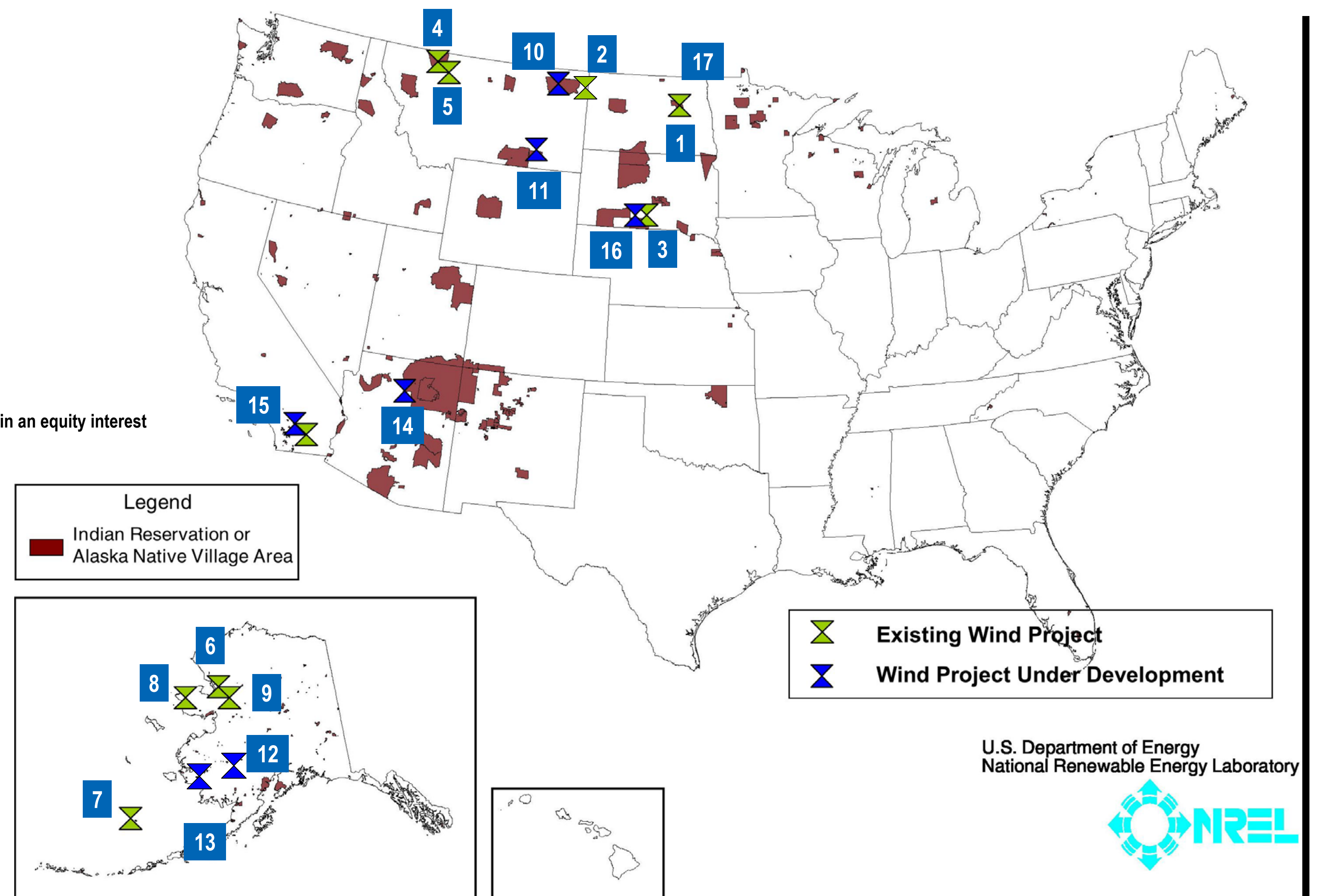
Existing and Pending Native American Wind Projects (April 30, 2005)

In-Place Projects

- Spirit Lake Sioux (Fort Totten, ND)**
 - 1x 100-kW turbine
 - Meets part of casino load
 - Installed 1996
 - Financing: TEP grant
- Turtle Mountain Band of Chippewa (Belcourt, ND)**
 - 1x 100-kW wind turbine
 - Meets part of wastewater treatment plant load
 - Installed 1996
 - Financing: TEP grant
- Rosebud Sioux (Rosebud Reservation, SD)**
 - 1x 750-kW wind turbine
 - Energy sold to Basin Electric and Ellsworth AFB
 - Green tags sold to Ellsworth AFB and Native Energy
 - Installed: 2003
 - Financing: TEP grant, RUS loan
- Blackfeet (Browning, MT)**
 - 1x 100-kW turbine
 - Energy sold to local utility
 - Installed 1996
 - Development supported by TEP
 - Financing: TEP grant
- Blackfeet (Browning, MT)**
 - 4x 10-kW turbine
 - Meets part of wastewater treatment plant load
 - Installed 1999
 - Financing: Field Verification Program
- Kotzebue Electric Association (KEA) (Kotzebue, AK)**
 - 10 x 66-kW turbines
 - 1x 100-kW turbine
 - Initial installation: 1997, subsequently expanded
 - Low-penetration wind-diesel system
- TDX Power, Inc. (St. Paul Island, AK)**
 - 1x 225-kW turbine
 - High-penetration wind-diesel system for TDX industrial area
 - Installed 1999
 - Financing: Totally commercial financing
- Alaska Village Electric Cooperative (AVEC) (Wales, AK)**
 - 2x 66-kW turbines
 - High-penetration wind-diesel system
 - Installed 2000
- Alaska Village Electric Cooperative (AVEC) (Selawik, AK)**
 - 2x 66-kW turbines
 - High-penetration wind-diesel system
 - Installed 2000

Near-Term Projects

- Assiniboine and Sioux Tribes (Fort Peck, MT)**
 - 1x 660 kW wind turbine
 - Energy will be used within the reservation
- Northern Cheyenne (Lame Deer, MT)**
 - 30 MW
 - Installation expected in 2006
 - Development (pre-construction) work financed with TEP grant
 - Tribe will retain an equity interest
- Alaska Village Electric Cooperative (AVEC) (Kasigluk, AK)**
 - 3x 66 kW wind turbines
 - High penetration wind-diesel system
 - Under development: Installation expected in 2005
- Alaska Village Electric Cooperative (AVEC) (Toksook Bay, AK)**
 - 4x 66 kW wind turbines
 - High penetration wind-diesel system
 - Under development: Installation expected in 2005
- Hopi**
 - 15 MW
 - Installation expected in 2005
 - Privately owned project: leasing land from the Tribe
 - Hopi planning to follow up with a wind project in which the tribe will retain an equity interest
- Kumeyaay**
 - 50 MW
 - Installation expected in 2005
 - Privately owned project: leasing land from the Tribe
- Rosebud Sioux (St. Francis, SD)**
 - 30 MW
 - Installation expected in 2006
 - Development (pre-construction) work financed with TEP grant
 - Tribe will retain an equity interest
- Three Affiliated Tribes (Fort Berthold, ND)**
 - 1x 66 kW
 - Will sell energy to local utility
 - Installation scheduled for 2005
 - Financing: TEP grant



Challenges

- Inability to access Production Tax Credit (PTC)
- Higher development costs (NEPA)
- Local utility resistance
- Lack of knowledge about wind development process
- Tribal policies / Native American law

Opportunities

- Wind resource
- Transmission access
- Wind-hydro
- Federal green energy initiatives
- Renewable energy and climate change concerns
- Environmental justice
- Tax advantages/preferences
- Federal outreach programs