

Case Studies of Sustainability in Rural Minnesota Communities

The Minnesota Project
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Edited and Written by
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Photographs :

St. Joseph—Ernie Diedrich
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Hutchinson— Ernie Diedrich
Jackson Meadows— website/Rebecca Weinbar
Grand Marais- website/Ernie Diedrich
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Case Studies of Sustainability in Rural Minnesota Communities

Table of Contents

Introduction: The Framework for Sustainable Communities 1

St. Joseph: In Growth's Way.... 9

Cold Spring: Clean Water for the Future.... 15

Nisswa: Navigating Future Growth.... 21

Hutchinson: Composting On the Road to Sustainability 33

Jackson Meadow in Marine on St. Croix:
Building a Sustainable Community 41

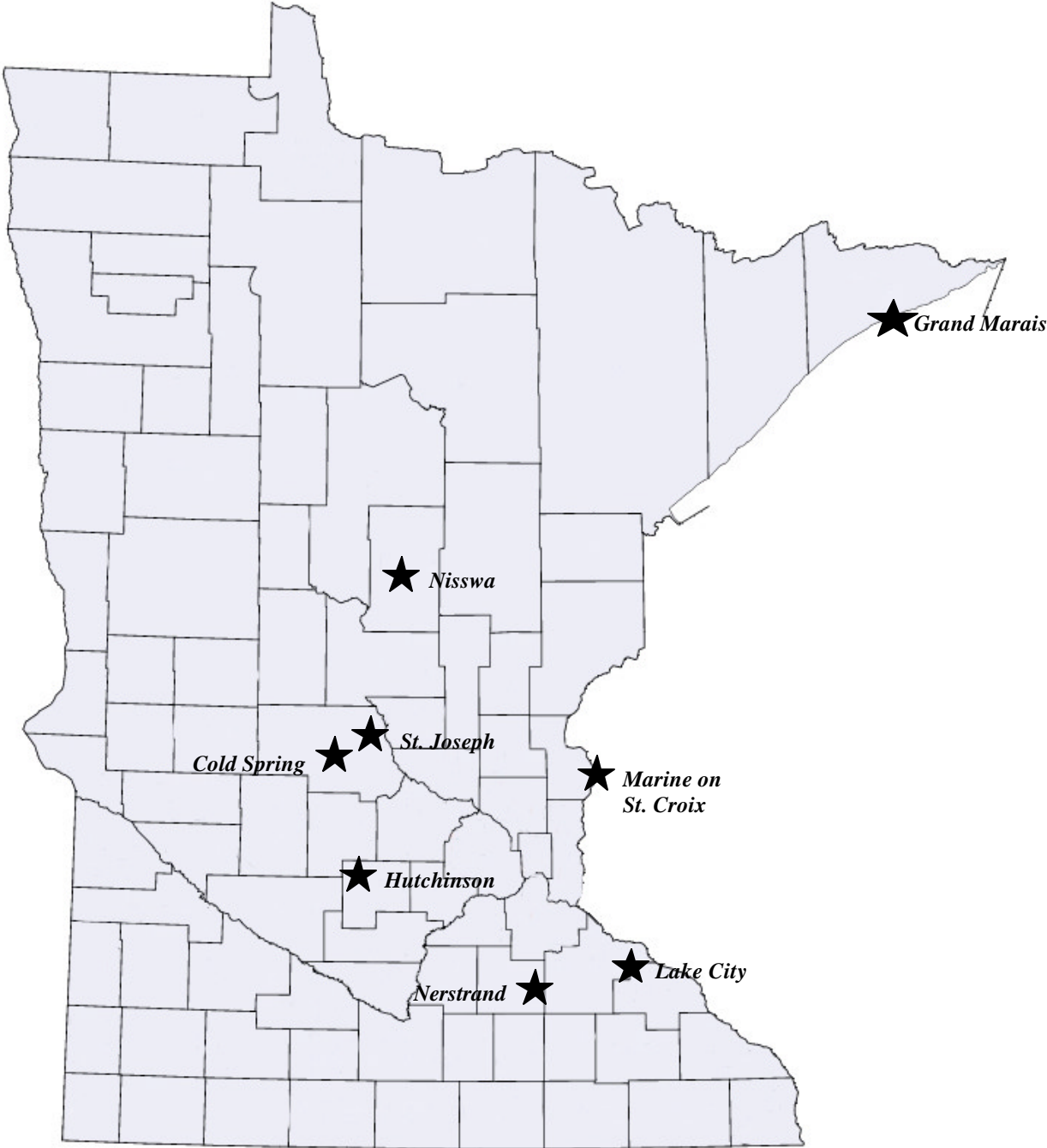
Grand Marais: Sustainability on the North Shore.... 55

Wheeling Township and Nerstrand:
Landmark of the Past Symbol of the Future.... 65

Lake City and Florence Township:
Commitment to a Clean Energy Future.... 71

In Conclusion: Assessing Community Sustainability ... 77

Case Study Communities



Introduction

The Framework for Sustainable Communities

Ernie Diedrich



The grass is breaking through the concrete. All across Minnesota, communities, businesses, non-profits, and civic organizations are changing the way they understand community and economic development and are choosing to collectively see their future differently. They are doing this in response to the bad news of environmental degradation and economic uncertainty, but also to the empowering possibility of choosing a future that is more desirable than the one they may have felt powerless to prevent.

The bad news is that people on our planet continue to pursue activities that relentlessly degrade the capabilities of future generations to live as well as we do today. Despite repeated indications that people on the planet are inexorably ripping and tearing at the ecological fabric that sustains us, most continue along with lifestyles based on high consumption, cheap gas and “more is better.” We live this way, because economies, and the cultures that depend on them, largely deny the existence of ecological rules. As populations and their appetites for goods and services increase, the consequences of breaking ecological rules become increasingly more severe and costly. To live better, to protect the environment, and to allow future generations the same chances we have had, societies on the planet and the communities within those societies have to change. They have to play by nature’s rules.

This study offers communities, businesses and civic groups a framework for sustainable development, and case studies of nine communities and groups of people that seem to be “doing it right.”

The first chapter deals with the framework for building sustainable communities. The final chapter summarizes the study and indicates the prospects for sustainable development in Minnesota.

It is our hope at the Minnesota Project that these case studies will inspire others, especially in rural areas, to move towards greater sustainability, which for us means communities that strive for *economic resilience, ecological integrity and democratic and empowering inclusion of all community members*.

About the Case Studies

These case studies are part of a larger project titled “On the Path to Community Sustainability,” a joint effort of the Minnesota

Project and St. John’s University. The two goals of the project were: to connect students through service learning projects to area community sustainability efforts and, in the process, to help the communities of St. Joseph and Cold Spring to move toward greater sustainability. The case studies of St. Joseph and Cold Spring tell the stories of this student / community collaboration.

The case studies themselves serve both of the project goals. By sharing the experiences and stories of sustainability efforts in nine communities we hope to give other communities ideas of what works well – and what not so well. We hope that the stories will both inspire and give a sense of possible pitfalls.

The stories were put together with the help of excited, dedicated college students. Student interns working at the Minnesota Project did the early research to identify possible communities. Students at St. John’s University and the College of St. Benedict did the initial research, interviews, and writing for the case studies of Grand Marias, Hutchinson, and several others we could not include here. Ernie Diedrich, their professor, fleshed out the research and completed the stories. The remaining case studies were researched and written by student interns from Macalester, the University of Minnesota, and Mt. Holyoke College working with the Minnesota Project.

“Sustainability” and Why it’s Important

The idea of sustainability is rubbery and means different things to different people. Other ideas that have marked cultures such as feudalism, liberty, or equality have each begun as vague and rubbery notions, but were made specific by the many people affected by them. Over time people establish patterns of behavior that continually evolve so that terms, like “liberty”, that mean one thing for one

generation becomes something new for a generation facing different circumstances. That defining sustainability is a hard thing, therefore, should not surprise us, but define the concept we must. If we don't define where we want to go, we're sure never to get there.

Defining sustainability is important, because we face a clash of visions in modern culture. The dominant vision asserts that our happiness is mostly grounded in the possession or use of things and that material production must and will grow in the future. An alternative vision suggests that there are resource and carrying capacity limits to growth and, furthermore, that long before the carrying capacity for growing populations are met, societies will find the consequences of growth to be too miserable to desire more. In short, people opposing the dominant vision don't believe that more is always better. One important function of the sustainability idea, then, is to express this opposition to the dominant vision.

Meadows, Meadows, and Randers in Beyond the Limits¹ state that "a sustainable society is one that can persist over generations; one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support." The Global Action and Information Network² sees sustainable communities as places where "all people live in dignity, having their basic needs met for water, food, shelter, clothing, health care, and education." The United Nation's Brundtland Report³ defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The list of definitions goes on, but the fundamental message is unmistakable...we must look beyond ourselves; sustainability means taking

the future into account.

Simply put, sustainability is about deciding what the multi-generational good life is once we accept nature's rules. Deciding what the good life is not very easy, however. This is where an inclusive visioning process becomes very important. Rather than letting the occasional crisis, zoning fight, or group of influential citizens decide what kind of activity ought to be sustained, it is critical that every stakeholder in a community be involved in designing and working on sustainability. After all, a clean environment and a good community is something everyone shares and helps maintain. In a well-functioning democracy, the future is everybody's business and broad-based grassroots participation creates a sense of ownership and commitment that invites long-term participation in sustainability projects.

To summarize, sustainability means taking future generations and ecosystems into account. The way we bring this down to earth is through democratic, grassroots citizen visioning. The further definition of what sustainability means is an unfinished process. As new circumstances arise, citizens must re-evaluate their behavior in the face of nature's rules.⁴

Deciding what nature's rules are is also not very easy, though this perhaps is easier than deciding what the good life is. Though various writers have written about the natural restrictions we all face, the Natural Step program appears to provide a rationale for those taking the future into account. Its four system conditions provide us with a filter through which plans, government policies, or business activities can be evaluated. The system conditions are general and must be interpreted by anyone deciding to change a product or alter a land use, but they offer a

¹ p. 209 in Meadows, Donella H., Dennis L. Meadows and Jorgen Randers, *Beyond the Limits*. Post Mills, VT; Chelsea Green Publishing Co., 1992.

² Kinsley, Michael, *Economic Renewal Guide*. Aspen; Rocky Mountain Institute, 1997.

³ Brundtland Report, *Our Common Vision*, 1987, http://www.doc.mmu.ac.uk/aric/cae/Sustainability/Older/Brundtland_Report.html

⁴ Natrass, Brian and Mary Altomare. *The Natural Step for Business*. Gabriola Island, Canada: New Society Publishers, 1999, www.naturalstep.org

general guide for organizations wishing to know what nature's rules are.

The Framework and Visioning

Individuals find themselves asking the same questions sustainable communities must ask. As individuals, we have to reconcile material wants with means. Deciding what our material wants or needs are for the most part depends on how we've chosen to manifest our human identity. That's what culture is all about. A community too, has to reconcile its material usage with its means, which relates to a social understanding of how happiness,

status, belonging, etc. are attained. Stephen Viederman notes⁵ that "[the envisioning process...helps us to understand our values, individually and as a society. Discussions of sustainability are fundamentally efforts to decide who we are." Most visioning takes place within given cultural parameters since what we are and what we can become are "social constructs." What we cannot forget is that how we define ourselves arises from a natural context. Any meaningful visioning then must take place within cultural and biophysical parameters.

Furthermore, human identity in a democratic

Rocky Mountain Institute Economic Renewal Guidelines

1. **Use renewable resources no faster than they can be renewed.** Natural resources must be treated as assets and not income. This includes renewable resources such as agricultural land. Agricultural practices should conserve the soil's fertility rather than "mine" the soil by allowing topsoil to blow away or killing valuable worms and other inhabitants of the very much living soil.
2. **Use non-renewable resources understanding that someday a renewable substitute will be required.** "All towns based on the extraction of non-renewable resources must eventually find another basis for their economy."
3. **Seek ways to strengthen the economy without increasing 'throughput'.** Any material process has its inputs and outputs. The sum of the materials that are processed, used, and turned into waste can be termed 'throughput'. Using more throughput just depletes your resource faster. Also look for ways to create more jobs by further "refining the community's products." This adds value to the product.
4. **Focus more on getting better; less on getting bigger.** Communities have more options than just opening up another Walmart or building another subdivision.

Kinsley, Michael, Economic Renewal Guide. Aspen; Rocky Mountain Institute, 1997, p. 9.

⁵ p. 50 in Stephen Viederman's "Sustainability's Five Capitals and Three Pillars" in Pirages, Dennis, ed. Building Sustainable Societies. Armonk, New York: M.E. Sharpe, 1996.

society, comes about when all participate in the visioning process. Unless we accept that one group of people can determine what another group will do and think, and accepts that this inequality results in eventual violence to redress this imbalance, then sustainability over the long run demands a human identity marked by justice and democratic participation in all institutions. The visioning process must include all stakeholders in a community to confer the greatest legitimacy on the visioning outcomes.

Chattanooga, Tennessee

Successful sustainability projects in cities such as Portland, Oregon, Seattle, Washington, and Chattanooga, Tennessee have involved lots of people that have a stake in the outcome. The more ownership people have in designing a sustainable community, the greater the likelihood that the community will succeed in its efforts. Chattanooga (pop. 152,000), for example, went through a long visioning process that resulted in a plan and many projects that are transforming the whole city. Chattanooga went from being the “most polluted city in America” in 1970 to one of

5. **Seek development that increases diversity and self-reliance.** The more businesses you have, the more likely the town will be battered by fluctuations of economic forces outside the community. The more you can make locally (at a reasonable price), the less dependent the town will be on outside markets and the more dollars will circulate in the community instead of flowing out.
6. **Put waste to work.** "Waste is simply a misplaced resource. Innovative business people and communities are finding less expensive--even profitable --ways to reuse, recycle, or biodegrade discarded materials, and they're putting people to work doing it."
7. **Regard quality of life as an essential asset.** The amenities that make a place meaningful to people not only make a place worth living in, but they also help attract people to a place. Recognizing the importance of quality of life will make it more difficult to trade it for more income or another suburb.
8. **Consider the effects of today's decisions on future generations.** Development has consequences that extend far into the future.
9. **Consider the off-site effects of decisions.** Your waste stream may "go away" for your community, but it ends up somewhere else and becomes a problem for another community.
10. **Consider the cumulative effects of a series of decisions.** Decisions that seemed right at the time, such as adding one more development, or allowing one additional variance can leave you eventually with an ugly suburb.
11. **Measure whether actions actually do what they're intended to do.** Make sure that development is accountable and that promises of improvement are measured to see if they actually bring an improvement.

the “Ten Most Enlightened Towns in America” according to the UTNE Reader magazine.

Sustainability for citizens in Chattanooga meant a revitalized downtown characterized by historic theaters, small inns, and a five-mile waterfront park where abandoned factories once stood. Known as Riverwalk, this park eventually will be part of a 75-mile network of city greenways. Built on a former no-man’s land, the \$45 million Tennessee Aquarium opened in 1992 and attracted 1.5 million visitors in its first year. Every bag of popcorn eaten in the new downtown multi-screen cinema helps fund the free, electric (quiet, no exhaust) downtown shuttle bus system. And now that Chattanooga has cleaned up its air, there are plans for a zero-emissions industrial zone that would transform a blighted industrial area into a mixed-use district of homes and businesses. Environmental racism, once rampant, now has black and white activists pursuing projects that would remove toxic waste dumps close to poor neighborhoods as well as cleaning up the grossly polluted Chattanooga Creek that runs through African American neighborhoods.

Current projects include reclaiming what was once the world’s largest TNT plant and turning it into an eco-industrial park. An older TNT site is now a testing plant for natural biological technologies, such as the use of cattails and elodea to cleanse contaminated ground water. The message that cities such as Chattanooga bring us is that people with a vision of what they want can build communities that are worth sustaining....that live according to nature’s rules.

What Sustainability Looks Like

Are all efforts to define sustainability a function of the particular place and thus unique? Are there models or patterns of community

sustainability just as there are indicators of health? As mentioned before, the good life is very difficult to define, because it is a value-based cultural construct and cultural constructs change over time. Though sustainability elements are by definition malleable and tend to evolve, we can define general traits that characterize a community intending to persist a very long time into the future.

Elizabeth Kline, director of the Consortium for Regional Sustainability at Tufts University, concludes⁷ that “sustainable communities are : self-reliant, resilient, stable within change, build on their strengths, and are populated by people willing and able to take initiatives and responsibility.” Further, Stephen Wheeler, in a literature Review of Sustainable Urban Development⁸ states that sustainable urban development seeks to create cities and towns that “improve the long-term health of the planet’s human and ecological systems.”

Cities and towns have to decide on specific characteristics they see as part of the good life. The assumption made here is that an inductive search for sustainability traits will see certain traits repeatedly reappear. We have to also develop effective ways to assess the progress made to attain the traits a community finally settles on. You don’t know you’re sustainable if you can’t measure progress towards that goal!

There are many resources communities can access to develop their own customized set of characteristics of sustainability as well as indicators that monitor progress towards them. For example, Elizabeth Kline, and her co-workers⁹ have developed a set of characteristics along with attributes that operationalize community sustainability characteristics. She identifies five sustainability objectives in her matrix for defining a sustainable community

⁶ Madison, Cathy. "Chattanooga, Tennessee; The Sustainable Blue Collar Town." Utne Reader. Volume 81; June/July, 1997.

⁷ p. 36 in Kline, Elizabeth, 1997. "Sustainable Community Indicators: How to measure progress," in Mark Roseland, EcoCity Dimensions: Healthy Communities, Healthy Planet. New Haven, CT: New Society Publishers.

⁸ Wheeler, Stephen, literature review, 1995

⁹ Kline, Elizabeth, 1997. "Sustainable Community Indicators: How to measure progress," in Mark Roseland, EcoCity Dimensions: Healthy Communities, Healthy Planet. New Haven, CT: New Society Publishers ¹⁰ Stephen Viederman's "Sustainability's Five Capitals and Three Pillars" in Pirages, Dennis, ed. Building Sustainable Societies.

namely, *no waste, economic security, quality of life, ecological integrity, and democracy*. Stephen Viederman¹⁰ collapses these five into three: *Economic Security, Ecological Integrity, and Democracy*. “Quality of life” is enfolded into democracy and economic security while “no waste” becomes part of ecological integrity.

The Izaak Walton League, in a 1996 publication,¹¹ offers a mini-curriculum for grades 9-12 on Community Sustainability that shows how students can help operationalize community sustainability through service projects. The Department of Energy has a Center of Excellence for Sustainable Development¹² which can help communities adopt a comprehensive approach to planning that links energy, environment, economy and

community livability. A very accessible example is the Rocky Mountain Institute’s guidelines for moving “affirmatively toward sustainability.” These also incorporate Natural Step principles, developed in Europe, and appear quite user friendly. A good Minnesota resource is the sustainability webpage of the Minnesota Office of Environmental Assistance.¹³ There are many more sources of information to help communities with their work. These general principles then can be used to get to very specific indicators.

In Conclusion

The transition to sustainable communities is already occurring as communities attempt to define what makes their communities worth

Choosing the Case Study Communities

Our goal was to highlight sustainability work in small communities in Greater Minnesota. We knew that choosing just a few good examples would be a challenge, and how big a challenge became more and more clear the more people we talked with. There are literally hundreds, if not thousands of people in small communities all over the state working to enhance and sustain their communities for the long-term. Our challenge was to find a few examples that others could learn from.

Our first foray into researching sustainable community efforts in Minnesota was a survey of more than one hundred small communities in Central Minnesota during the summer of 1998. We found that many, if not most communities were engaged in work to improve the community, but

few had projects that looked holistically at the three elements of sustainability - economy, environment, and community. During the summer of 1999, Rebecca Weinbar, a student intern with the Minnesota project, interviewed hundreds of community leaders and technical assistance providers and developed profiles of projects in almost 80 small Minnesota communities. Whenever someone told her of a community effort that they thought might have a sustainability focus, she contacted community members and talked with them about their work. The case studies contained in this report are chosen from among those she profiled. We chose communities that met the following criteria for inclusion in the report.

¹⁰Armonk, New York: M.E. Sharpe, 1996.

¹¹Izaak Walton League, 1996 curriculum

¹²Center of Excellence for Sustainable Development, <http://www.sustainable.doe.gov>

¹³Minnesota Office of Environmental Assistance, <http://www.nextstep.state.mn.us/index.cfm>

living in. Part of that assessment is to make sure that future generations will be able to enjoy the quality of life the present generation enjoys. To that end, adopting a process for agreeing on the fundamentals of sustainability, such as the Natural Step, and then further customizing those insights offers a community a practical and profitable pathway to sustainability.

A preferred future is one that requires planning and effort. Communities must decide what kind of community they want to sustain by dreaming it. Whether this happens through focus groups, town meetings, or open city council meetings, the first step to a preferred sustainable future starts with a vision of the good town or city. The next step involves making the dream a reality through projects that ensure real progress. That is progress that

is economically sound, protects the environment, and is seen as fair by the whole community. Finally, though very few communities have done this, towns and cities need report cards with indicators that let people know if their projects improved the quality of life over time.

The communities in this booklet of case studies may not use the word “sustainability” or have ever heard of the Natural Step, but they have grappled with the connections between economy, environmental and social equity and are taking steps to consciously strive for a better future.

Sustainable Community Case Study Criteria

1. The projects fit within the following definition of sustainability.¹

- * Acknowledges that economic, environmental and social issues are interrelated and that these issues should be addressed "holistically."
- * Recognizes the sensitive interface between the natural and built environments.
- * Understands and begins to shift away from polluting and wasteful practices.
- * Considers the full environmental, economic and social impacts/costs of development and community operations.
- * Understands its natural, cultural, historical and human assets and resources and acts to protect and enhance them.
- * Fosters multi-stakeholder collaboration and citizen participation.
- * Promotes resource conservation and

pollution prevention.

- 2. The projects address more than one aspect of sustainability, that is projects that addressed the environment and economy or community and economy, etc.
- 3. The communities are all in Greater Minnesota, either small cities, counties or rural, with some geographic distribution among the different case studies.
- 4. The projects were initiated in different ways or for different reasons.
- 5. The projects are far enough along to demonstrate a measure of success.
- 6. Community leaders were willing to share their stories, experiences, and wisdom.
- 7. The lessons are transferable to other areas or other projects.

¹ From the Office of Environmental Assistance webpage, at www.moea.state.mn.us