

Lessons Learned by a Recovering Applicant



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USDA Farm Bill Grants for Wind Energy
Development in Montana

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Wind Development Process and USDA application (based on 2003 NOFA)

Phase I

- Initial Site Selection
- Wind resource assessment
- Land acquisition - Options/Easements
- Permitting
 - Conditional/Special Use Permit
 - Initial FAA Approval Form 7460-1

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In process

Complete

Not needed
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Application

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Phase I

■ Studies

- ✓ Transmission Interconnection
- ✓ Initial Environmental/Wildlife Studies
 - ✓ Federal Form R1940-20
 - ✓ Phase I Environmental Study
 - ✓ USDA Historic Preservation/
Cultural Survey
- ✓ Initial Economic Feasibility
- ✓ Radio/Microwave transmission

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Phase II

- Power Purchase Agreement
 - At least a letter of intent to purchase from utility.
- Financing
 - Final Feasibility Analysis
 - Full project funding plan
 - Verification of leveraged funds
 - Risk Analysis
- Preconstruction engineering
- Construction bidding
 - Performance and Payment Bond
- Easement Agreement

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Phase III

- Site Preparation
- Project Management
- Construction
- Commissioning
- Operation

In process

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Phase IV

- Ongoing Operations & Maintenance –
20 to 30 years

Phase V

- Decommissioning and
Removal of Wind Farm

In process

Complete

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- Feasibility Study
 - Qualified Independent Consultant
 - Must be a PE if project is >\$100,000
- Federal Forms
 - Equal Opportunity
 - Drug-Free Workplace
 - Various certifications

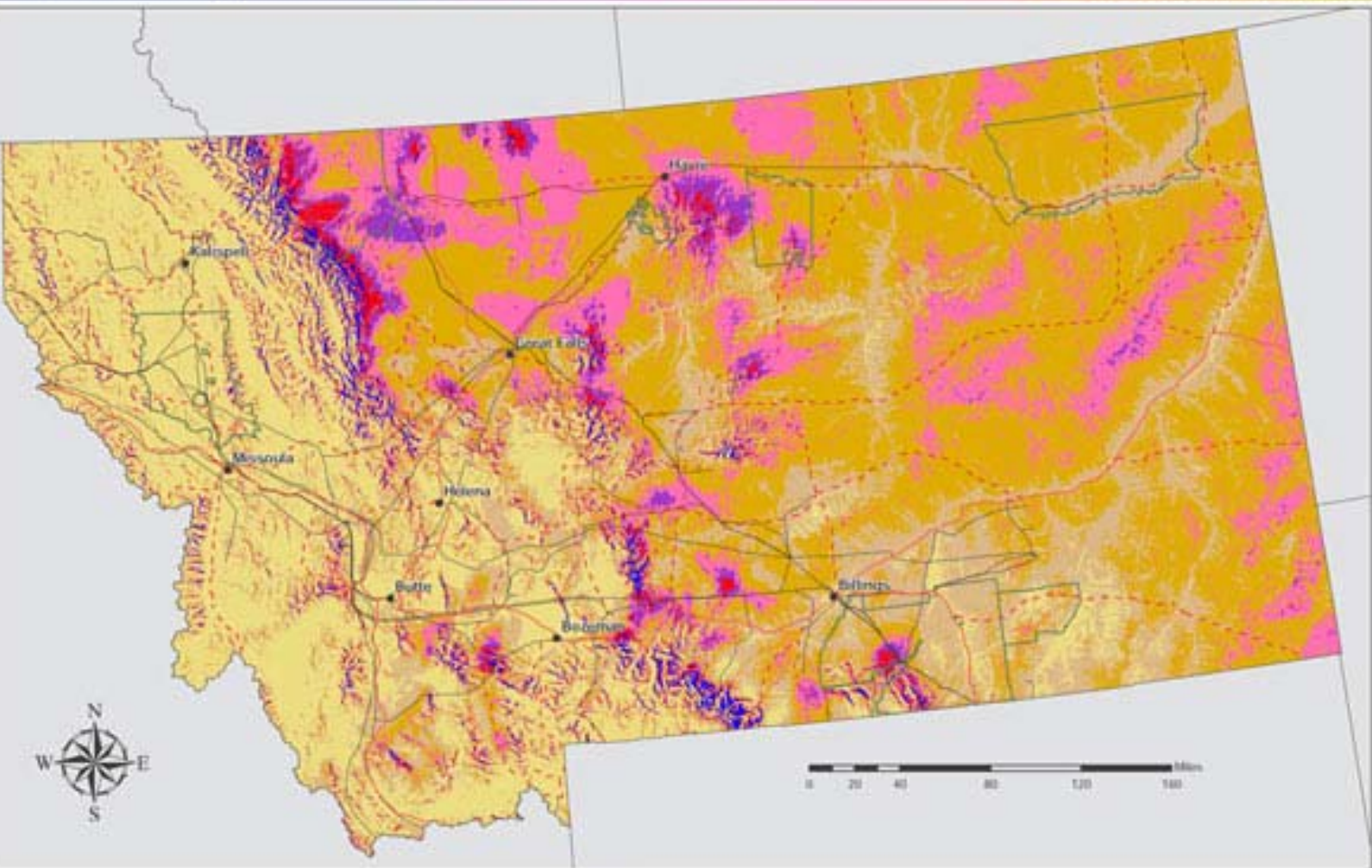
Tips for Applicants

- Lessons learned from a recovering applicant.

Get a handle on your wind resource

- How much wind do you have?
- Is it enough?
- What size wind turbine can work in the resource?
- What does the transmission look like at the site ?





| Wind Power Class | Resource Potential | Wind Speed at 50 m (mph) |
|------------------|--------------------|--------------------------|
| Class 1 | Poor | 0 - 12.5 |
| Class 2 | Marginal | 12.5 - 14.3 |
| Class 3 | Fair | 14.3 - 15.7 |
| Class 4 | Good | 15.7 - 16.8 |
| Class 5 | Excellent | 16.8 - 17.9 |
| Class 6 | Outstanding | 17.9 - 19.1 |
| Class 7 | Superb | > 19.1 |

- Major Cities
- Transmission Lines > 115 KW
- Limited Access Highway
- Highway
- Tribal Reservations

The wind resource estimates presented on this map were developed by TrueWind Solutions using MesosMap, a mesoscale atmospheric simulation system, at a spatial grid resolution of 400 meters (one-quarter mile). The estimates have been validated by the National Renewable Energy Laboratory (NREL) and independent meteorological but should be confirmed by direct measurement according to wind energy industry standards.

Team Up

- It's a smart move, even if it's not your usual style.
- You need help putting the project together:
 - Financial analysis
 - Technical assistance – consultants
 - Siting – find the best wind site
 - Business structure
 - Learning about the energy industry and how to talk to a utility.

Use available resources

- Use any helpline or templates USDA offers
 - Kansas template
- Call your USDA officer as many times as it takes to get clarity on what you need to deliver – the earlier in the scheme of things the more receptive they'll be
- Also – remember the energy title is new for the USDA folks too – so have patience and be clear in your questions.

Looking ahead

■ Scoring-

- Know how your application will be evaluated.
- Know what questions you have to answer.

■ Forms-

- Find out what forms you need, get them and make plenty of extra copies.
- Don't underestimate how long this will take.

■ Submitting the Application-

- Know how and when to turn in you application.

■ **Budget time and dollars to do all of this.**

Commitment: A 20 year crop

- Making the Commitment
 - This is a long-term project that takes a serious level of commitment.
 - Start as early as you can.
- You can't do this in a day or a week
- This is different than anything you have ever done before.

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