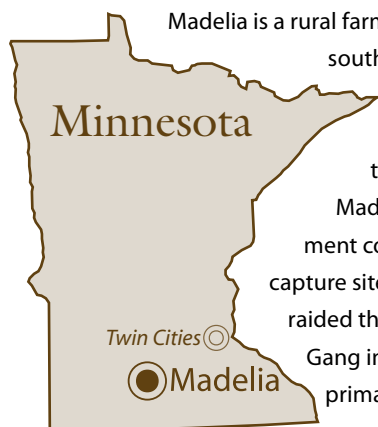


# A Sustainable Vision

## Creating Community Principles for the Madelia Model



Madelia is a rural farming community located in the south central Minnesota county of Watonwan, and home to just shy of 2,500 people. With the slogan *Pride of the Prairie*, Madelia has a history rich in settlement conflict and is best known as the capture site of the Younger Brothers, who raided the area with the Jesse James Gang in the late 1800s. The residents primarily descend from European ancestry, including German, Norwegian, Irish, English, Swedish and Danish descent.<sup>1</sup>

A rising immigrant population, drawn to jobs at local agricultural processing plants, has resulted in Watonwan County having one of the highest concentrations of Latinos in the state.<sup>2</sup> Life in Madelia is quaint, and the town embodies a small town atmosphere. As the Madelia promotional material boasts, "Visit for a day, stay for a lifetime. Live in a community where housing and living costs are reasonable, schools are progressive, health care is advanced and amenities are many."<sup>3</sup> But gone are the days when "everybody knows everybody." Madelia is at a crossroads where the common issues facing much of rural America are an everyday reality.

A time existed when most Americans lived in rural areas. Today, most of the population is urban, living inside cities or rapidly expanding suburbs within metro counties.<sup>4</sup> Those who still live in rural areas are facing a disconnection with the land, loss of population and small businesses, and a lack of attention and support from state and federal government. As small businesses have folded, rural employment and economic development is increasingly dependent on large



companies, most of which are not based in the community. Development that used to occur with a communal mindset is now often concerned with maximizing benefits to outside investors. But as the businesses and developers increasingly focus on globalization and national strategies, the lives of people living in rural communities are often overlooked.

Agriculturally based and with a high immigrant population, Madelia is diverse, changing, and unique—just like many of the major cities to which it ships its agricultural products. What is being done to preserve the unique and important resources that rural America—specifically Madelia—offers the rest of the United States and the world? How can rural communities connect to policy at local, state and national levels to make their vision for their community a reality?



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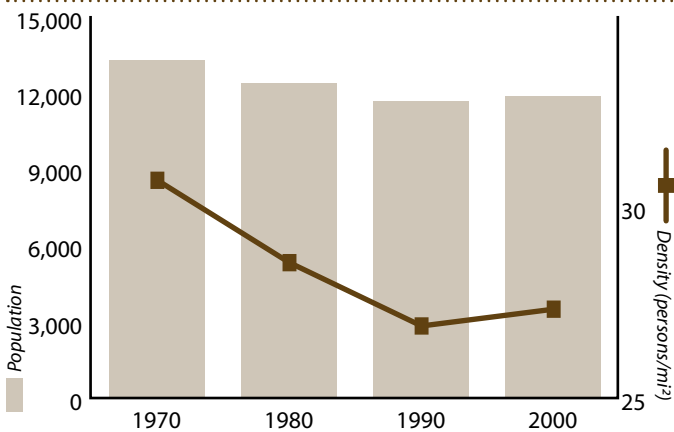
## CHANGES IN MADELIA



Talk to any long-term resident of Madelia and they will speak of changes in the community. These changes are typical of many rural communities in the Midwest. In 1860, Madelia was named the Watonwan County seat (but later lost the title to nearby St. James). Becoming a railroad stop in 1870 for the rail line linking Minneapolis to Omaha was critical to the city's growth,<sup>5</sup> as was the grain milling industry that helped establish and settle the area.<sup>6</sup>

The first official census was taken in 1875 and counted 355 residents in Madelia.<sup>7</sup> Within the past few decades, its population has remained relatively stable, with 2,316 people in 1970 and 2,340 people in 2000.<sup>8</sup> But over that same period, Watonwan County's population and density (number of persons per square mile) has decreased, with a slight increase from 1990-2000.<sup>9</sup>

### Population and population density, Watonwan County, 1970-2000



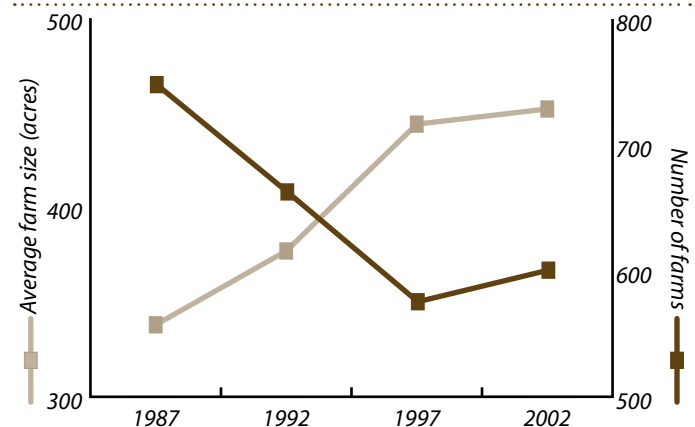
Source: Datanet. May 15, 2007. Department of Administration, Minnesota. May 14, 2007 <<http://www.lmic.state.mn.us/datanetweb>>.

Agriculture has always been the primary industry in Madelia, with closely linked businesses involved in food processing, hardware and other agricultural needs. Other industries include health care, education, finance, social assistance, printing, food, motor vehicle and parts dealers, and religious and other civic organizations.<sup>10</sup> Some of the major companies in town are LaSalle Farmers Grain Company, a farmer-owned cooperative serving the region; Tony Downs Foods; the House of Print; Gopher Concrete; and Forstner Fire Apparatus. Many who have resided in Madelia know the story of Jim's hardware, which sold tools to farmers and household appliances to the community. Jim owned one of the three hardware stores in Madelia until the mid-1970s; today there is only one.<sup>11</sup> Jim closed shop when the farmers in the area were forced to stop farming. His customers could not pay the bills, and his business, therefore, could not generate the revenue to support itself. Jim's story is reminiscent of many stories in rural America. In rural areas especially, business and industry exist to fulfill each other's needs. When one business fails or moves, the others are affected.



In Watonwan County, the farms have become fewer and larger since 1987, with<sup>12</sup> corn and soybeans remaining the dominant crops.<sup>13</sup> But the abundance of agricultural land now provides opportunity to the region's farmers to produce other types of crops for the emerging bioeconomy built on renewable energy.

### Watonwan County farms, 1987-2002



Source: Data and Statistics. 30 Dec. 2005. United States Department of Agriculture, National Agricultural Statistics Service. 14 May 2007 <[http://www.nass.usda.gov/Data\\_and\\_Statistics/index.asp#top](http://www.nass.usda.gov/Data_and_Statistics/index.asp#top)>.

## Sanford 'Sandy' Seibert



Sanford "Sandy" Seibert, a lifelong farmer residing outside Lewisville, Minnesota, is a native of the area and considers it a great place to live. He has much to recount about Madelia and the surrounding communities. After being raised in the countryside, he now farms his

parents' place and has raised three children with his wife, Jeanne, whom he met while studying at the University of Minnesota. Sandy and Jeanne married in 1967, and the community held a shivaree while he pushed Jeanne down Main Street in a wheelbarrow. He remembers the days in Madelia of a close-knit community that resembled a large extended family. The party telephone line kept the community in contact by sending out the word about either a party or a situation that needed help or manpower. Those days have changed, and Sandy reflected that people do not intermingle like they used to. While the population has remained stable, according to Sandy, just the mix of people has changed.

Despite the change in community environment, Sandy mentioned, "One nice thing about farming is that I always have a job." His farming choices have followed the changing economy. He tried wheat and alfalfa and found that they interfered with row crop cultivation. Sandy also grew peas and sweet corn up until 1988, when Fairmont Canning/United Foods closed. It is another example, similar to Jim's hardware, of how the movement of industry deeply affects farmers and vice versa. A corn and bean rotation works best for his farm and has been the most profitable and stable. The business community has also changed from the time he started farming in 1967.

He remembers five or six grocery stores in the area as well as the three hardware stores. Now there is only one of each. He sees the challenge to local business and industry of how to get people to spend their dollars in the community. Since he has to travel to Mankato anyway to get parts, he might as well get groceries there. "People have choices to go to other places, and that's the unfortunate thing about being a human being ... it comes down to being about the money."

Sandy has been involved with the Madelia Model from the beginning. His first impression of the Model was that it was broad enough to incorporate sustainability. Sandy wants other communities to see Madelia as a working model rather than a concept. He sees his personal role as a promoter of the different practices the Model proposes, such as inter-seeding different grasses on his cropland.

Sandy says the Madelia Model is a good fit for their community because of its strong agricultural roots. With the current price of corn, staying focused on the benefits of putting marginal land into the Conservation Reserve Program is difficult. However, since the price of corn fluctuates, what happens when the price drops to \$2 or \$2.50 from its current price near \$4? Farmers will be unable to make money off of the marginal land, and it makes sense to have a plan like the Madelia Model that proposes using perennials on the marginal land. The goal is that perennials would be just as profitable as corn and would work to improve water quality. Sandy is a first-class example of someone who thinks about the broader picture. He already has buffer strips on all his ditches, even with the higher-priced corn. The current practice of farming and managing public land is a cost to us rather than a benefit, Sandy says. The Madelia Model provides an opportunity for that to change.

Where does Sandy see Madelia in five or ten years? "One thing you can be sure of is that everything changes," he says. Perhaps with the Madelia Model, everything will change for the better.

### ENERGY: THE NEW CROP OPPORTUNITY

Renewable energy is a new priority for many Americans, including President Bush, who talked about the potential of switchgrass in his 2006 State of the Union address.<sup>14</sup> A few years ago, planting grass for energy was not a viable crop option for farmers. And rural communities did not blink an eye at the coal train cruising through town to deliver energy. Now, technology is emerging to create energy from non-traditional farm crops. This presents new opportunities for farmers and struggling rural communities to create and use their own energy locally. In a region with rich agricultural land and support from a city-owned electric utility, renewable energy from biomass or agricultural products is a viable option for rural America's towns like Madelia.

### THE MADELIA MODEL<sup>15</sup>

In February of 2007, the Fairmont, Minnesota-based nonprofit Rural Advantage published the *Madelia Bio-Based Eco-Industrial Resource Assessment*, commonly known as "The Madelia Model," with a financial support from

the Minnesota Pollution Control Agency. Linda Meschke, president and founder of Rural Advantage and the editor of the Madelia Model, developed the assessment to see how rural sustainable development could be pursued to improve the





area's water quality and create a unique competitive advantage to benefit rural community members. The Model assessed the biomass supply within a 25-mile radius around Madelia and discussed various technologies available in today's market that could be used to produce local, renewable energy. It proposed options such as converting marginal agricultural land into perennial prairie grasses with the notion that the grasses would be as profitable as corn and used for energy production and improved water quality.

The Madelia Model is based on assessing the opportunity that the new bioenergy economy provides to pursue eco-industrial development, which involves integrating sustainable development principles. With the ultimate goals of greater environmental performance and local economic value, the idea is to create a "network of businesses that cooperate with one another and with local communities to improve resource productivity, restore the local environment, and eliminate pollution and associated costs." The Madelia Model shows how a rural community can enhance social, economic and environmental wealth by using agricultural production to create bio-based processing and renewable energy.

Within the 25-mile radius of Madelia, 1.9 million acres are in annual row crop cultivation. The Model proposes conversion to perennials on about 20 percent of the landscape for energy crop production, with corn and soybean crops expected to remain on the most productive lands. Though it is not realistic that the specified area would supply all of the community's energy needs through biomass, it is feasible for Madelia and the surrounding area to defray its energy needs by producing local and profitable energy using available biomass. Additionally, other industrial waste streams, agricultural wastes and other products were included in the biomass assessment for Madelia.

The Model suggests three steps necessary for eco-industrial development in Madelia. The first is a biomass supply, the second is a facility for energy conversion and the third is a demand for the energy to make it profitable. There is a realistic possibility that Madelia could meet all three requirements for renewable energy development; they already have biomass potential and more energy demand that could be supported with local biomass energy production.

#### Madelia Profiles

## Margie Hoyt



Margie Hoyt grew up as a self-proclaimed "Army brat" living in Washington D.C., North Carolina and Washington State. She visited relatives in Madelia and spent her 8th grade year in the Madelia school system because her parents separated and her dad moved

to Madelia. Twenty years later, she returned to Madelia to attend nearby Mankato State University for a bachelor's and master's degree. In that time her father suffered a stroke, so she became her dad's caretaker instead of pursuing a career in urban planning. She lives in Madelia with her daughter, father and some friendly cats.

When Margie returned to Madelia in 1993, her first impression was that it had become a ghost town. Fewer kids and less liveliness contrasted with her memories from her 8th grade year and summer visits. She said that it is hard to pin down what changed in Madelia but that it seemed less open and friendly and more rigid and fearful. The town was arrested in its development and many of the buildings showed it. Margie stated, "Unfortunately, this has more to do with the greater forces at work in the country than in anything specific to Madelia, as many small towns are suffering the same fate. Still, the lack of openness and the degree of fearfulness prevents any creativity, and so as the children leave when they

graduate, they take their energy and ideas with them, making the future of Madelia look rather bleak."

Margie's feelings toward the area are ambivalent. She sees much potential for the community, but only if people are willing to take a chance. "Madelia is at the cusp of a major shift in America and is uniquely positioned to benefit from this shift, but it will require a greater openness to ideas, greater enfranchisement of the people to have a voice in its affairs, and courage to act on those ideas. Then Madelia will be capable of a very bright future."

Her initial reaction to the Madelia Model was one of perplexity and confusion. She asked, "Just how do these various parts go together?" Once she recognized the thread that runs through all the aspects of the Model, she saw the potential for Madelia's renewal through creativity and innovation.

Margie sees her personal role in the project as the "little engine that could," continually moving forward little by little, to get people to think unconventionally and push the boundaries of their comfort zone to include more of the world and its possibilities for Madelia. She has much enthusiasm and confidence for seeing the Model implemented and is willing to go to great lengths to see it through. She wants the Model to promote genuine dialogue so that the community finds common ground and pulls together for the good of the town. She envisions people truly listening to and understanding one another.

Where does Margie see the Madelia Model in five or ten years? Simply stated, "Madelia can do this or get left behind." If it can implement the Model, then Madelia will be well on its way to creating a sustainable future.

## PREPARING TO IMPLEMENT THE MADELIA MODEL

Sustainable development is based upon indigenous and local resources, and assures that resource bases are enhanced, not merely extracted. The Institute for Agriculture and Trade Policy (IATP) was asked to help convene local organizations and individuals to create a community vision for Madelia. Rural Advantage, IATP, the Madelia Chamber of Commerce, the City of Madelia and Madelia Light and Power decided that the best approach to implementing the Model would be to first evaluate the individual and community needs of Madelia. These community leaders chose to ground the model in the highest priorities of the citizens. A facilitated process was used to gather community input on the most important principles that should be addressed as the Model is implemented.

Focus groups designed to generate community conversation and interest, were divided into four sectors: Agriculture, Government and Public Service, Business and Industry, and Community Residents. Madelia's large immigrant population was also included in this visioning through a meeting with Latino community members. The division represented the different experiences and lifestyles of Madelia so a truly sustainable model would incorporate all facets of community life.

## SUSTAINABLE COMMUNITY VISION PRINCIPLES

Working with input from its partners in Madelia, IATP determined dates, times and locations for the four focus group meetings and the Latino meeting. Those supporting the effort were the Madelia Chamber, the City of Madelia, and various residents of Madelia, with IATP facilitating. At each focus group two questions were asked: What do you need as an individual to be successful and sustainable in Madelia? What do you envision as community development principles for Madelia 25 years into the future? The answers were as varied as the participants themselves. The common understanding of a community vision was essential for the development of ideas and vision from the focus group participants. Each focus group generated its principles of development, and common principles between different sectors of the community soon became apparent.

At each meeting, all the participants voted on their collective top choices for both individual and community needs that could be met with the Madelia Model. IATP divided the answers into the categories of environment, social/community and economic. After combining each group's top priorities, the community was invited to learn about the findings and evaluate the results at a community meeting. The community unanimously supported the findings and principles. The City of Madelia and the Chamber are now in the process of adopting the principles as representative of what their community embodies now and in the future. These principles will guide future development projects that are part of the Madelia Model. For example, tax incentives could be offered to a renewable energy business that addresses these principles, or residents can push for city policies that support the principles. The Madelia principles follow.



### Environment

- ▶ **Manage the landscape** in a diversified and sustainable manner through alternative and perennial crops.
- ▶ **Utilize local products** for value-added processing.
- ▶ **Create and utilize sustainable and renewable energy.**
- ▶ Have **clean air and water** with no noxious fumes.

### Social/Community

- ▶ **Maintain stable and consistent leadership.**
- ▶ Have **consistent community support** for those in leadership.
- ▶ **Promote and maintain a safe, healthy and attractive family environment** with available recreational opportunities.
- ▶ **Have respect for all residents.**

### Economic

- ▶ **Local ownership** of renewable energy opportunities.
- ▶ **Nurture industries and businesses that provide living-wage jobs.**
- ▶ **Opportunity for all community members** to benefit and profit from the Madelia Model.
- ▶ **Incentives for employees of businesses and industries** to live in the Madelia community.

## THE MODEL AS A CATALYST FOR SOCIAL CHANGE

The Latinos who met to discuss challenges were also invited to attend the larger community resident focus group; however, none attended. This is indicative of the separation between community members but also represents an opportunity to build cross-cultural connections. As an example of the social change capable with the Madelia Model, an exciting opportunity exists to bridge the gap between the rising Latino population and long-term residents of Madelia. One of the main concerns voiced at the Latino meeting was that the community feels invisible in the larger context of the city. They are searching for an opportunity to bridge the gap and feel a part of the wonderful Madelia community.

The Latino community has an important role in the development of the Madelia Model since they are such a major com-

ponent of the community; more than 20 percent of Madelia's population is Latino.<sup>16</sup> They have much passion and entrepreneurial spirit to try new things that will both generate income and work to bring the community together. The meeting IATP held with the Latino community stirred discussion about potential for a locally owned, year-round greenhouse heated with the waste steam from a renewable energy generation plant. Additionally, a farmers' market could allow local residents to sell their produce to the larger community. These are just a few examples of using the Madelia Model as a broader agent for change at the community level.

### **LEARNING FROM OTHER MODELS**

Other rural communities are also using a sustainable development model. One example is Reynolds, Indiana, a small town of only 547 people that has renamed itself "BioTown USA." Its goal is to show that "agriculturally-derived energy is safe, reliable and consistent"<sup>17</sup> through a project that consists of three phases. The first phase is to educate, promote and increase the use of ethanol and biodiesel.<sup>18</sup> Phase two is "research, development and implementation of plans to take agricultural and municipal wastes and make electricity." With more than 150,000 hogs within a 15-mile radius, as well as several other sources of biomass, Reynolds is an ideal location to use technology that converts manure and biomass into energy for the homes and businesses in the area.<sup>19</sup> Phase three involves "producing synthetic natural gas from agricultural waste and biomass."<sup>20</sup> BioTown USA has an agricultural focus, and the idea of using local biomass resources to produce energy is the same as the Madelia Model.

Another example is Cashton, Wisconsin, which is currently developing the Cashton Greens Business Park to utilize and create innovative sources of renewable energy. They received a state grant to explore how different bio-products could be produced in the park, which includes food distribution centers and a biodiesel refinery.<sup>21</sup> The park is designed to use less refrigeration and electricity, reduce landfill waste and utilize regeneration of power for operating machinery.<sup>22</sup>

Madelia is looking to be a model that stands out with a creative competitive advantage, much like Cashton and BioTown. The Madelia Model also has the potential to carry the town's name to other communities interested in completing their own biomass assessment. In the broader picture of rural sustainable development, the implementation of the Madelia Model serves as a model for other towns across America.

### **THE FUTURE OF THE MADELIA MODEL**

Often rural communities are faced with development challenges that may work for or against where they see their community in 25 or 50 years. A common assumption in fostering rural development is that outside resources are needed to solve the social, economic or environmental issues and problems plaguing rural America. In Madelia, the focus groups generated a set of principles that the city is in process of reviewing and adopting; the principles ultimately will be at the forefront of their decision-making. Just like BioTown USA and Cashton, Madelia is working to become a model for other communities to show that rural sustainable development is possible without entirely relying on outside economic development from large industries or businesses.

The future of Madelia looks promising, especially as more and more residents like Sandy Siebert and Margie Hoyt (profiled within) shape the community's future toward a sustainable path. The Madelia Model shows the reality of Madelia generating rural wealth by capitalizing on local biomass energy supplies while addressing the needs of the citizens.

### **FOR FURTHER INFORMATION**

- [madeliamn.com](http://madeliamn.com)
- [ruraladvantage.org](http://ruraladvantage.org)
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## Photo credits

Page 1: Madelia quilt / IATP staff (2007).

Page 2: Parade in downtown Madelia / photo courtesy Madelia Chamber of Commerce (date unknown). La Salle elevator / IATP staff (2007).

Page 3: Madelia Chamber of Commerce / IATP staff (2007). Sandy Seibert / IATP staff (2007).

Page 4: Margie Hoyt / IATP staff (2007).

Page 5: Attendees at focus group findings meeting / IATP staff (2007).