

1997 Project Abstract For the Period Ending June 30, 1999
This project was supported by MN Future Resources Fund

Project Title: SUSTAINABLE DEVELOPMENT OF WIND ENERGY ON FAMILY FARMS
Project Manager: Lisa Daniels
Affiliation: Sustainable Resources Center
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Web Page address: Windustry.com
Appropriation Amount: \$200,000

Statement of Objectives

This project provides wind energy information and technical resources directly to the farmers and rural communities where wind is a viable resource. This project had three main objectives: Provide outreach and education to farmers and local rural communities where there is interest and potential for wind energy. Provide technical assistance to farmers and rural communities who are working to address the local issues involved in wind development. Explore ways to protect farmers' wind rights. SRC will work with legal counsel to legally define wind rights and determined how they can be bought, sold, or leased in regard to the land for which they are associated.

Overall Project Results

Overall, the Sustainable Resources Center Wind Energy project was successful in broadening the scope of its wind energy forums and outreach to farmers, small business and rural communities.

The project started out concentrating on its formal curriculum and main text and other tools for evaluating wind energy in a formal classroom type setting. We coordinated several meetings and conducted classes on specific topics which included: assessing the value of your wind energy; landowner issues of wind energy; wind rights; wind energy development in Minnesota; and community-based wind energy for local benefit. These classes had mixed results and medium attendance but was not effectively reaching the people in the communities that possessed the strong windy resources.

Then as this biennium progressed we tried new things to get good solid information out there. We collaborated on several meetings and efforts to promote wind energy in the state such as a wind energy festival in Lake Benton; wind energy tours of the wind turbines; national and regional meetings where lessons learned and public policy initiatives could be shared. These were all very well planned events and had excellent turnouts. Some of our other techniques that were more successful as well included: newsletters, speaking on the agenda of county commissioner meetings and the Buffalo Ridge Wind Energy Task Force meetings; collaborating to put on tours of the wind projects. Our most effective outreach method were our "Town Meetings". We held seven "Town meetings" in spring of 1999 that were an overwhelming success for attendance and participation. We structured the meetings to have a panel of presentations and then plenty of time for discussions, questions and answers. The SRC wind energy project reached over 400 farmers/rural landowners in Spring of 1999, to provide information on wind rights and negotiating beneficial wind easement contracts with wind developers.

Project Results Use and Dissemination

All work done on community wind development, legal issues, and technical issues was prepared for facts sheets, wind curriculum note pages, exhibits, and be displayed on the world wide web page. All wind project classes, tours, presentations and meetings were open to the public and widely publicized. A quote from a letter of support for this project from the Nobles County Board of Commissioners, April 1999, says it best, "Land owners and local governments in Southwest Minnesota have greatly benefited from the programs provided by the Sustainable Resources Center. [the project] will continue to provide unbiased, reliable data to assist us in understanding and evaluating the unique wind resources that southwest Minnesota enjoys."

Date of Report: July 1, 1999
LCMR Final Work Program Update Report
Date of Workprogram Approval:
Project Completion Date: June 30, 1999

LCMR Work Program 1997

I. Project Title: SUSTAINABLE DEVELOPMENT OF WIND ENERGY ON FAMILY FARMS

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Total Biennial Project Budget:

\$ LCMR:	\$200,000.00
- \$ LCMR Amount	\$190,351.10
Spent:	
= \$LCMR Balance	\$9,648.90

A. Legal Citation: ML 1997, [Chap. 216], Sec. [15], Subd. 12(d). SUSTAINABLE DEVELOPMENT OF WIND ENERGY ON FAMILY FARMS

Appropriation Language: This appropriation is from the future resources fund to the commissioner of administration for an agreement with the Sustainable Resources Center for the second biennium to provide technical assistance, wind assessment, and technology transfer for the development of wind energy harvesting.

II. PROJECT SUMMARY AND RESULTS:

SRC will provide information and technical assistance encouraging economically viable wind energy development in small dispersed cluster projects through orderly and sustainable community development practices.

Provide outreach and education to farmers and local rural communities where there is interest and potential for wind energy. Continue to market the SRC wind energy course through distribution channels originally set up in first biennium. Local educators that are part of the organizations we are currently working with include MN Extension Service, rural colleges and universities, regional economic development agencies and environmental learning centers. This will be the marketing backbone of the curriculum. SRC's network of wind ambassadors will meet with people through their civic organizations, city councils, regional development committees, community education, and places of employment, invite them into discussions on wind energy and give them a framework of how to assess the feasibility for establishing wind energy projects in their community or on their farm.

Provide **technical assistance to farmers and rural communities** who are working to address the local issues involved in distributed wind development. SRC will work with the available wind assessment data in the windy areas of the state to provide direct technical assistance to individual farmers who are interested in installing wind turbines on their property. SRC will use data provided by the MN Department of Public Service and a wind atlas modeling software in a pilot program for individual farmers to determine the best location for the turbines on their land.

In addition, SRC will bring in experts to address in depth the most important issues that farmers and rural communities need to understand order to successfully invest in wind energy development. These emerging wind energy issues include orderly development, local ownership structures for wind development, turbine technology, investment options, and legal issues such as eminent domain.

Explore ways to **protect farmers' wind rights**. SRC will work with legal counsel to legally define wind rights and determined how they can be bought, sold, or leased in regard to the land for which they are associated. "Town meeting" type presentations for questions and answers on wind rights will be held in several locations of the western and southern parts of Minnesota. We will produce fact sheets with references for additional distribution in our education and outreach channels.

III. PROGRESS SUMMARY:

June 1999

The Wind Energy Program at Sustainable Resources Center achieved its goals and completed the deliverables as proposed in the workprogram.

June 1999 Update on Result 1.

January - June - Worked on revising and updating our curriculum main text and supplementary pieces. This is an ongoing process because the wind energy industry is changing so quickly. Had most of our main text peer reviewed, some sections extensively rewritten and others edited. Also, as additional reports and references are published, our materials needed expanding to be more inclusive and thorough. Also, worked on updates and enhancements to the economic model spreadsheet called WindPower Calculator. The goal was to improve the spreadsheet so it is more accessible and easier to use by a wider audience. The program must run smoothly on both Windows and Macintosh based computers.

March - Produced Spring Windustry newsletter and had it bulk mailed to all members of our database.

March/April - The folks in Southwest Minnesota were being approached by wind developers with renewed fervor to sign on to their wind easement contracts. After our Town Meetings on Wind Rights (see Results #3 below), I was still receiving many phone requests about wind energy information. Farmers/landowners in Southwest Minnesota communities where wind development was brand new were searching for more information other than the wind developers themselves. The SRC Wind Energy Program put together another round of meetings, called Town Meetings on Wind Energy, where we would concentrate on the different payment options, the value of the wind and negotiating points for beneficial wind easement contracts. Finding the biggest

meeting hall we could, we reserved the American Legion Hall in Lake Wilson and held an afternoon and an evening session.

Our planning committee for the meetings included a national wind energy expert, a MN Dept. of Ag representative and a local elected official. We planned the agenda and prepared materials and coordinated the marketing of the meetings with in a series of conference calls. We had newspaper coverage for the meeting announcements. There were radio interviews and MN Ext bought radio ads. A good turnout was assured.

The meetings had a great turnout April 8th.

Lake Wilson	Attendees
1:00pm	150
6:00pm	90

April - June in Worthington, SRC Wind Energy Program sponsored an ongoing effort meeting for Community leaders, utility representatives and MN Ext service. This was the start of an ongoing series of meetings to organize a community based wind energy project. This type of wind development project would have more elements of local equity and long term local economic benefit. Building on the excellent base of data on the wind resource collected and compiled by the MN Dept of Public Service, these meetings are intended to bring community leaders, elected officials, and community utility representatives into the dialogue about developing community wind projects. This piece was lead by the SRC Wind Energy Program along with the county commissioners in Nobles County. We had over 30 people participating in the meetings - they represented 5 different counties, and four different utilities from the Southwest portion of the state. This program is looking for funding to continue this major new effort.

June 1999 Update on Result 2. Pilot for Wind Resource Assessment and Website

January - Created the Windustry website. You can now look up Windustry.com or Windustry.org and get good information on a number of wind energy issues from the perspective of a farmer/landowner. Our goal was to make this a useful site for someone who has good wind resources, wants to participate in wind development, or learn more of the value of windy land. A website is a new medium and there are techniques to using it more effectively. At first we started on a road of preparing the traditional info sheets. But there is so much more that you able to do for the web to make it a valuable source of information. There is a fine balance between putting enough information on it and have it be valuable and organized in an intuitive fashion and not putting too much on that it is too cumbersome to use. A good editor is useful for these purposes. And we are always open to more comments for improvements. Since there are no printing costs involved with a web page, it is an excellent way to share wind energy information and updates because current events, policy decisions and milestones have industry shaping impacts.

June 1999 update on Result 3. Protecting Wind Rights

Jan - April- SRC Wind Energy Program prepared and delivered Wind Rights information in five "town meeting" style presentations that included a great deal of time for open comments and discussion. This schedule was changed to hold the meetings in February and March rather than later in the spring because of increased inquiries for

information. There was a great deal of wind development activity due to the Public Utilities Commission decision for NSP to develop an additional 400 MW of wind energy in conjunction with their 1994 Legislative Mandate.

The SRC Wind Energy Project put together a working team for developing materials for the Wind Rights meetings. The team included an attorney who specializes in real estate and real property in Minnesota, an attorney who specializes in contract law (worked pro-bono on this), a farmer/rural economic development professional from Lincoln County, a wind energy developer, and a utility electrical engineer/consultant. Held conference calls to identify issues, to brief the attorneys on up to date on current wind issues, gather materials such as sample landowner wind easement contracts, discuss draft materials and determine our presentation agenda.

The forums were marketed as Town Meetings on Wind Rights - planned five around the state. Had local newspaper announcements before each meeting, and some radio as well.

3 in Southwest Minnesota

Slayton	Feb 25 1:30pm
Lake Benton	Feb 25 6:30pm
Pipestone	Feb 26 8:30 am

1 in Northwest Minnesota

Moorhead	Feb 26 6:00pm
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1 in Southeast Minnesota

St. Charles	(Mar 9 original meeting snowed out) Mar 30 9:30am
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Held the meetings

Meetings in Southwest Minnesota had very good turn out and the information was very well received not only for farmers/landowners considering signing on to a wind easement but also for farmers that had already signed on. There was a great deal of general interest from the community. Also, invited the wind developers to the meetings to be available to answer questions. The meetings had formal presentation components and time for question and answers.

<u>Town Meeting</u>	<u>Attendees</u>
Slayton	75
Lake Benton	40
Pipestone	45
Moorhead	12
St. Charles	13

We had several indications that these were valuable forums for the local communities. For example, most of our meetings especially, the ones in Southwest Minnesota, had a good number people who stayed after they were formally adjourned to continue discussions with our wind energy experts and sharing experiences with each other.

November Summary Update

November update on Result 1. Provide outreach and education. We have convened, made presentations and helped organized several meetings and events for exchanging wind energy information. In summary our major efforts included:

- In March 1998, SRC created a custom slide presentation and informational talk for the Moorhead Public Service (MPS) announcement of their "Capture the Wind" program. MPS's wind energy program developed as a direct result of the Windustry conference in the first biennium. The slide presentation was developed to teach MPS employees about wind energy in Minnesota and the specific wind energy program that MPS was about to offer to the Moorhead community. The wind energy presentation was also developed for use in community presentations such as with the Lions Club, Rotary etc.

- In April, SRC also made a wind energy information presentation at a press conference in Moorhead for Earth Day week.

- Also, in March and April, Windustry been working to support two other communities in their wind energy efforts. We worked with White Earth Land Recovery Project (WELRP) and Blue Earth Light and Power. We worked with WELRP to identify next steps for developing a wind energy project on their reservation. They have been collecting wind energy data for about 2 years. We have been working with an intern and with the director of the project. They want to do a small demonstration project and educate their community about it. SRC will assist with the community education aspects.

Blue Earth Light and Power is a municipal utility working to design a program to make it easy for small wind turbines to be installed and integrated into their local utility grid. Again, we are working with them to design their program and on the community education aspects.

- In May - the SRC Windustry program won an award for its poster presentation at the American Wind Energy Assoc. national conference in Bakersfield, CA.

- In June, SRC helped to organize a full day event and tour of the wind turbines at Buffalo Ridge. The tour had two full buses of participants. One bus originating in the Twin Cities, had two legislators included in the group. With the 4 hour bus ride, SRC organized informational presentations for the participants. The other bus originated in Sioux Falls, SD where a 2 day meeting of the National Wind Coordinating Committee was being held. The tour luncheon in Lake Benton was a major event for not only the bus participants but also for local farmers and landowners that were interested and/or involved in wind energy development. Presentations were made by industry representatives as well as local government officials.

The second day was a full day wind energy forum designed for all stakeholders in wind energy development from the wind and electric industries to local farmers and community leaders to national experts. The meeting was held in Sioux Falls, SD but most of the local participants were from Minnesota. The main agenda was to have a dialogue on the regional barriers and opportunities for wind development. Windustry organized parts of the meeting and was responsible for getting farmers' and rural landowners' perspectives heard.

Both events were huge outreach efforts by the SRC Windustry program in collaboration with other renewable energy advocates, and both events were by and large considered successes.

- In August, SRC was invited to organize a segment for the cable TV show, the Environmental Journal. We saw it as an opportunity to present not only information on

the wind development here in Minnesota, but also to include the farmer and local community viewpoint as well. We used many of our network of wind ambassadors from around Minnesota to talk about the benefits of wind energy. The video segment should be available in December.

- In Sept., the Windustry program assisted in organizing events for the first Wind Energy Week declared in Minnesota which culminated in the dedication of the world's largest wind project in the world. Media coverage was great; Windustry worked on several media pieces for public awareness and information of wind energy. There was a Wind Fest for a community celebration in Lake Benton where the local and national perspectives were heard. This was a day long event with learning and information booths staffed by area school children as well as wind energy and utility representatives. The events were attended by over 500 people.

- In Oct. and Nov., the Windustry staff has been working closely to organize and hold a few informational meetings between the MN Rural Finance Authority and local wind developers, local farmers and elected officials. The RFA is responsible to report on the legislative wind energy incentives for two low interest loan programs and why they are not being applied for. This work is instrumental in designing new incentives that could be more successful in assisting farmers to get increased economic benefit on their farms and in their communities.

November update on Result 2. Pilot for Wind Resource Assessment. We provided direct technical assistance to more than our goal of 18 individual rural landowners and farmers who were interested in installing wind turbines on their property.

- Windustry designed and delivered the Regional Wind Assessment classes in three communities around Minnesota. We convened a team of wind energy experts to design the wind assessment classes in Feb - April of 1998. Then Windustry held two sessions in each location in June and July.

- * St. Charles, Community Center - 9 participants

- * Slayton, Southwest Regional Dev. Center, - 11 participants

- * Moorhead, City Council Chambers - 10 participants

- We achieved our project goal of performing 18 wind assessment and analyses for farmers and rural landowners. (We actually performed 19.) We performed two levels of assessment, Basic and Advanced. For the 14 Basic analyses we used DPS wind data and maps and the Danish modeling system on the computer. For the 5 Advanced analysis in addition to using the same data and tools as the Basic analysis, we added a site visit and land roughness characterization. Due to our computer software issues and the DPS data not being ready we had to mail final reports rather than present them in the second session as originally planned. All final reports were mailed in August. This was about one year in advance of the projected completion date.

- One problem was that we were the first to use this new windows version of the software in the United States. We discovered several problems with this Danish product that were unique to us because of our geographical location. Considerable time was spent on working through the software and data issues. We will pursue a course of action that the software is corrected or our money refunded.

- Our Windustry web site is nearly ready to go online. We have created a new series of information pages for it. The pages are summarized sections of the main text into easy to read information sheets. The web site should be up and running in December 1998 rather than June of 1998. This is a revised schedule as noted on the attached amendment to the workprogram.

November update on Result 3. Research on Protecting Wind Rights

Only preliminary work has been performed on this activity so far. Because our wind assessment pilot program schedule was accelerated we had to adjust the schedule of this activity. We are confident that the new schedule will allow us to be focused and responsive to the interests of the rural communities. As noted on the attached workprogram amendment, the new activity schedule will be to perform the research and develop the fact sheets by April 15, 1999. Then SRC will deliver the information in five "town meeting" style presentations that include a great deal of time for open comments and discussion. The five town meetings will be held in April, May and June 1999.

March 1998 - Update Summary Report

During the summer and fall of 1997, Windustry program worked through its established relationships with MN Extension and the Sustainable Energy for Economic Development (SEED) to participate in several events to provide information on wind energy and its development. Some of events included:

July and August - Farm Fest 97 near Redwood Falls, MN , SEED meetings, and several meetings with individual farmers along the Buffalo Ridge and surrounding area. Windustry staff also gathered comments and feedback for improving the Windustry main text and other materials. Based on feedback, the Windustry staff is revising all the Windustry materials to make them reflect changes in MN statute, more readable, more organized, and easier to present to in a classroom situation. Also SRC initiated a new newsletter, to communicate with our Windustry participants and other interested parties. The trial newsletter was met with many positive comments as a valuable means of getting a quick industry update. It will continue to be published on a periodic basis throughout this project biennium. Based on additional outreach, the Windustry has proceeded on developing new wind energy classes for both formal and informal settings.

Based on our presentations in July and August, much of the materials needed to be more easily broken down into modular parts. Windustry is designing a new series of information sheets and complimentary exhibits. We are taking time to plan the kind of classes and information media that will be most effective in reaching Minnesota's windy rural communities. Also, we are beginning on the design for the new Windustry web page and hope to have our Wind Power Calculator spreadsheet, developed in the first biennium, available through this media.

Throughout the winter, the project provided technical support and information to several wind projects in different phases of getting started. The wind projects are being initiated by Moorhead Public Service, Blue Earth Light and Electric, White Earth Land Recovery as well as individual farmers/rural landowners.

The Windustry wind assessment pilot is currently exploring different modeling methods and different computer programs to use in the pilot Wind Assessment project. We are working with the Department of Public Service to develop the best way to make use of the state wind energy data in assessing the wind resource at specific sites. As with the Windustry Wind Power Calculator, our objective is to provide the highest level of confidence possible in the data we provide to individuals and communities.

IV. OUTLINE OF PROJECT RESULTS:

RESULT 1. Provide outreach and education to farmers and rural communities who are working to address the local issues involved in distributed wind development.

LCMR Budget: \$88,500 LCMR Balance: \$
Completion Date: Ongoing activity for project period, completed by
June 30, 1999

Provide technical support to wind energy curriculum trainers in rural communities as they offer the course to farmers and local community leaders. SRC provides wind energy information and support for rural education organizations which include MN Extension Service, state colleges and universities, and environmental learning centers, as well as rural municipal and cooperative utilities.

SRC has in the first biennium, identified and trained members of rural communities to offer the wind energy curriculum to their constituents. However, these new trainers will need ongoing support and updated wind information from SRC staff and our network of experts in order to adequately meet the needs in their specific communities. We will be working to broaden and formalize a network of wind energy "ambassadors" and educators. This network provides classes in rural communities on dispersed wind energy, different ownership models, wind assessment and measurement plans, economics of wind energy and related topics.

Also, we will be broadening our class offerings and where appropriate adding tours of different wind energy projects and new exhibits. Design more specific short courses, for example, for bankers to understand the numbers of wind energy so they can select and support good wind power projects. Another short course example is with local elected officials - city council members, mayors county commissioners - on the potential for economic development and strategies to keep the wind dollars in the community.

In addition, the wind energy field has several emerging issues that will affect the overall economics of rural dispersed wind energy projects and SRC will ensure that the updated information on these issues is incorporated into the curriculum and course offerings through both written and oral presentation.

RESULT 2: Provide direct technical assistance through a pilot wind atlas program to 18 individual rural farmers who are interested in installing wind turbines on their property.

LCMR Budget: \$92,000 LCMR Balance: \$
Completion Date: Ongoing activity for project period, completed by
~~June 30, 1999~~ August 30, 1998.

SRC will pilot a program to use data provided by the MN Department of Public Service and the wind atlas software to input site specific data for 18 individual farmers or rural landowners to determine the best location for the turbines on their land. This pilot will explore the usefulness and confidence of the actual available data used in conjunction with extrapolated data for the sites in this pilot located in various parts of Minnesota. For

the individuals that participate in this pilot there will be an educational process for using the data and knowing its strengths and limitations.

There will be the purchase of a portable computer and printer in the third quarter of 1997. The computer equipment purchased with the appropriation will continue to be used for this wind energy education program through its useful life, or, if the use changes, Sustainable Resources Center is committed to pay back to the Fund an amount equal to either the cash value received or a residual value approved by the director of the LCMR if it is not sold.

SRC will establish a Web page by June 1998 and maintain it as an ongoing activity for the project period. The Web Page will be created and maintained with course information, technical information, fact sheets, meeting and presentation schedules, and news worthy events in the wind industry especially in the midwest.

Background:

The MN Department of Public Service has for several years collected and analyzed wind energy data around the state. Their recently expanded Wind Resource Assessment Program is fairly extensive and one of the best state run programs in the country. The data is currently being verified and authenticated for use in a wind atlas modeling software which the DPS has plans to purchase. SRC will work with the DPS data and professionals who are familiar with the modeling software to get specific information for potential wind project sites on farmers' land. SRC will be working with the outreach network we have developed, during the first biennium, in rural communities for the site selection effort and for the education aspect of the pilot.

RESULT 3 Explore ways to protect farmers' wind rights.

LCMR Budget: \$19,500 LCMR Balance: \$
Completion Date: ~~Two "town meeting" presentations completed by June 30, 1998.~~
Five "town meeting" presentations completed by June 30, 1999.

SRC will work with legal counsel to legally define wind rights and determined how they can be bought, sold, or leased in regard to the land for which they are associated. Five "town meeting" type presentations for questions and answers on wind rights will be held in the western and southern parts of Minnesota. We will produce fact sheets with references for additional distribution in our education and outreach channels.

V. DISSEMINATION:

Most of the results of this project have to do with the dissemination of information. All work done on community wind development, legal issues, and technical issues will be published in facts sheets, wind curriculum note pages, exhibits, and be displayed on the world wide web page. All wind project classes, tours, presentations and meetings will be open to the public and widely publicized.

VI. CONTEXT:

A. Significance: Although many reports have stated that Minnesota has a strong enough wind regime to develop a sustainable wind energy industry, at present, the

only wind energy development taking place in Minnesota is through an investor owned utility with a legislative mandate. The discussion of wind development in Minnesota should not be confined to only big utilities. There is great potential for family farms, municipal utilities and small businesses to profit from their wind resources but access to capital and technical know-how are currently existing impediments. This project addresses some of these barriers by providing the information and resources directly to the farmers and communities where wind is a viable resource.

Sustainable Resources Center is a non-profit with twenty years experience working on energy, efficiency and renewable issues. SRC was funded by the LCMR during the 1995 biennium to develop a wind energy curriculum for family farms and rural landowners who are interested in making a determination about participating in dispersed wind development. SRC has thoroughly researched the impediments and issues related to wind energy development and has now developed a curriculum that provides this information. This curriculum will be available through an outreach program starting in January of 1997.

This project is the next important step toward positioning Minnesota to participate in a growing global economy of renewable energy systems.

B. Time: All project activities will be completed on or before June 30, 1999.

C. Budget Context: In the first biennium, SRC has built good relationships with national and local wind energy professionals and rural educators. Our outreach has been well received in several Minnesota rural communities and we intend to broaden and deepen this in the second biennium. In our proposed work, we will have more opportunity to meet and answer questions directly and help communities create a framework with which to formulate answers that suit their needs. In this second biennium of wind energy for sustainable development we will be doing more marketing of the information in the wind curriculum and getting it into people's hands who are agents of rural economic development and who live where the wind resource exists.

	July 1995- June 1997	July 1997- June 1999	July 1999- June 2001
	Prior expenditures on this project	Proposed expenditures on this project	Anticipated future expenditures on this project
1. LCMR	\$200,000	\$200,000	\$200,000
2. Other State			
3. Non State Cash	\$20,000		
Total	\$220,000	\$200,000	\$200,000

1997-1999 BUDGET: See attached schedule.

VII. COOPERATION: SRC has established relationships with colleagues in several areas including MN Extension, MN Farmers Union, state colleges and universities around the state. The MN DPS staff who work on the Wind Resource Assessment Program have participated on the advisory panel for the wind energy curriculum and we will continue to work with them in the wind assessment and analysis aspects of this project. Also, we have good relations for exchanging information as well as contacts for our educational programs with several rural municipal utilities and the Minnesota Municipal Utilities Association. We expect to continue to broaden these connections.

VIII. LOCATION: The activities outlined in this project will be concentrated in the southern and western areas of the state that have evidence of strong wind resources. See map below.

IX. REPORTING REQUIREMENTS:

Periodic workprogram progress reports will be submitted not later than January 15, 1998 and November 15, 1998. A final workprogram report and associated products will be submitted by June 30, 1999.

X. RESEARCH: Not applicable for this project.

Map

The activities outlined in this project will be concentrated in the southern and western areas of the state, as indicated, that have evidence of strong wind resources.

