



Distributed Wind for American Farmers



**Heather Rhoads
Executive Director
DWEA**

February 24, 2025



DW4AF Objective

“to lower energy costs,
improve efficiency of
operations, and increase



income for low-moderate income, small-medium farmers and agricultural producers and accelerate the deployment of on-farm wind energy systems. This will reduce burdens of providing off-farm income to sustain agricultural operations and facilitate the intergenerational transfer of farm assets – cheaper energy to keep farms in the family.”



Distributed Wind for American Farmers

- Cooperative Agreement with USDA Rural Business Cooperative Services
- Period of Performance: Jan. 15, 2025 – Dec. 31, 2026
- **Scope of Work Tasks:**
 1. Identify, engage, and support 5 “super-networking” regional ag organizations
 2. Use digital filtering methods to create curated lists of prospective customers
 3. Assist outreach organizations with materials, training, events and communications
 4. Assist individual farmers with feasibility assessments and supplier match-making
 5. Assist farmers in applying for REAP grants and/or loans
- **Goals: 75 DW REAP applications in 2025 + 125 in 2026**
- DWEA Personnel: Heather Rhoads, David Dunaway, Sonja Ling, Teena Bell Harris, Maureen Burke, Mike Bergey
- Technical Assistance Contractors – TBD
- Regional Ag Organization Partners – TBD



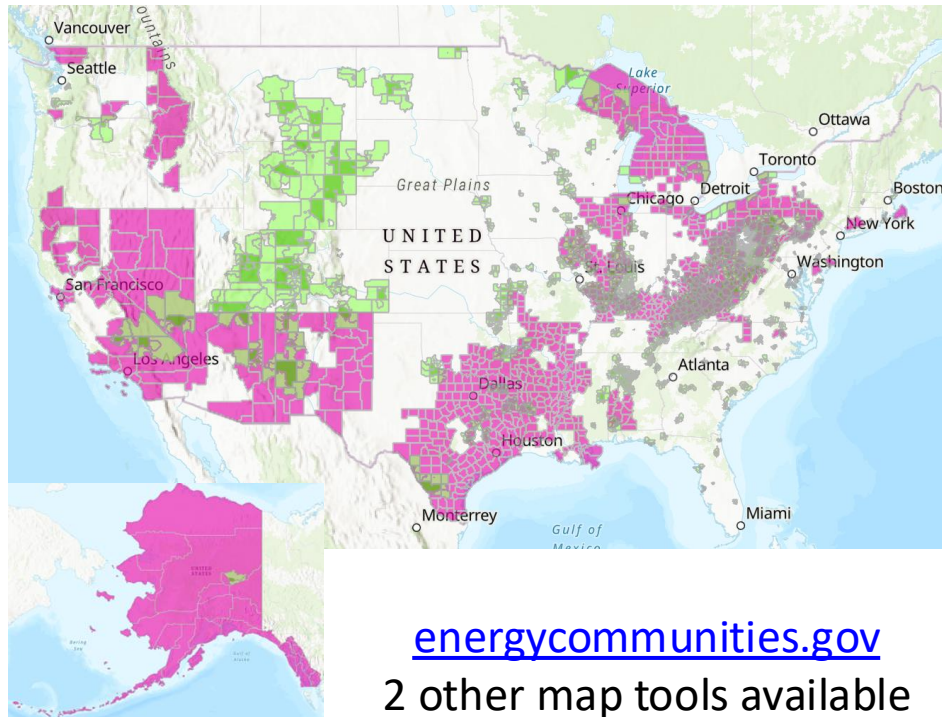
DW4AF Justification of Public Need

- DW is an under-utilized renewable energy technology popular with farmers
 - Preserves prime agricultural land
 - Supports nighttime and winter energy demands
 - Has high domestic content
- While DW has great potential, substantial headwinds have limited adoption
- DW potential has been vastly overshadowed by solar and low solar module prices and has a large potential for cost reduction with increased deployment because it is underdeveloped and undercapitalized
- DW is poised to contribute to rural economic development in unique ways; American manufacturers are developing plans for “mini-factories” to manufacture small/medium sized wind turbines close to where they are used
- USDA REAP & farm markets can play an important catalytic role in driving down DW costs over the next decade, with rural economies as the primary beneficiaries

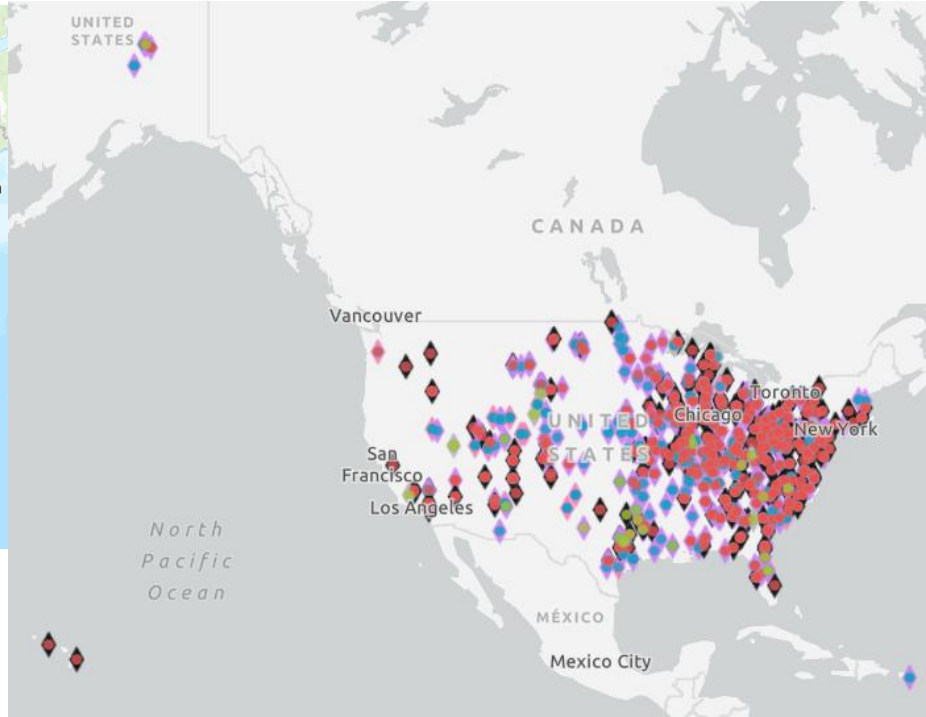


Task 1. Identify & Engage with Outreach Partners

- Identify Target Market Focus Areas
- Identify and Confirm Best Fit Outreach Partners
- Place Partner Subcontracts

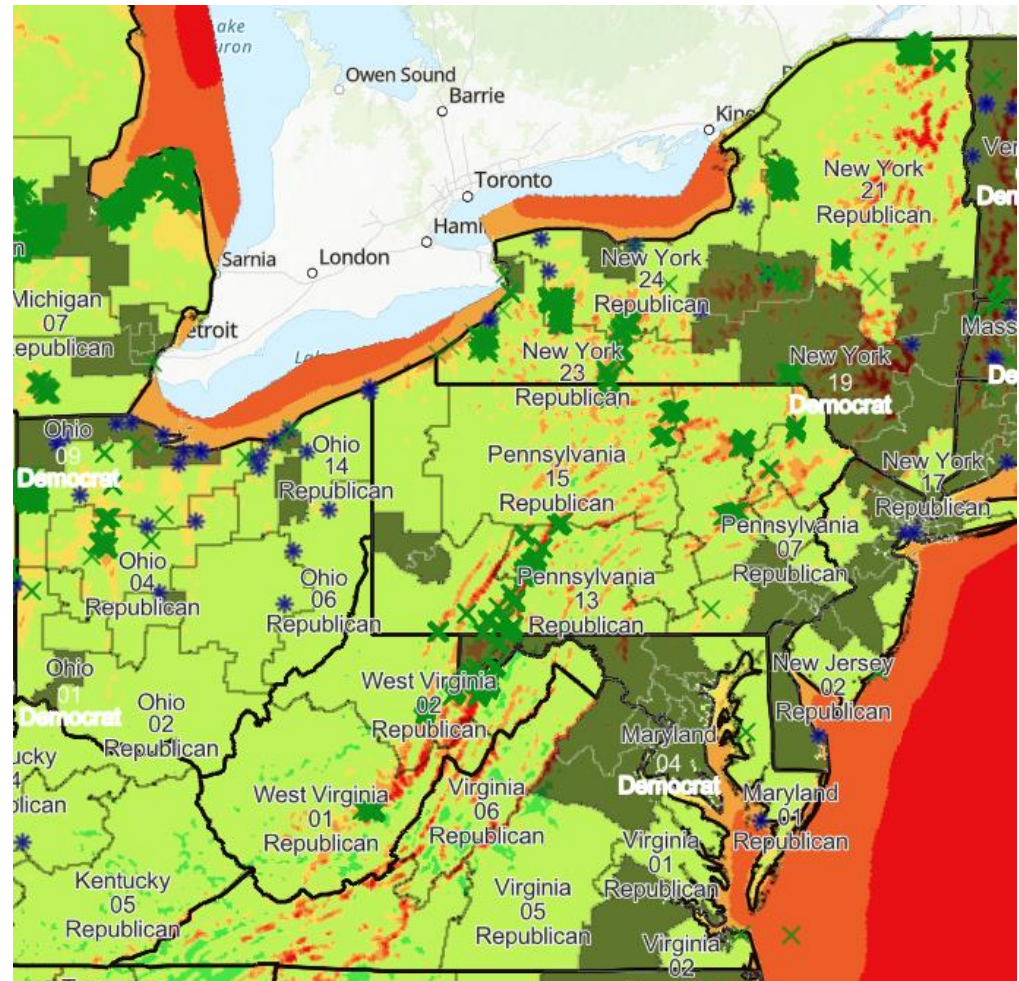
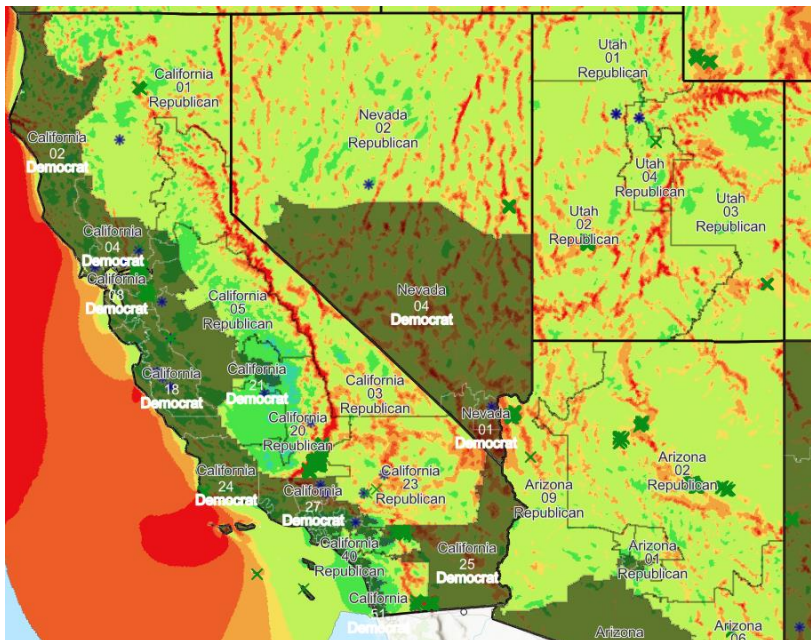


energycommunities.gov
2 other map tools available



Task 2. Create Prospect Lists for Target Markets

- Compile Digital Data
- Analysis and Filtering
- Contact Refinement
- Final Prospect Lists



Task 3. Outreach

- Materials and Resources Development
- Direct Partner Outreach
- Events and Mailings
- Other Outreach



FEB 4, 2-3 PM
DURING THIS ZOOM YOU'LL LEARN ABOUT...

- Wind Resources
- Certified turbines
- Cost Modeling tool
- Financial incentives
- ...and more!

*AgWind provides **no-cost** assistance for rural energy users, like you, to gauge savings from wind systems*



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www.AgWindEnergy.org

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Dan Sisson
28101 County Street 2680
Anadarko, OK 73005-2268


Explore current incentives for
Rural Wind Energy Systems


You may qualify for up to 70% of the cost!

Join us for a free Zoom to see if a wind turbine will work for your property

**TUESDAY
FEB 4
2-3 PM CENTRAL**

Scan to RSVP





www.AgWindEnergy.org

Task 4. Site Evaluation Support

- Partner Training on Site Evaluations
- DWEA Direct Support
- Metrics




AgWind Feasibility Assessment | Distributed Wind Energy Association Print Report

Turbine Production [Financial Analysis](#) [Saved Sessions](#) [Contact Us](#) Logout | Administration

Provided For	Provided By	Edit Info
Client Name: FTS Enterprises	Company: FTS Enterprises	
Address: 10600 W 6th Juniata, Nebraska	Name: Mike Bergey	
Latitude: 40.569°	E-Mail Address: mbergey@bergey.com	
Longitude: -98.529°	Phone: 405-364-4212	

Input Parameters & Turbine Production:



Turbine Selection	Bergey Windpower Excel 15
Nameplate Capacity [kW]	15.6
Rotor Diameter [m]	9.6

Site Location:
10600 W 6th
Juniata, Nebraska
40.569° latitude
-98.529° longitude

Average Wind Speed [mph]	13.94
Tower Height [ft]	100.0
Altitude [ft]	1,998.0
Weibull K	2.0
Wind Shear	0.18
Turbulence Factor [%]	10.0
Average Output Power [kW]	4.6
Daily Energy Output [kWh]	110.7
Monthly Energy Output [kWh]	3,366.7
Annual Energy Output [kWh]	40,400.6
Hub Average Wind Speed [mph]	13.9
Air Density Coefficient	0.9
Operating Time [%]	99.3

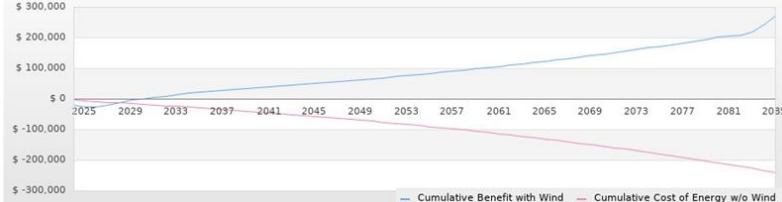
NPV \$ 108,069

IRR 31.84 %

Lifetime Cost of Energy \$ -0.09 /kWh

Payback Period 2.8 years

Costs & Benefits:



Small Wind Turbines for Homes, Farms, and Small Business



AgWind Feasibility Assessment

Wind Turbine Performance & Economics Evaluation Tool

Username:

Password:

For assistance, please contact DWEA@agwindenergy.org

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Task 5. REAP Application Preparation Support

- DWEA Training on Grant Writing
- DWEA Direct Support
- Metrics



*Scan to check
your site's wind!*

USDA REAP APPLICATION PROCESS FY25

Getting Started: Before Applying

- Establish project design and cost; Gather quotes for work to be performed
- Contact local Rural Development State Energy Coordinator ([State Energy Coordinators](#))
- Contact local utility for interconnection agreement and PPA, apply for permits
- Obtain UEI (Universal Entity Identifier) at [SAM.gov](#), activate registration

Gather Application Forms and Documents (see file list)

- Obtain REAP Grant Application Forms from: [Rural Development Website](#)
- Assemble required documents as outlined in the [detailed application checklist](#)

Complete Application Forms and Documents

- Fill out application forms ([RD 4280-3x](#), [SF-424](#), [SF -424C](#), [SF -424D](#))

- Compile supporting documents: proof of eligibility, technical requirements, and environmental checklist

Submit Application

- Send your completed application package to your local Rural Development State Energy Coordinator or via [Grants.gov](#)
- Retain copy of application for your records

Await REAP Scoring and Selection

- Applications are scored based on energy savings, project cost, and readiness criteria
- Notification can take several months

Grant Award and Disbursement

- The local Rural Development State Energy Coordinator will notified awardees
- Grants are disbursed after project completion, payment, and verification of proper functioning
- Reimbursement requires detailed invoices and proof of payment for eligible expenses

Current Situation

- DWEA has a signed, legally-binding, Cooperative Agreement with USDA Rural Cooperative Business Service
- Project is on hold due to President's Executive Orders and federal funding freeze
- DWEA's expects the hold will be lifted, but has been and will continue to be cautious towards incurring costs





Stay tuned

at www.AgWindEnergy.org and www.DistributedWind.org



heather@eformativeoptions.com, cell 206-755-2064

Find a good time to chat here: www.calendly.com/herw