Sustainability Framework Plan

St. Cloud Area Joint Planning District Plan

SUSTAINABILITY COMMITTEE

Adopted: September 2010

St. Cloud, Minnesota Joint Planning District Board

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Section 1 – Introduction

St. Cloud Area Joint Planning District Plan

In order to facilitate and enhance public participation, the St. Cloud Area Joint Planning District Board undertook a regionally coordinated, community-based process to create a plan that reflects the unique traditions, values and aspirations of area residents. The St. Cloud Area Joint Planning District Plan adopted in May 2000, establishes a vision and implementation strategy for various land use and growth related matters. This planning effort was the largest project in greater Minnesota to encourage voluntary, cooperative land-use planning among local governments.

The St. Cloud Area Joint Planning District Plan establishes a number of goals and objectives for the future of the area, which include specific statements to balance urban growth and preserve the area's natural resources through sustainable practices:

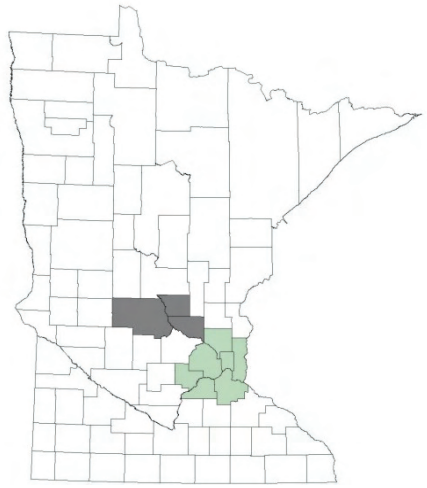
Goal: Manage growth and urban sprawl to balance agricultural issues and land preservation with planned urban development to protect and enhance both the Region's rural character and its natural resources.

Goal: Preserve and manage all of the Region's natural resources, including but not limited to air, water, green spaces, natural areas and farmlands, through sustainable land use practices.

Goal: Encourage transportation planning that is sensitive to both the natural environment and neighborhoods.

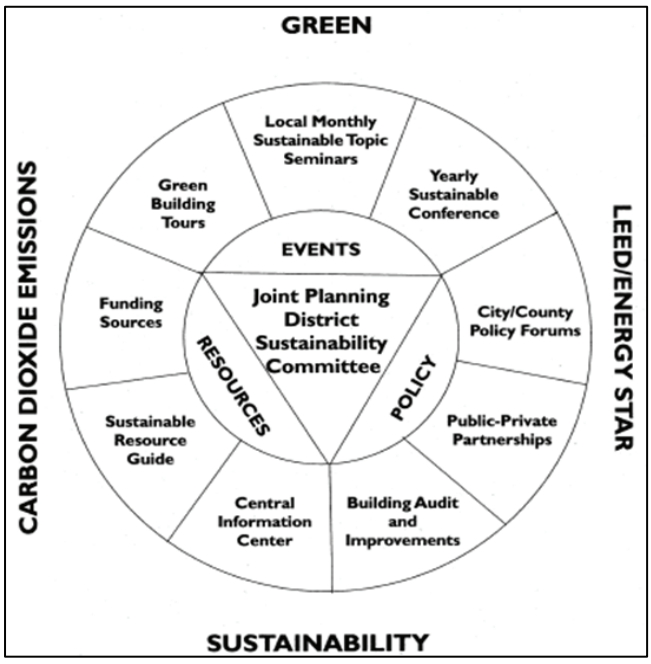
Goal: Maintain the integrity, heritage and local character of the Region's natural and built environment.

To date, the area's efforts to enhance its regional services and vision have flourished. This includes numerous transportation plans, a regional wastewater facility study, affordable housing efforts, monthly regional issues forums and regional park planning. Through quarterly meetings, the St. Cloud Area Joint Planning District Board plays an active role in the implementation of such regional efforts ensuring implementation of the community based planning effort.



St. Cloud Area Joint Planning District Sustainability Committee

In 2008, a group of public and private sector representatives began meeting to identify opportunities to heighten local awareness of sustainability and green practices (such as energy efficiency and recycling) in the three-county St. Cloud area. The creation of such a coordinated effort to disseminate information regarding sustainability and green practices on a region-wide basis was consistent with the goals of the Joint Planning District Plan outlined below:



- **Goal:** Preserve and manage all of the Region's natural resources, including but not limited to air, water, green spaces, natural areas and farmlands, through sustainable land use practices;

- **Policy:** Assemble reference materials relating to sustainable development and make available to local units of government within the Project Area.

Given this goal of the Joint District Plan, and the Joint District Board's past success in coordinating and facilitating discussion on other regional initiatives, the St. Cloud Area Joint Planning District Sustainability Committee was formally adopted under the umbrella of the Joint District Board with an intent of broadening awareness and utilization of sustainable practices in the area's public and private sector entities.

However, perhaps the greatest impetus for the creation of a St. Cloud Area Joint District Planning Sustainability Committee was the grass roots interest and initiative of local environmental, education, government, and business leaders. The committee's membership reflects the broad interest and commitment of the area's community leaders to sustainability.

As a regional sustainability body, the Sustainability Committee serves as an information source for cities, counties, and a variety of business and resident perspectives. Monthly meetings allow for discussion of implementation strategies and approaches to reach the region's sustainability goals. The creation of the Sustainability Committee under the umbrella of the St. Cloud Area Joint Planning District has a number of advantages, including:

- Improve public awareness of the Joint Planning District Plan.
- Facilitate discussion of sustainable practices and opportunities for public/private sector cooperation.
- Enhance the committee's credibility through the support of the area's government bodies.
- Improve grant-funding requests through regional cooperation on sustainable practices.

In addition to being a clearinghouse of information for the public, elected and appointed officials, businesses and residents, the Sustainability Committee is committed to developing and implementing a sustainability framework of goals and best practices for the St. Cloud region, as well as to provide detailed analysis and recommendations for jurisdictions seeking more in-depth assessment of their systems and practices.

St. Cloud Area Joint Planning District Sustainability Framework Plan

In May 2009, the Sustainability Committee sought a qualified consultant to assist in developing a framework of goals and best practices for the St. Cloud region, as well as to provide a detailed analysis and recommendations for jurisdictions seeking a more in-depth assessment of their systems and practices. After review of over twenty statements of qualifications, Emmons & Oliver Resources, Inc. (EOR) was selected for their broad experience in natural resource management, and their past success in developing one of the few sustainability plans in the Nation. EOR, based in Minnesota, is a national leader in producing creative and economic solutions that respect the environment. In addition to its proven success in developing sustainability plans, EOR has in-depth expertise within the

identified Sustainability Committee's 16 best practice areas, and understands the need to engage and educate future implementers on why, what, and how, thus ensuring greater success of the Sustainability Plan. Experience in St. Cloud provides them a local context, while their unique approach to collaboration and understanding of global climate change ensures innovation.

Building upon the expertise of the consultant team, the Sustainability Framework Plan development process was designed to actively engage the St. Cloud area community and the Sustainability Committee in establishing local visions, goals, and implementation initiatives. The education and engagement efforts were included in the process to provide a consistent baseline level of understanding of sustainability concepts and to ensure that the plan builds on the current activities, interests and passions of the community. The process used to develop the plan is discussed below and highlighted in **Error! Reference source not found.**.

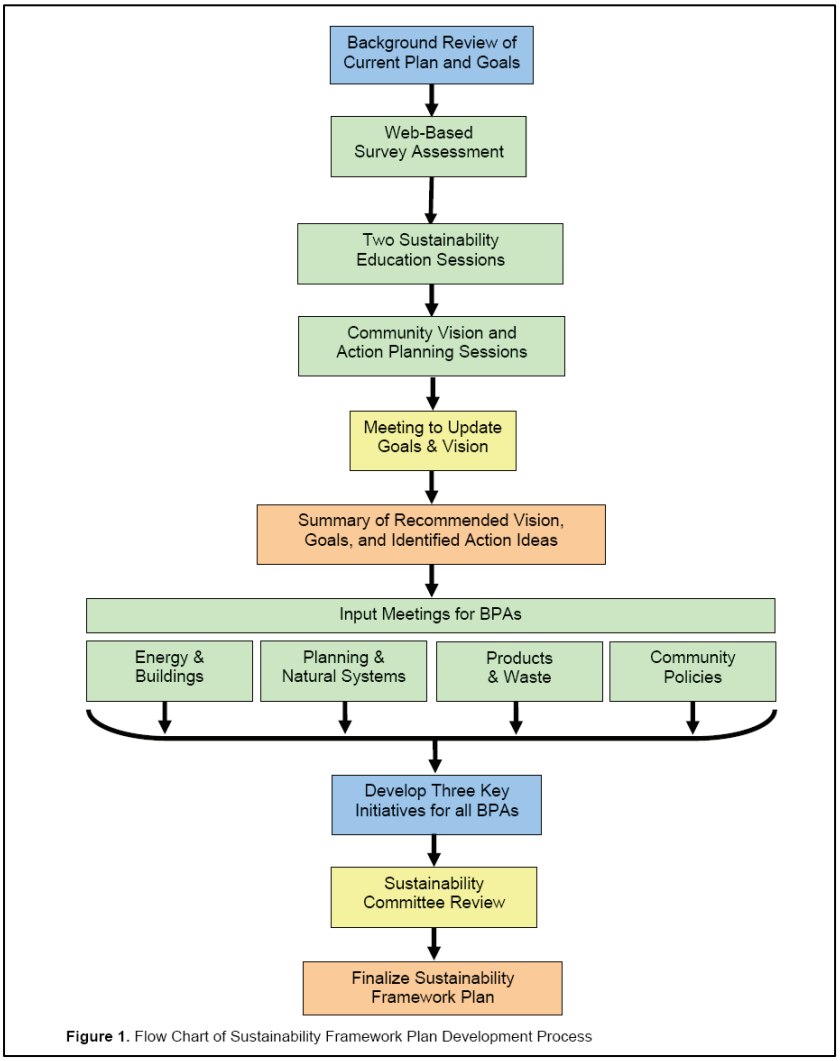


Figure 1. Flow Chart of Sustainability Framework Plan Development Process

A. **Review of Background Information**

The goals and recommendations outlined in the 2000 St. Cloud Area Joint Planning District Plan were reviewed to determine the current goals established for the St. Cloud area.

B. **Web-based Existing Practices Survey**

A web-based survey was conducted of key staff from each member organization to assist in collecting information on sustainable initiatives that are already underway in the St.

Cloud metropolitan area. The survey was intended to allow the sustainability plan to highlight current practices and build on those existing practices for future initiatives.

C. **Education Sessions: Seminars on Sustainability and the Natural Step Framework.**

Two half-day sustainability training sessions were conducted for interested individuals from the St. Cloud Area Joint Planning District Board, Sustainability Committee, City Councils, County Boards, Township Boards, Colleges and Universities, staff, relevant commissions, and other identified stakeholders. The two sessions covered the same topics and were scheduled at different times of the day to allow more people to attend as their schedule allowed. Participants were provided with information to establish an understanding and shared vision of sustainability through Natural Step Framework, Natural Capitalism and Cradle to Cradle concepts. An outline of the sessions, a list of attendees, and statements from the received evaluations are included as Appendix B.

D. **Engagement Sessions: Community Vision and Action Planning**

Three half-day visioning and action planning sessions were hosted to allow interested individuals from the St. Cloud area to provide input on the vision and potential actions needed for each BPA. The planning sessions helped develop enthusiasm for sustainability initiatives and allowed the consultant team to develop basic action plans that are integrated to the local setting. Each session allowed discussion of the current baseline of actions taking place in the St. Cloud area in each area of focus, establishment of a vision, and discussion of the types of actions attendees would like to see take place in the St. Cloud area. And agenda and minutes from the meetings are included in Appendix C.

E. **Meeting to Update Goals and Vision**

The results of the visioning and action planning sessions and the draft goals and visions developed from the community input were presented to the Sustainability Committee to allow discussion on the vision and goals.

F. **Summary of Recommended Vision, Goals, and Identified Action Ideas**

The results of the discussion were to refine or redefine the vision and goals for each BPA and develop a final written version of the new vision and goals. Using the identified goals and the input from the education and engagement sessions, the consultant team developed a set of specific draft implementation actions/tools for each of the BPAs. The actions/tools were used as a framework for discussion at the public input session.

G. **Public Input Session**

One three-hour public input session was held to facilitate input on the draft actions identified for each BPA. The input session was structured so that participants would

break into a number of small groups to facilitate in-depth discussion of actions and tools to move toward the goals of each BPA. The session was broken into two sets of breakout discussion segments so that attendees had the opportunity to discuss two different BPAs in depth and evaluate connections between areas. The goal of the session was for attendees to identify the top three focus areas for initial action in each BPA. The areas for initial action are intended to be bigger picture items that will make the most difference for local sustainability. An agenda and minutes from the meeting are included as Appendix D.

H. **Enhance Sustainability Framework Action Plan for each BPA**

The public input session concluded by defining distinct steps for accomplishing each of the three identified initiatives for the BPAs. The developed Sustainability Framework Action Plan includes the identified vision, goals, initial initiatives and actions, as well as various additional actions or tools for each BPA.

The St. Cloud Area Sustainability Framework Plan will address the following sustainability best practices areas (BPAs):

BPA #1 – **Environmentally Preferable Purchasing**

Identify best practices in purchasing economical and environmentally preferable products and services.

BPA #2 – **Product Stewardship**

Identify best practices in facilitating programs that partner with private industry to reduce the end-of-life impacts of products.

BPA #3 – **Greenhouse Gas Reductions**

Identify best practices in reducing targets for green house gas emissions for the region's facilities.

BPA #4 – **Sustainable Land Use Policies**

Identify best practices in developing land use policies that provide incentives to reduce sprawl, preserve open space, expand and enhance green corridors as new development and redevelopment occurs and that create a walkable community.

BPA #5 – **Sustainable Multi-Modal Transportation**

Identify best practices for promoting sustainable transportation systems/networks and developing educational and public information about transportation alternatives.

BPA #6 – **Alternative Energy**

Identify best practices for increasing the use of clean, alternative energy options to incorporate into regional facilities which may include researching methods to reduce

energy consumption and investigating the use of alternative energy sources for heating/cooling throughout the participating area.

BPA #7 – **Energy Efficiency**

Identify best practices in making energy efficiency a priority infrastructure which may include developing educational programs for the public about energy efficient techniques and construction practices, and investigating opportunities and ways to provide incentives to encourage private sector home and business energy improvements.

BPA #8 – **Sustainable Building Practices**

Identify best practices that will promote sustainable building practices and green construction to assist residents/builders and encourage green building techniques for both government and private development.

BPA #9 – **Community Health**

Identify best practices in promoting healthy community programs such as development of public education programs that endorse healthy activities for residents, and development of infrastructure to enhance walking and biking opportunities.

BPA #10 – **Recycling and Waste Reduction**

Identify best practices in evaluating recycling participation rates in regional operations and within the communities, as well as reducing waste and promoting reuse through development of waste reduction targets for facilities and through creation of a "Green Team" approach to reduce, reuse, and recycle.

BPA #11 – **Healthy Urban Forests**

Identify best practices to maintain healthy urban forests such as promoting tree planting through programs to annually increase tree canopy throughout the region and an incentive program that encourages private sector owners to plant trees within parking lots and other areas of the region.

BPA #12 – **Sustainability Education**

Identify best practices in developing programs to educate public schools, private schools, and private industry about sustainable practices and educating businesses about sustainability and provide an educational campaign that reaches out to colleges, universities, school districts, private industry, and professional associations about how they can achieve sustainability by incorporating certain practices into their daily operations.

BPA #13 – **Surface and Groundwater Resources**

Identify best practices to protect and improve surface and groundwater resources such as development of an educational program aimed at reducing water wasted through irrigation; investigating new design standards and incentives to emphasize the use of natural drainage systems; and, seeking ways to modify street improvement projects to

provide less impervious surface and utilize rainwater gardens, porous pavement and other environmentally friendly techniques.

BPA #14 – **Mississippi River Water Conservation**

Identify best practices to promote water saving practices such as adoption of water conservation policies that help protect the Mississippi River and its tributaries.

BPA #15 – **Innovative Opportunities**

Identify best practices for innovative opportunities to improve the environment; for example, discovering ways to partner with local utility and power providers, think tanks, manufacturers, etc. to establish regular meetings to brainstorm and implement outreach opportunities and programs; and, encouraging neighborhood environmental initiatives and investigating funding programs for local environmental projects/improvements.

BPA #16 – **Sustainable Government Policies/Practices**

Identify best practices to make all existing and new policies, regulations, and ordinances sustainability friendly through creation of incentive programs for certain areas where applicable (i.e., recycling at local schools).

BPA #17 – **Sustainable Food Systems/Practices**

Identify best practices to promote sustainable food systems through education to the private and public food service industry; including school cafeteria programs. Areas to be included are farmer's markets, buy locally, community supported agriculture (csa's), sustainable agriculture practices, and "reduce, reuse, and recycle" practices for restaurant waste.

Anticipated Outcomes of St. Cloud Area Sustainability Framework Plan

Given the successes of smaller local sustainability efforts, and past achievement in the St. Cloud area's regional efforts, the Sustainability Framework Plan is in a unique position to make a great impact in addressing climate change. The achievements of other cities in Minnesota and Wisconsin since adoption of a sustainability plan is telling of the St. Cloud area's expected impacts. Though examples abound, a few are detailed below:

- Minneapolis and St. Paul completed an Urban CO_2 Reduction Project Plan in 1993, with implementation plan in 1997, 2005, and 2007.
  - St. Paul reported reduced greenhouse gas emissions by 960,000 tons per year, at a total cost savings of $59,000,000, not including significant operational savings in Public Works.
  - Minneapolis reported an economic and environmental savings exceeding 365,000 tons of CO_2 reduced (1998 – 1999), and an annual savings of $21,642,000.
  - Minneapolis met 2005 goal of reducing carbon dioxide emissions by 20% from 1988 levels.

- Burnsville adopted Sustainability Guide Plan in 2008. Since adoption, approved geothermal system for its Ice Arena – before geothermal, the ice arena contributed 46% of the City's total

CO_2 emissions. Also, the plan's CO_2 reduction goals and clear steps for implementation has put the City a step ahead of others and increased grant dollars received.

- Since the City of Lacrosse, WI adopted the Sustainability Initiative, it has passed an ordinance to encourage small wind systems, begun construction of a new transit center with a green roof and implanted an award-winning Household Hazardous Waste Program.

Performance Measures of St. Cloud Area Joint Planning District Sustainability Framework Plan

Given the local government and private sector partners' significant commitments of time and resources to the formation of the sustainability committee and subsequent planning process, there is a strong expectation that the Sustainability Plan will be a living planning document that guides future action rather than sitting on a shelf. Benchmarking is an essential element to promoting greater utilization of sustainable practices suggested by the St. Cloud Area Sustainability Framework Plan. As such, a number of benchmarking and reporting strategies are outlined below. In addition, the Sustainability Framework Plan itself details additional benchmarking tools in specific BPAs.

- The Sustainability Framework Plan is staffed by the City of St. Cloud's Sustainability Coordinator and Community Development Director, who are responsible for the administration and reporting of the committee's activities. This community-based committee will continue to meet on a monthly basis to implement the recommendations of the study.

- The Sustainability Committee was created under the auspices of the St. Cloud Area Joint Planning District Board, which consists of elected officials from the area's cities and counties. The committee is charged with reporting of past and upcoming actions during the quarterly meetings of the St. Cloud Area Joint Planning District Board.

- The Sustainability Committee envisions its role as a conduit and clearinghouse for sustainability information sought by the area's residents and entities. Community involvement and education initiatives are anticipated to take the form of a regional sustainability website, sustainability guidebook, on-going community forms, a locally staffed call center, and others suggested by the Sustainability Framework Plan. The success of these outreach and education efforts can be easily tracked and be part of the quarterly reporting to the Joint Planning District Board and the project partners.

- As detailed within the Sustainability Framework Plan, the Minnesota B3 Energy Benchmarking and Carbon Management system can be used as a screening tool for greenhouse gas reductions and energy conservation in local buildings and to help recommend buildings for energy audits. Training is suggested for local staff and officials so that data can be continually entered for evaluations. The system can measure and compare output over time to other local buildings, and targets as established for the state of Minnesota.

WHAT IS SUSTAINABILITY?

(Remainder of this section **by Terry Gips, President, Sustainability Associates, St. Louis Park, MN** www.sustainabilityassociates.com)

Historical Roots of Sustainability

The sun also rises, and the sun goes down, and hastens to the place where it arose. The wind goes toward the south and turns about to the north, it whirls about continuously and the wind returns again according to its circuits. All the rivers run into the sea, yet the sea is not full. Unto the place where the rivers come, they return again. The thing that has been; it is what shall be; And that which is done is that which shall be done. ~ Ecclesiastes 1:5-9

The frog does not drink up the pond in which it lives. ~ Native American proverb

In every deliberation, we must consider the impact of our decision on the next seven generations.
~ Great Law of the Hau de no sau nee (Iroquois Nation)

According to Jewish teachings by those who wrote the Talmud, God brought Adam to the Garden of Eden and warned: Take heed not to corrupt and destroy My world. For if you corrupt it, there will be no one to set it right after you. ~ Ecclesiastes Rabba 7.13

Shift in Public Awareness

Hurricane Katrina, $3 a gallon gas, Nobel Prize and Academy Award-winning Al Gore's *Inconvenient Truth*, and extensive media attention have served to awaken the public to the challenges with climate change and the need for sustainability. The ImagePower Green Brands 2.0 survey released May 1, 2007 by WPP, one of the world's largest communications services groups, revealed that Americans across all socioeconomic and ethnic groups display increasing degrees of green attitudes and behaviors. This is one of the greatest shifts in U.S. consumer consciousness in recent history. According to the study, 34% of Americans are "active green," meaning they identify with the idea that taking care of the environment is society's responsibility. This group is doing everything they can to make a long term positive impact on the environment—including making smarter purchasing choices.

Definition of Sustainability

The Alliance for Sustainability has long defined sustainability as being "ecologically sound, economically viable, socially just and humane, meaning to embody our highest values -- how we treat people, animals and the Earth." (*Manna,* 1984). The United Nations defines sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their needs." (U.N. World Commission on Environment & Development, *Our Common Future,* 1987)

More and more businesses embrace sustainability through the use of a triple bottom line that expands beyond financial to include social and environmental concerns. (John Elkington, *Cannibals with Forks: The Triple Bottom line of 21st Century Business,* 1998) It is sometimes called the "3Ps: People, Planet and Profits", and companies such as Shell are using it along with nearly every major corporation in Europe. It forms the basis for the Dow Jones Sustainability Index with more than $5 billion under management (www.sustainability-indexes.com) and the Global Reporting Initiative with more than 1250 businesses in 60 countries reporting on their social, environmental and financial results (www.globalreporting.org).

Natural Capitalism by Paul Hawken, Amory Lovins and Hunter Lovins documents how we can have 10 to 100 times greater resource productivity, benefiting profits, people and the planet. American companies could cut national electricity consumption by at least 75% and produce approximate annual returns of 100%. Because only about 1% of all the materials mobilized to serve America are actually made into products still in use six months after sale, there is a huge opportunity to turn this 99% waste into profit.

Taking the Natural Step to Sustainability

One of the most widely used and successful approaches for bringing about sustainability is the Natural Step Framework, which was created by Swedish medical doctor and cancer researcher Dr. Karl-Henrik Robert, along with assistance from physicist Dr. John Holmberg. As a scientist at Sweden's leading research hospital, Robert was concerned that increasing cancer rates, especially among infants like those he was treating, were tied to environmental factors. He was frustrated by the lack of agreement among scientists about the cause or what to do, so he began a consensus process which resulted in 50 leading Swedish scientists agreeing on the underlying principles needed for sustainability.

He shared this information with major corporations who recognized the need for action. They supported the sending of an audiocassette and brochure to every home and school in Sweden--4.3 million. Leading artists, musicians and scientists produced a national TV special in 1989 to launch an educational campaign. The Natural Step became a nonprofit backed by the King of Sweden.

My mission is to transform my company into a sustainable business—
one that does well by doing good – by using the principles of the Natural Step framework.
-- Ray Anderson, CEO, Interface, world's largest commercial floor covering manufacturer

The Natural Step in Practice

IKEA, the world's largest furniture manufacturer, became the first company to utilize it, soon followed by Electrolux (world's largest appliance manufacturer), and Sweden's railway, largest hotel and supermarket chains, biggest oil company, and McDonald's. It was also adopted by rural communities and large cities like Stockholm who became "eco-

municipalities." More than 500,000 young people became involved through the Swedish Youth Parliament for Sustainability, and thousands of farmers utilized the NSF to shift toward sustainable agriculture, saving money and reducing pesticide use 75%.

The Natural Step soon spread to numerous countries and was brought to North America in the mid 90s by *Ecology of Commerce* author Paul Hawken and MIT learning organization leader Peter Senge, author of *The Fifth Discipline*. It was first used by $1.4 billion Interface, the world's largest commercial floor covering manufacturer, which has saved more than $300 million utilizing it. Sustainable forestry products manufacturer Collins Pine saved $1 million a year. It also has been utilized by:

- Hundreds of businesses, including Interface, Starbucks, Home Depot, Nike, Bank of America, CH2M Hill Engineering, White Bear Racquet & Swim, Baltix Furniture and Lakewinds Natural Foods;
- Government agencies such as the State of Oregon and US Army and Navy;
- The American Planning Association;
- Numerous municipalities, including Seattle, Santa Monica, Madison and 19 Wisconsin municipalities;
- Hospitals such as Ridgeview Medical Center;
- Academic institutions such as the University of Texas, Houston; and
- Religious institutions.

Four Principles of the Natural Step Framework (NSF)

The Natural Step was established with the purpose of developing and sharing a common framework composed of easily understood, scientifically based principles that serve as a compass to guide society toward a just and sustainable future. The NSF emphasizes that the only long-term, sustainable manner in which business and society can operate is within the Earth's natural cycles. This can be accomplished by meeting four basic sustainability conditions:

The Natural Step Framework (Natural Step www.naturalstep.org) holds that in a sustainable society, nature won't be subject to systematically increasing:

1… Concentrations of substances extracted from the earth's crust;
2… Concentrations of substances produced by society;
3… Degradation by physical means;
And, in that society,
4… people are not subject to conditions that systematically undermine their capacity to meet their needs.

To address the first three, strategies include both dematerialization (using less resources to accomplish the same task), substitution of alternatives, more efficient use of materials and the 3 Rs and 1 C: Reduce, Reuse, Recycle and Compost. To make these four principles more accessible to the public, the Alliance for Sustainability and other groups utilize an easy-to-understand, practical way of addressing the principles:

1. What We Take From the Earth: Mining and Fossil Fuels – Avoid "systematically increasing concentrations of substances extracted from the earth's crust." Simply, we need to use renewable energy and nontoxic, reusable materials to avoid the spread of hazardous mined metals and pollutants. Why? Mining and burning fossil fuels release a wide range of substances that do not go away, but rather, continue to build up and spread in our ecosphere. Nature has adapted over millions of years to specific amounts of these materials. Cells don't know how to handle significant amounts of lead, mercury, radioactive materials and other hazardous mining compounds, leading to learning disabilities, weakened immune systems and stunted development. Burning fossil fuels contributes to smog, acid rain and climate change.

Action: We can reduce energy, purchase renewable energy and support sound public policies. We can walk, bike, carpool, use public transit and "eco-drive" (properly inflate tires, drive the speed limit and avoid sudden stops/starts - save 25-35% on fuel). We can reduce heating/cooling (save 20%), turn off computers (save $120/yr) and use compact fluorescents (save $25-50), LEDs, Energy Star appliances (30% energy saving), proper insulation, battery lawnmowers (save $65/year), and "smart power strips" (save $120/yr). We can decrease mined metals through recycling (cans, fluorescents, electronics), reused rings, rechargeable batteries (two save $1000), non-mercury thermometers, soy inks, and sustainable building.

2. What We Make: Chemicals, Plastics, and Pesticides – Nature must not "be subject to systematically increasing concentrations of substances produced by society." Simply, we need to use safe, biodegradable substances that don't cause the spread of toxins in the environment. Why? Since World War II, our society has produced more than 85,000 chemicals, such as DDT and PCBs. Many of these substances don't go away, but rather, spread and bio-accumulate in nature and the fat cells of animals and humans. Cells don't know how to handle significant amounts of these chemicals, often leading to cancer, hormone disruption, improper development, birth defects and long-term genetic change.

Action: We can use non-toxic, natural cleaning materials (chlorine-free), personal care products (no anti-bacterial soap), toys, paints and renovation materials (formaldehyde-free). We can reduce plastics with reusable bags, plates, cups, cutlery, and water bottles, while reusing packaging, recycling containers and purchasing bio-based, compostable containers. We can use safe, natural pest control in our parks, schools, workplaces, homes and yards.

We can have chlorine-free spas/pools and use "green dry-cleaning". We can eliminate factory farm feedlots and support sustainable agriculture by voting with our dollars by purchasing certified organic food and clothing. We can utilize used clothes and toys and then share them with others.

3. What We Do to the Earth: Biodiversity and Ecosystems – Nature must not "be subject to degradation by physical means." Simply, we need to protect our soils, water and air, or we won't be able to eat, drink or breathe. Why? Forests, soils, wetlands, lakes, oceans and other naturally productive eco-systems provide food, fiber, habitat, oxygen, waste handling, and other essential goods and services. For millions of years they have been purifying the planet and creating a habitat suitable for human and other life. When we destroy or deplete these systems, we endanger both our livelihoods and the likelihood of human existence.

Action: We can reduce paper use through two-sided copying, electronic communication, cloth napkins, reusable shopping bags and getting off junk mail lists. We can purchase certified, sustainably-harvested forest products and use 100% post-consumer recycled content paper, tissues, towels, and toilet paper. We can eat lower on the food chain with an organic, plant-based diet and reduce or eliminate our consumption of endangered and factory farmed fish and seafood. We can protect and conserve precious water with low flow faucets, toilets and showers, native landscaping, green roofs and rain barrels and gardens. We can compost yard material and food scraps. We can encourage smart growth and protect wildlife habitat.

4. Meeting Human Needs - "People are not subject to conditions that systematically undermine their capacity to meet their needs." Simply, we can meet the fundamental needs of every human and consume less. Why? The US makes up only 4% of the world's population but consumes about 25% of its resources. People living in the lowest 20% by income receive only 1.4% of the world's income. Just to survive, they see no choice but to cut down rainforests, sell endangered species, and use polluting energy sources. The alternative Nobel Prize-winning work of Manfred Max-Neef shows how we can meet the fundamental needs of everyone, address our consumption addiction or "affluenza," and transform our lives and planet.

Action: We can support policies promoting social justice, health and a local living economy. We can smile, treat everyone with respect, connect with our neighbors, make socially responsible investments, purchase fair trade products, and donate our time/resources to create a sustainable community. We can practice a healthy lifestyle and encourage discussions about meeting fundamental needs, ask if we really need more stuff, and design our workplaces, homes and organizations to give us more of what we want (healthy, attractive and nurturing environments) and less of what we don't want (pollution, stress, expense).

Section 2 – Baseline Sustainability Actions in the St. Cloud Area

The St. Cloud Area Sustainability Framework Plan is intended to generate a template of state-of-the-art sustainability best practices that can be implemented in Central Minnesota. However, the St. Cloud area has for many years been undertaking new and innovative initiatives aimed at environmental protection, alternative energy sources, waste reduction, and other sustainability concepts. The Sustainability Framework Plan should be seen as a continuation of the commitment of the area's local governments, organizations, and businesses to sustainability best practices. These entities on their own initiative have implemented a wide variety of sustainability initiatives that have set the table for expanded thinking and greater acceptance of even more aggressive sustainability concepts in the community.

As such, this section highlights a number of those sustainability practices by summarizing the projects and its partners. This section also cites others for further review beyond this plan.

SURVEY OF EXISTING INITIATIVES

To establish a baseline of the current sustainability-related activities of the communities and organizations in the St. Cloud Area Joint Planning District, four short on-line surveys were developed to address the identified Best Practice Areas. The surveys were grouped by general topic area as:

1. Energy & Buildings
2. Planning & Natural Systems
3. Products & Waste
4. Community Policies

The surveys were sent to the following organizations as well as all attendees who provided their email address at the education and engagement sessions. The following is a brief overview of several questions within the baseline survey, while the complete survey results are offered in Appendix A.

Table 1. Mechanisms to Protect, Preserve and/or Improve Trees

Healthy Urban Forest Practice	Number of Respondents Using Practice
A tree preservation & protection policy	4
Prohibit the planting of invasive tree species (such as amur maple, black locust, Russian olive, Siberian elm, and Norway maple)	4
Coordinate tree planting and utility locations with tree locations	3
Prohibit the planting of non-native tree species	3
Promote planting of native trees	3
A reforestation plan	2
Limit use of heavy machinery that compacts soil	2
No grading in root zone area past the dripline of existing trees	2

The area's city and county governments have made significant progress in recent years to adopt environmental protection ordinances for identified sensitive areas in each community. Additional activities by respondents include promotion of forest preservation and an oak wilt prevention program. Incentives provided for tree planting include financial support for cost of trees and planting, education on benefits of trees, free trees given to students and staff, and an earth day tree planting event.

Table 2. Standards to Protect Surface and Groundwater Resources

Surface and Groundwater Resource Protection Practice	Number of Respondents Using Practice
Require water quality treatment (stormwater ponds, filtration, etc.)	5
Require natural buffers along water resources	5
Encourage infiltration of stormwater	5
Shared parking facilities	4
Require infiltration of stormwater	2
Define maximum allowed road widths	2
Allow/encourage use of porous pavement	2
Minimize parking lot sizes	2
Define maximum allowed number and size of parking stalls	1
None	1
Minimize roof area (encourage multi-story buildings, smaller building footprints)	0
Encourage green roofs	0

To protect surface and groundwater resources, a variety of methods are used with a number of organizations requiring water quality treatment, requiring natural buffers along water resources and encouraging infiltration of stormwater. The number of these initiatives and their success is in part the result of coordination of the related activities of cities, counties, and state agencies in addressing ground water issues.

Table 3. Education Programs related to Water Resource Improvement and Protection

Water Resource Education Programs	Number of Respondents Using Program
Volunteer water quality monitoring	5
Newsletter articles on what people can do to protect water quality	4
Newspaper articles on what people can do to protect water quality	4
Volunteer programs to assist in water quality improvement	3
Storm drain stenciling	2
Technical assistance for small on-lot water quality improvement projects	2
Grant program to fund small on-lot water quality practices	1
None	1

A variety of citizen based and government based local water resource education initiatives are being undertaken through direct and indirect media outlets. Common water resource protection education programs include volunteer water quality monitoring, newsletter and newspaper articles. In addition, research on water quality issues was highlighted as an education program by St. Cloud State University.

Table 4. Education Programs regarding Product Stewardship

Product Stewardship Education Programs	Number of Respondents Using Program
Recycling education	5
Hazardous materials avoidance and management education	4
Promotion of garage sales, trading, etc. to encourage reuse	3
Education on reusable products to substitute for disposable products	2
Reusable goods donation education	1
Product life cycle education	1
None	1

All respondents have some type of recycling program with all organizations providing recycling for cans, plastic and paper and fewer providing composting and battery recycling. St. Cloud State University also indicated that they have a food waste to animal feed program and a cooking oil to diesel fuel program as well. Other waste reduction policies listed by the respondents include double sided printing, demand reduction, employee training on waste reduction, and defined waste reduction goals. The City of Sauk Rapids is also moving toward paperless government. Recycling education programs are fairly common among respondents, along with education programs on hazardous materials management and reuse promotions.

Table 5. Views on the Commitment or Interest in Sustainable Food Systems in Various Organizations (one check mark indicates one response)

	Commitment	Interest	No Interest
Schools	✓	✓✓✓✓	✓
Businesses		✓✓✓✓	✓✓
Government	✓✓	✓✓✓	✓
Non-Profits		✓✓✓✓✓✓	
Healthcare		✓✓✓✓	✓✓
Congregations		✓✓✓✓✓	✓
Community Groups	✓	✓✓✓✓✓	

In the area of sustainable food systems, the primary barrier to promoting sustainable food systems in the responding organizations were identified as too many other priorities with one respondent each indicating lack of local, organic or sustainably grown foods, cost and "not an important issue" as the primary barriers. The secondary barriers were identified as cost, lack of resources, lack of time, lack of interest and too many other priorities. The respondents identified a number of resources in their organizations and in the community that support sustainable food systems including community gardens, farmers markets, community supported agriculture (CSAs), natural food stores, organic purchasing by grocery stores, a variety of composting programs, and gardening programs. The only resources that were identified by a majority of respondents as not being available were residential food waste collection/composting, policies encouraging sustainable food systems, and zoning encouraging sustainable food systems. A majority of respondents were unsure if restaurant food waste composting and local/organic purchasing by restaurants were available in their community.

Table 6. Views on Initiatives that would Best Promote Community Health (one check mark indicates one response)

	Most Important	Second Most Important
Provide training for staff to promote community health initiatives	✓✓	✓✓✓
Allocate adequate funding for community health	✓	✓
Raise public interest and understanding of community health issues and solutions	✓✓✓	
Develop a shared vision among decision makers regarding the role the community should play in promoting community health		✓✓
Remove barriers that are preventing community health initiatives	✓	✓
Promote understanding and awareness of the connection between community health and planning	✓✓	✓

In the area of community health, the respondents indicated that raising public interest and understanding of community health issues and solutions was the most important way to promote community health and that providing training for staff to promote community health initiatives was the second most important factor for promoting community health. Growing interest in community health initiatives will heighten demand for greater focus on these efforts in the St. Cloud metro area into the future.

Table 7. Views on if there are Effective Environmental or Sustainability Programs or Education Programs in the Following Organizations (one check mark indicates one response)

	Yes	No
Schools	✓✓✓	✓✓✓✓
Businesses	✓	✓✓✓✓✓✓
Government	✓✓✓✓	✓✓✓✓
Non-Profits	✓✓✓	✓✓✓✓
Healthcare	✓✓	✓✓✓✓✓
Congregations		✓✓✓✓✓✓✓
Community Groups	✓✓	✓✓✓✓✓

In the area of sustainability education, there were some mixed views on whether or not various organizations have effective environmental or sustainability education programs. Half of the respondents felt that government has effective environmental or sustainability programs, and the other half of the respondents felt that government does not have effective environmental or sustainability programs. The majority of respondents felt that schools, businesses, non-profits, healthcare, congregations and community groups do not have effective environmental or sustainability programs. However, almost all respondents felt that each of these organizations is interested in, or committed to, addressing environmental or sustainability issues.

EXAMPLES OF EXISTING SUSTAINABILITY INITIATIVES

This section offers numerous examples of the current initiatives being undertaken by public and private entities within the Joint Planning District in four broad sustainability categories, including: Energy & Buildings, Planning & Natural Systems, Products & Waste, and Community Policies. Compilation of the existing initiatives offers a number of benefits. First, the awareness of these local initiatives allows local experts to offer guidance and support to other entities interested in specific sustainability initiatives. Second, the commitment of local entities to these practices may not be well known, and greater awareness can raise confidence of existing residents and greater interest in potential residents and businesses. Finally, compilation of these local practices is an essential element in determining the national/international best practices yet to be undertaken locally.

Sustainable Public Transportation: Awarded Best Transit of its Size in 2007, St. Cloud Metro Bus is increasing ridership by making buses more environmentally friendly. A partnership between Metro Bus and St. Cloud State University brought to reality the nation's first public bus powered by recycled vegetable oil- Husky Fried Ride. The vegetable oil comes directly from on-campus dining, saving an estimated $2.30 per gallon. Sustainability is paying off; system-wide ridership has reached an all time high surpassing 2008 by over 100,000 trips.

St. Cloud Hydroelectric Generation Facility: Since 1888, the City of St. Cloud's Hydroelectric Generation Facility has been generating close to 9 megawatts of electricity per day, meeting the demands of 7,500 households. The 850-foot wide structure creates a 23-foot deep pool that provides a consistent municipal water supply for area residents. In addition to providing renewable energy and water source, the dam serves as a point of education for area youth and students at the adjacent St. Cloud State University.

St. John's University Solar Array: The solar array at St. John's is the first highly visible step in achieving carbon neutrality. It demonstrates our commitment to the American College and Universities President's Climate Commitment and to the Benedictine value of stewardship. With 1,820 modules on 3.9 acres, the solar array will produce 575,000 kwh annually. The solar farm will produce 4% of St. John's energy needs on an annual basis, but will produce up to 20% of peak

power needs in perfect conditions. In order to be more efficient, the panels will track the sun from east to west, gaining 15% more power. The farm was made possible by a 2 million dollar grant from Xcel energy's Renewable Development Fund and by Westwood Renewables. Completed in November 2009, the St. John's solar array is 4 times larger than the previous largest array in Minnesota.

St. John's/St. Ben's 2010 Energy Challenge: The 2010 Campus Energy Challenge is a great opportunity for SJU/CSB students to be a part of the national effort in reducing campus energy consumption. Both St. Ben's and St. John's have signed the American University & College Presidents' Climate Commitment. Students are committed to helping the schools achieve the goals of becoming carbon neutral. The 2010 Campus Energy Challenge is a month long conservation competition. The student housing buildings compete to achieve the greatest percentage reduction in energy use by the end of the month. To make the competition fair, the challenge does not compare the amount of energy use among buildings, but the percentage reduction (or increase in some cases) compared to each building's past average energy use. Both campuses have energy metering systems that keep track of how much energy every building is consuming. Data is updated to the website on a daily basis. The winner is thrown a grand celebration party with awesome raffles! The building that wins at Saint Ben's and the building that wins at Saint John's is awarded a $300 party, including: pizza, ice cream cakes, and other treats.

St. John's/St. Ben's Sustainability Revolving Loan Fund: Each campus has set aside a sum of money that will be used to grant zero interest loans to projects with cost savings. The cost savings will pay back the loan until 120% of the loan is paid off. As the fund grows, more and larger projects can be initiated. There are a multitude of ways we can decrease consumption of energy and products. The results are decreased operating costs and a more sustainable campus. Since part of sustainability is equity, anyone can submit a proposal and it will be reviewed. Projects are audited and results posted to prove the viability and legitimacy of the fund. A committee of faculty, staff, administration, and students govern the fund.

St. Cloud State University Green Buildings: In an effort to protect the environment and improve the health of their students and faculty St. Cloud State University monitors and improves air quality in all campus buildings, uses green construction materials, and has installed energy management systems that use light sensors, timers, and a temperature management system that is based on building occupancy.

Public Building Construction: With the recent construction of the St. Cloud Public Library, the St. Cloud Police Department, Kennedy Community School and the Stearns County Westside Service Center, GLTArchitects has helped the City of St. Cloud, the St. Cloud School District and Stearns County create highly sustainable public buildings. All have daylight harvesting and lighting sensors and controls, reducing or eliminating the need for artificial light. Storm water is managed at all three through a variety of strategies including green roofs, infiltration basins and rain gardens. Kennedy School and the Westside Service Center both have geothermal heating and cooling systems, and the other two have highly efficient HVAC systems. All have water saving plumbing fixtures; and highly sustainable, easily maintainable materials were used in their construction.

Geo-Thermal Technology at St. Cloud Municipal Athletic Complex: Through the recent installation of a GeoExchange system, the community has a high-performance "green" arena that reduces gas usage by 95% and electric usage by 30%. Nearly 4,000,000 gallons of water usage will be eliminated along with the yearly elimination of 300,000 pounds of greenhouse gases.

Planning & Natural Systems

Mississippi River Corridor Regional Plan: A number of public and private partners are developing a St. Cloud Urban Area Mississippi River Corridor Plan. The plan will establish a community based vision and implementation strategies to maintain the river as a regional asset through appropriate stewardship and utilization of the urbanized area's riverfront. It is expected the plan will be adopted formally in 2010, and proceed with a significant public awareness and marketing campaign.

St. Cloud Forestry Program: St. Cloud boasts a forestry program responsible for all tree-related issues including maintenance, management of a nursery, planting, and the processing of tree waste. These proactive efforts are supported with an ordinance condemning and forcing removal of dead, dying or diseased elm, oak and ash trees on private and public property. Attesting to the success is The National Arbor Day Foundation's recognition as "Tree City USA" for 30 consecutive years. Like trees, forestry

staff works around the clock to improve the environment; and therefore, the quality of life for residents.

Central Minnesota Builders Association "Homes of our Own Program: The CMBA introduced the "Homes of Our Own" program to area schools in celebration of National Arbor Day. The Homes of Our Own program teaches second graders how trees are used to provide shelter for animals and people, and that trees are a renewable resource. Builders explain to them how trees are used to build homes and what is done to save trees during the construction process. If the school permits, the kids help plant a tree and learn how to care for trees. This is the twelfth year that CMBA has sponsored the Homes of Our Own Project.

St. Cloud Refuse and Recycling Program: Since 1991, the City has operated a volume based curbside refuse collection system combined with yard waste collection and recycling. Under the City system, user charges are based on the volume of refuse placed out for collection. Since this volume-based system was initiated, landfill deposits have been cut in half. Of the 8,000 tons of municipal waste collected from residential properties in 2009, 30% was recycled, 29% went waste-to-energy, and 41% was land filled.

Environmentally Sensitive Areas Ordinance: In an effort to maintain natural beauty, the cities of Sartell, St. Cloud, Sauk Rapids, and others have adopted innovative environmentally sensitive areas ordinances creating intentional interaction between city staff, environmental scientists, and developers early in the development process. The process offers solid ecological information and development considerations to the local governments charged with enforcing the Environmentally Sensitive Areas Ordinances. Over seventeen completed developments balance protection yet have seen a return in investment.

Paint-the-Drain Eco-Graffiti: In a proactive effort to curb storm water pollution, over 1,500 storm drain inlets have been stenciled with eco-graffiti reminding residents not to dump

down the drain. Unlike household drains that route directly to the Wastewater Treatment Facility, storm drains funnel directly into the Sauk and Mississippi Rivers untreated, seriously impacting natural water resources. As part of a larger education campaign, St. Cloud area is learning that what happens on the land affects our water resources, and that individual actions are key to sustainability.

Central Minnesota Sustainability Project (CMSP): CMSP was founded in April 2010 by Rick and Carol Miller as a way to help people find their way back to gardens, nature, and healthy eating. The mission of CMSP is to experience with the greater community the value of sustainability through the creation and maintenance of sustainable community gardens and biologically diverse eco-systems. At present CMSP operates three community gardens within the greater St. Cloud region as well as a handful of backyard organic gardens. The CMSP vision is to continue to increase the presence of organic community gardens throughout Central Minnesota so the regions diverse families might learn to grow their own food leading to a healthier lifestyle and more economic independence. CMSP strives to develop markets for sustainable foods and Fair Trade products that create economic opportunity for interested participants. CMSP intentionally embraces multiculturalism because it is by sowing and growing together that we gain wisdom about one another, transforming the way we treat each other, while collectively strengthening our community.

CMSP Multicultural Gardeners Program: CMSP identifies gardeners and prospective gardeners in need of land and links them to available suitable land for both family and market gardening. The refugee and new American population in central Minnesota is taking advantage of this CMSP facilitated opportunity. In 2010 CMSP provided 21 plots at two community garden sites (CentraCare Plaza and Schmidt Park) where more than 21 new Americans of African descent are gardening. CMSP has provided seed, plants, tools and counsel as needed and requested by the gardeners. It is the intent of CMSP to create economic opportunity for these new Americans by developing markets for their fresh produce as well as their hand made hand sewn items. CMSP is hopeful that some of the locally raised produce can be developed into value added items such as pickles and other preserves.

CMSP and the African Women's Alliance are collaborating on an educational video (with a training component) that will cover the gardening experience from soil preparation to harvest. It will also present several hands on food preservation techniques with licensed

nutritionists and food handlers, and will culminate with a community meal prepared by licensed chefs featuring recipes from multiple cultures. It is our expectation that the video will be available in several languages.

St. Cloud State University Community Garden: Once an empty lot north of the St. Cloud State Women's Center, the community Garden has become a lively summer place for campus and community people to grow food and develop friendships. The brainchild of St. Cloud State Sociology Professor Tracy Ore, the organic and sustainably maintained garden began with a few volunteers six years ago and each year has attracted greater numbers of neighbors of all ages to join in a collaboration that yields surprising results for participants. Gardeners volunteer in a variety of ways and in varying degrees. The volunteers work hard and celebrate on Sundays with a potluck where they enjoy the actual "fruits" of their labor.

St. Cloud State University Yellow Bike Program – SCSU's Outdoor Endeavors started the Yellow Bike Project in 2004. The bikes are for university students to use, free of charge. The program operates with the generosity of those who donate the bikes and student staff who put a lot of time, energy and love into the effort. SCSU students are encouraged to pick up a bike to ride on campus and asked to abide by the following guidelines:

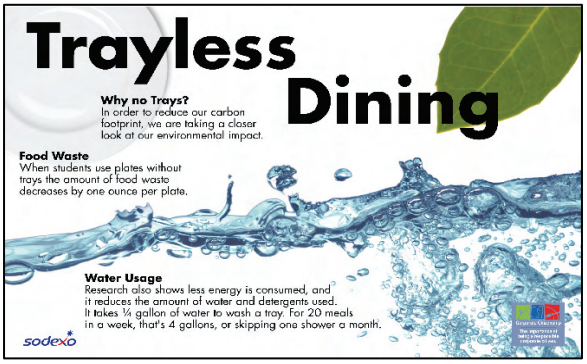
- Do feel free to ride it
- Do follow the local bike laws
- Do ride at your own risk
- Do wear a helmet
- Do return it to a bike rack

St/. Cloud State University Ride Green Initiative - The campus puts a priority on sustainable transportation and promotes bicycles over cars. There is no doubt that this vision would ease traffic, promote health/wellness and reduce our collective carbon footprint. Starting in fall, 2010 SCSU will be piloting the Husky Ride GREEN Initiative offering students, faculty and staff bike rentals on a semester and academic year basis.. While many people choose to buy a cheaper bike, the campus is making available a high quality bike at a fraction of the cost and maintenance of actually owning it. Users are saved the headache of replacing their

cheap bike every year or overinvesting in an expensive bike by leasing a bike through the Husky Ride GREEN Initiative.

Products & Waste

The St. Cloud Recycled Art Project Shop (S.C.R.A.P.S.): Supported by the St. Cloud Arts Commission, S.C.R.A.P.S. makes leftover, overstock, and gently used materials available at no charge to educational and community art activities. Donations include traditional supplies and recycled wood scraps from local manufacturers. Art supplies are expensive, and untapped materials wasted; this program reuses them in a creative way. A storage space opens for "shoppers" twice a month.



St. Cloud State University's Trayless Dining: SCSU implemented trayless dining at the on-campus cafeteria. First piloted in 2009, going trayless saves 650-750 pounds of food and 400-500 gallons of water a day; use of chemicals like soap and rinse solution is down 10 percent. As the first university in Minnesota to implement, the dining service provider of Sodexo will be leading similar efforts across the nation.

St. Cloud Wastewater Treatment Facility: Leading the regional efforts of wastewater, the City of St. Cloud's treatment facility serves six area cities, with an annual flow of 13,000,000 gallons per day, and wastewater generated from approximately 108,500 people. A large-scale project is underway addressing age, upgrades and expansion. A wastewater effluent reuse system is being developed to accommodate gray water needs from surrounding industrial parks as well.

St. Cloud Composting Facility: In an effort to keep neighborhoods clean and divert organic material from landfills, the City of St. Cloud operates a self-haul compost site in River Bluffs Regional Park. An estimated 6,300 cubic yards is disposed at the compost site accounting for over 18,000 visits. Nearly 1,400 cubic yards is taken from the site to be reused by residents and on City projects.

Community Policies

Tracking City of St. Cloud's Public Services Carbon Footprint: Since 2008, the Public Services department has been tracking and assessing the carbon footprint of operation by tabulating energy consumption by fuel type and associated carbon dioxide (CO_2) emissions. Included are the carbon offsets related to power generation at the Hydroelectric Facility, and bio-solids recycling. In 2009, carbon offsets exceeded carbon emissions by a factor of three to one.

Earth Day Activities: Earth Day is a perfect opportunity for the world to get out and exercise their rights to a happy and healthy future for our environment and one another. St. Cloud's residents are doing their part with thousands participating in a weekend long Earth Day event. Aimed at creating an active community, it includes marathon runs for all ages and all experiences, as well as Health and Fitness Expos, and community cleanup activities. Minnesota's premier half marathon event comes to St. Cloud every spring. With an estimated 2,000 runners for the half-marathon alone and nearly 4,000 spectators, it is a part of a two-day festival celebrating Earth Day. There is also a half-marathon relay, 5K and a 1K for kids and a Health and Fitness Expo.

Centra Care's BLEND (Better Living: Exercise and Nutrition Daily): Funded by the CentraCare Health Foundation, BLEND is advocating for healthy communities by allowing every child the opportunity for daily physical activity and access to nutritious foods. A number of initiatives promote this including youth runs, and Kids Health and Fitness Expos.

St. Cloud State University's UCHOOSE Program: Founded upon the harm reduction principle, UCHOOSE educates college students in fun and interactive ways about alcohol misuse and consequences. Courses involve small group interaction to address alcohol effects and norm clarification, as well as teach strategies to moderate alcohol consumption. Since its inception, over 3,000 students have completed the program.

St. Cloud Recreation's Kinder Olympics and Kinder Gym: Held each winter, Kinder Olympics offers a number of skill building, physical fun, literary and craft activities. Following completion, children are rewarded in Olympic fashion. Kinder Gym is a play center in Whitney Recreation Center with mats, toys, tents, and tunnels. These opportunities offer avenues to explore and enjoy physical fitness at a low cost.

Other Initiatives

The prior initiatives are a small sample of the broad range of sustainability practices being undertaken by the public, private, and non-profit organizations within the St. Cloud metropolitan area. The following summary is offered as a brief outline of these additional initiatives. Additional information is available through on-line or direct contacts with the sponsoring organization:

Energy & Buildings

- Metro Bus updating and purchasing more environmentally friendly fleet
- Wastewater Treatment Plant expansion standards
- Rain barrel promotion program

Planning & Natural Systems

- Stormwater Management Plans
- Installation of rain gardens/native landscaping
- Tree preservation efforts
- Pervious pavement systems
- Winter road treatment mix
- Central Minnesota Water Alliance water videos contest
- Adopt a park program
- Arbor Day tree planting partnership
- Emerald Ash Borer/Dutch Elm Disease/Oak Wilt Disease removal program

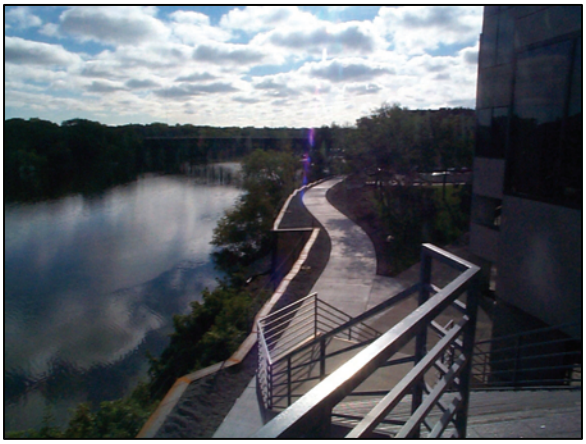
- Complete streets policies
- Grass roots involvement for acquisition and conservation of natural areas/parks
- Multi-modal transportation alternatives

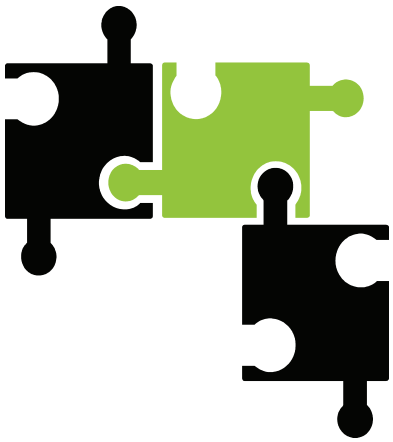
Products & Waste

- Compost sites
- Organic Recycling
- Christmas Tree Recycling
- Effluent injection
- Expanding Farmer's Market

Community Policies

- Water conservation ordinance
- Fully shielded lighting
- LED traffic signals
- Encourage higher-density housing and mixed-uses
- Expanded networks of trails and bike routes
- "Dark Sky " public street light standard
- Chamber of Commerce Buy Local Campaign
- St. Cloud's No-Idling City Vehicle Policy
- 10-most endangered parks designation
- City of St. Cloud owned greenhouse
- Boulevard tree replacement programs





Section 3 – Sustainability Toolbox and Action Plan

Sustainability is a broad concept that encompasses all aspects of municipal operations, business decisions, and daily life. In order to put some structure to this all encompassing concept, the Sustainability Framework Plan is split into 14 sections that address the 17 best practice areas of sustainability. Each section provides a vision, background, goals and a number of initiatives and action steps in that area. At first glance many of the Best Practice Area (BPAs) may seem unrelated, however, all areas are interrelated. For example, land use decisions and practices are strongly related to:

- transportation since the layout and infrastructure of a community strongly influence transportation choices
- water quality because the use of the land and land management practices change the amount of water that runs off a landscape and change the quantity of pollutants and nutrients in the runoff
- healthy foods since the types of grocery stores present in a neighborhood (e.g. convenience stores vs. full grocery stores) influence what foods make up a person's diet
- energy use because land uses affect transportation and some modes of transportation use more energy than others and because zoning and building standards may limit the potential to use renewable energy sources

Action in these focus areas will move the Joint Planning District toward achieving its sustainability vision:

St. Cloud Joint Planning District - Sustainability Vision Statement

The St. Cloud Area is made up of active and vibrant communities whose collective decisions support a prosperous local economy, maintain the physical and mental health of the community, and sustain high quality land and water resources.

BEST PRACTICE AREA 1: ENVIRONMENTALLY PREFERABLE PURCHASING,

BEST PRACTICE AREA 2: PRODUCT STEWARDSHIP, AND

BEST PRACTICE AREA 10: WASTE REDUCTION (REDUCE, REUSE RECYCLE, AND COMPOST)

Vision

The trash bin is the smallest container – if it is needed at all. The amount of waste generated is minimal with most materials being reused, recycled or composted.

Background

Waste, and our choice to reduce waste, has a significant impact on the environment. Waste in incinerators and landfills create greenhouse gas emissions such as carbon dioxide, nitrous oxide, and methane. When you take into account the full lifecycle of the products we use every day and the increased energy needed to make replacement products from virgin, raw materials, the actual impact of all this waste grows significantly. Accounting for the connections between waste in many sectors, including mining, deforestation, industrial agriculture, manufacturing, transportation, and electricity, our wasting represents 36.7% of all U.S. greenhouse gas emissions (Trashing the Climate, Platt et al., 2008. pg 24).
Over 50% of what we still throw in the garbage can be recycled through curbside and other types of collection. An additional 25% of our trash is comprised of food wastes and other materials that could be composted. A typical household in Minnesota throws away over 10 pounds of household compostable material every week. The little bit of garbage that remains after we recycle and compost can be thoughtfully addressed through a zero-waste approach (which includes extended producer responsibility) to prevent waste altogether. In other words, there really is no waste. Recycling, composting, and producer responsibility are powerful tools to reduce waste and therefore, our greenhouse gas emissions. Specifically in Minnesota, reducing our waste has a greenhouse gas reduction impact equivalent to shutting down 20% of our state's coal power plants, or reducing every car usage in the state by two-thirds, or using 75% less electricity in our own homes.

Goals

A. Reduce the amount of waste generated especially packaging, wastes and compostable wastes (food, nonrecyclable papers[1], leaves, grass clippings etc.) by increasing education

[1] Non-recyclable papers typically include materials such as wrapping paper, waxed boxboard, paper towels, construction paper, brown craft envelopes, blueprints, pendaflex folders, carbon paper, hardcover books.

around the benefits of reducing wastes, supporting programs that result in less waste and formally supporting producer responsibility policy.

B. Increase the amount of materials being reused by removing barriers to reuse, promoting existing reuse options and increasing the opportunity for additional reuse initiatives and increase the durability of goods by supporting state and local initiatives that require product stewardship.

C. Increase the number of people participating in recycling programs and amount of material being recycled through education efforts around the benefits of recycling, by creating incentives for recycling and providing additional opportunities for recycling by all members of the community including commercial facilities, multi-family housing, single family housing, government, and educational institutions.

D. Increase number of people composting and amount being composted by education for target groups (residents, businesses, schools and institutions) providing technical assistance to start up, provide incentives and increase the opportunity for participation.

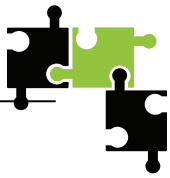
E. Increase local economy/green jobs by developing markets for recycled and reused materials by promoting current opportunities for the salvage and purchase of these items, creating incentives for building deconstruction versus demolition and through economic development incentives for recycled, reuse or composting businesses.

F. Increase the use of environmentally preferable products including recycled/reused materials by promoting current opportunities to purchase verifiable/certified "green" products, improving procurement practices based on successful programs in other communities and through the creation and enhancement of cooperative purchasing options.

G. Decrease the financial burden of waste that is currently carried entirely by the local governments and citizens by gaining an understanding of the policies and structures that create the problem and then developing systems that provide for equitable cost and benefit sharing.

Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three prioritized initiatives focus on key areas with tremendous opportunities to reduce waste while creating local economic development and green job opportunities.

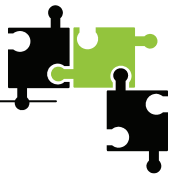


The first initiative is an effort to realize the environmental and economic value of the resources that are currently being disposed and how those values can directly impact local economies. This will be done through increasing reuse, encouraging manufacturers to increase the durability of their goods, and creating local market opportunities for recycling, composting and reuse businesses. The second initiative focuses on increasing participation in waste reduction programs currently available. An upfront investment in education, incentives and startup assistance will pay off with long lasting and ongoing benefits. The third initiative is about connecting the products and services we purchase with sustainability initiatives. Verifying or certifying the environmental impact of products and providing cost-effective purchasing opportunities will address the frustration and difficulties of locating and paying a fair price (not eco-gouged) for products that are trusted to be truly "green".

1. **Create jobs and green cash, not a pile of trash:** Increase the amount of materials being reused and promote local economic development and the creation of green jobs by focusing on both upstream (manufacturing) and downstream (post consumption) issues. Downstream, encourage reuse over disposal by promoting existing reuse opportunities, creating new ones, and addressing the barriers to reuse. For manufacturers and processors (upstream), support state and local initiatives that require product stewardship to increase the durability of goods and promote market development for recycled and reused materials.

    a. Create new reuse opportunities based on community need. Measure the amount of reusable durable goods going into the trash (at neighborhood clean up days, piloted blocks, institutions, etc.) to create a baseline and prioritize biggest potential for reuse (furniture, electronics, clothes, etc). Find partners that can use targeted materials, such as Salvation Army, Goodwill, Epilepsy foundation and others, to talk about creating a free center for reuse. Create a website like Eureka Recycling's Free Market that can quantify the amount of material reused. Work with the City's economic development goals to attract businesses that can use the available reuse items as feedstock or inventory.

    b. Increase material reuse by promoting existing opportunities for donation, sale, repair or purchase of salvage items. Make accessing these resources easy for residents by documenting and keeping up to date: the available community resources, what items they accept and any conditions around quality, quantity or seasonality. Use a variety of approaches to promote this list, including online (city website, Facebook, etc.), articles in community papers and displays at events. Coordinate with existing reuse events such as "Donate, Don't Ditch" at St. Cloud State and the Community Curbside Set-Out Day before the special pick up day. Publish a reference list of where reuse can take place year round for distribution at one-time events.



c. Create a targeted incentive program to promote reuse over disposal. Explore additional local policy to reflect the values of the community. Quantify the financial (disposal cost savings and added value opportunity) and environmental impact (decrease in carbon emissions) of reuse policy to create a cost benefit analysis for incentive programs. For instance, the use of a building permit requirement to encourage building deconstruction instead of demolition (such as requiring a holding area for waste deconstruction materials). Or the possibility of a container deposit legislation or policy that can result in 90% or greater recovery of containers.

d. Support and attract new reuse businesses. Promote and advertise community businesses that use recycled or reused materials as feedstock including repair, thrift stores and other reuse businesses in the community. Provide economic incentives for these types of businesses to locate in the city. Quantify the number of jobs and economic impact of this specific business sector.

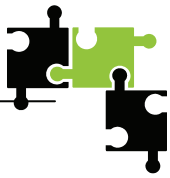
e. Prioritize local industry groups that are receptive to increasing reuse through product stewardship. Create product stewardship education programs to promote existing regional, state and national initiatives to these groups. This will include workshops, evaluation, best practices, peer mentoring and consulting.

f. Document whom the specific local producers of waste and end-users of recovered materials are in the community and quantify what volumes they produce or use. Partner with these waste generating business or value added manufacturers to support the collection and reuse infrastructure required to increase reuse or minimize waste. This could include the funding of a hard to recycle drop off center for items such as plastic containers without necks.

2. **When Zero makes your community Number One!:** Recycle and compost more materials by increasing the number of people participating in recycling and composting programs. Increase participation through targeted education, making programs accessible to a wider audience, providing technical assistance and creating incentives.

   a. Conduct participation and demographics studies to determine underserved populations in existing service areas. Prioritize opportunities to increase participation and create targeted education and incentive campaigns to reach these groups. Education can be on the environmental benefits of recycling. Incentives can include pay as you throw trash rates, or rebates or financial incentives to recycle more. Measure impact before and after efforts to determine success.

   b. Improve resident's ability to recycle away from home (including commercial facilities, government, and educational institutions). State and national surveys show that this is where much of the remaining residential waste is borne and residents are frustrated that there are not opportunities to recycle. Document waste reduction



potential in public space through waste audits. Conduct additional waste audits after recycling is set up to measure impact.

c. Identify areas to increase commercial and residential recycling efforts (ex. multifamily buildings, apartments, condos, etc.). Residents live increasingly in homes that are not single-family, and multi-family recycling needs to be addressed differently than single family homes. Use Eureka Recycling's Multi-family recycling toolkit and other national resources to structure a successful program. Conduct pre- and post-waste sorts to document improvement.

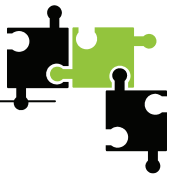
d. Promote composting by addressing the barriers that currently exist by providing technical assistance to start up the program, incentives to participate and increasing access. Work to increase opportunities for participation by working with haulers, city programs and processors so more people have access to both commercial composting. Provide workshops and materials needed to start back yard composting. Target education campaigns on composting for residents, businesses, schools and institutions. Measure the volumes collected to quantify the impact.

3. **Vote for the environment with your dollars:** Increase the use of environmentally preferable products, including recycled/reused materials, by promoting current opportunities to purchase verifiable/certified "green" products, improving procurement practices based on successful programs in other communities and through the creation and enhancement of cooperative purchasing options.

   a. Increase the impact of environmentally preferable purchasing policies by reviewing and identifying the opportunities within current government. Quantify what impact the policies have already had and measure what additional potential exists within government purchases. Survey purchasers within the government to identify the barriers and address solutions to making the policies more effective. Use ongoing purchasing data to determine effectiveness and measure success.

   b. Create additional policies to promote sustainable purchasing habits in the community. These could include a municipal policy of no plastic water bottles at meetings, a retail plastic bag policy requiring reusable or bio-based compostable or recyclable bags, or a take out container policy requiring re-usable or bio-based, compostable. Measure what the potential environmental impact and cost of these efforts would be to conduct a cost-benefit analysis prior to work. Measure after implementation to quantify benefits.

   c. Expand access to purchasing outside of government. Maintain criteria for best available product certification. Create and distribute updated lists of verified preferable products and where they are locally available. Create methods for businesses and residents to access the same reliable products and reduced bulk



pricing by allowing co-op purchasing and bulk orders. Promote opportunity through business networks and schools.

d. Increase local availability by working with manufacturers and distributors to supply products locally. Support locally manufactured green products in conjunction with economic development funding.

e. Provide resident forums where they can be engaged in environmental product purchasing through education (ex. understanding why all plastics cannot be recycled), social action (why their feedback to brands, packagers can influence design) and the impact of their purchasing power.

General Actions

The following general actions have been identified as key steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives".

I. Consider relative education actions in this BPA in conjunction with community education BPA and compost actions in these BPA's with Food related actions in other BPA's.

II. Work to remove disincentives and create incentives to improve waste reduction (reduce, reuse, recycle, compost). Review waste reduction governmental/institutional policies and ordinances to identify the barriers and opportunities.

III. Establish governmental and institutional waste reduction (reduce, reuse, recycle, compost) goals and measures! Review internal initiatives in all governmental buildings – track and measure before and after results for social, environmental and economic benefits to use a model for broader audiences and promote green initiatives.

IV. Kick off a city or regional energy and waste reduction campaign for residents and businesses. Co-messaging and providing single sources on multiple resource topics is a proven technique to increase involvement. Provide a "stamp of approval" on specifically targeted efforts and methods (i.e. backyard composting).

V. Promote local waste reduction success stories (environmental awards program) to educate and provide peer modeling for residential as well as government and private sector workplaces. Recognize individuals or teams, not entities.

VI. Look for economies of scale in garbage that often create opportunities to implement green programs at much lower costs. (Ex. organized collection of waste at city, county or regional level.)

VII. Promote the regions good, green businesses, nonprofits and initiatives (ex. develop or work with partners to create an expo like the Living Green Expo in the Twin Cities).

BEST PRACTICE AREA 3: GREENHOUSE GAS REDUCTIONS

Vision

Air quality is excellent due to reduced greenhouse gas emissions. This has been achieved through sustainable building practices, renewable energy and energy efficiency breakthroughs, and through connected and multimodal transportation systems that reduce the need for single-occupancy vehicle trips.

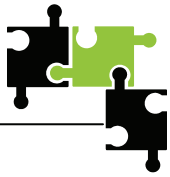
Background

Greenhouse gas (GhG) emissions by municipalities' operations come from a variety of sources: Buildings contribute approximately 35-40% of emissions through their use of electricity and natural gas (see also BPA 8). Water supplies and treatment infrastructure can account for significant amounts (from 10-25% depending on size and age of facility and efficiency of operation). Other contributors are street lighting, transportation fuels such as gasoline and diesel, and wastewater treatment facilities. The first step in making reductions in greenhouse gas emissions is to establish a baseline from which to measure improvements in energy efficiency. As improvements are monitored, tracked, and published, they can serve as incentives for private building owners to follow.

Transportation accounts for 15-20% of GhG emissions. Conservation measures through proper maintenance of the public fleet can improve fuel efficiency, while alternative fuels and hybrid vehicles can further increase efficiency and greatly reduce emissions, depending on the size and number of vehicles (see also BPA 5). When one considers private vehicle use, greenhouse gas reductions are multiplied through increased fuel efficiency, reduced miles traveled and availability of alternative fuels and transportation.

Another source of greenhouse gasses is landfilling, which produces methane, which has 23 times greater heat trapping capacity than carbon dioxide. The positive effect of recycling and composting can be great. A significant portion of "stuff" currently being landfilled – some studies have shown percentages as high as 50% – can either be recycled or composted. Landfills are the single largest direct human source of methane.[2] Conversely, the process of aerobic composting produces small amounts of vapor, consisting of water and carbon dioxide. When the volume of waste produced by restaurant, business and multi-family facilities are considered, the case for composting becomes even stronger. In communities

[2] Platt, Brenda, et al. Stop Trashing the Climate. Institute for Local Self-Reliance. June 2008.



that are agriculture-based, composting is even more compelling, as it provides valuable nutrients and replaces soils lost through erosion and poor agricultural practices (refer also to BPAs 1, 2, 10).

Some municipalities have moved to large-scale composting as a way to greatly reduce the amount of landfill. The compost is then sold for gardening and landscaping purposes. Restaurant food waste can sometimes be collected for distribution to local farms for feedstock, further reducing landfill and therefore, greenhouse gasses.

Goals

A. Improve collection of baseline data on emissions from public/private buildings and facilities.

B. Work to reduce greenhouse gas emissions through reductions in Vehicle Miles Traveled (VMT), through the goals of the Sustainable Multi-Modal Transportation initiative (see also Best Practice Area 5).

C. Reduce greenhouse gas emissions through improvements to management and operations of municipal fleets. Increase use of electric vehicles, hybrid vehicles and flexible / alternative fuels.

D. Reduce the energy and costs expended in water pumping and treatment by encouraging water conservation, rainwater collection systems, and the reuse of greywater for domestic purposes.

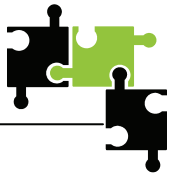
E. Reduce greenhouse gas emissions by increasing the production, marketing and sale of locally-grown and sustainably produced foods, thus reducing transportation costs and artificial inputs.

F. Reduce greenhouse gas emissions through prevention, recycling and composting of municipal solid waste.

G. Explore the potential for capturing landfill gas (biogas) for use as fuel, thus reducing greenhouse gas emissions.

H. Continue to explore the potential for biofuel production from a variety of non-food-based biomass sources, emphasizing those that can be sustainably managed.

I. Educate and build public support for GhG reductions by emphasizing funding sources and incentives for the goals mentioned in this section, as well as the long-term cost savings and benefits of greater energy independence (see also Best Practice Area 7).



Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three prioritized initiatives focus on public education and cost savings, management and operations of municipal fleets, and reduction of solid waste.

1. **Teach reduction** Educate and build public support for greenhouse gas reductions by emphasizing funding sources and incentives for the goals mentioned in this section, as well as the long-term cost savings and benefits of greater energy independence (refer also to BPA 7).

   a. Publish often and through multiple venues – newsletters, utility flyers, community workshops – funding sources for energy efficiency upgrades/retrofits for commercial and residential property owners.

   b. Publish websites that offer information and other links on ways to reduce energy consumption, how to apply for rebates, grants and other funding opportunities.

   c. Coordinate with BPA 13,on the following actions:

      C1. Stormwater generation and treatment, which accounts for a percentage of energy use and GhG emissions.

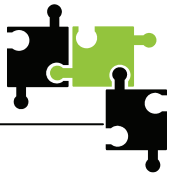
      C2. Development issues which affect stormwater generation, building design and roads, all of which are interconnected and have impact in GhG emissions through energy use to purify water, operate buildings, and miles traveled. By focusing on more sustainable development models, energy consumption in each of these categories can be reduced, thereby reducing GhG emissions.

   d. Coordinate with BPA 4, Land use, to stop sprawl. This includes restoration of existing buildings, infill development, greater density and innovative zoning to promote use of existing infrastructure; again, each of these strategies has potential to reduce GhG emissions.

   e. Coordinate with BPA 12, Sustainable Education, on the following actions:

      E1. Start with the City and County; set an example of how GhG reduction can be accomplished on one building; publish results and expand throughout the system of public buildings.

      E2. Coordinate with community-based education efforts by designating a Sustainability Coordinator who is the conduit between city and community, and serves as a valuable resource.



E3. Coordinate with Academia – local school districts and St. Cloud State – to develop curriculum on sustainability which includes reduction of GHG emissions and conservation of resources.

f. Collect baseline data on greenhouse gas production for local area schools through the use of EPA's Climate CHECK system or other GHG tracking tool.

2. **Raise MPG, Switch to Alternatives-** Reduce greenhouse gas emissions through improvements to management and operations of municipal fleets. Increase use of electric vehicles, hybrid vehicles and flexible/alternative fuels.

   a. Inventory existing fleet.

   b. Identify vehicles that may need maintenance that would improve efficiency.

   c. Prioritize vehicles that may be due for replacement with a more efficient model.

   d. Establish criteria for vehicle purchase, including mpg ratings, and other pertinent information.

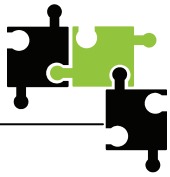
   e. Publicize the substantial efforts already going on in this area – for example, the Husky Fried Ride (new Metro Bus St. Cloud State route powered by recycled deep fryer vegetable oil) and Metro Bus use of E85. There are, however, serious questions as to whether corn-based ethanol results in a net energy gain or loss as well as issues of soil erosion and depletion of water supplies from irrigation and large amounts of water used in corn-based ethanol production, so promotion of E85 may not be appropriate.

   f. Establish carpooling policy which limits (or eliminates) public vehicle use for one-person trips.

3. **Make Dirt, Not Gasses** - Reduce greenhouse gas emissions from landfills through prevention, recycling and composting of municipal solid waste. Tie efforts to BPA1 Initiative #2 "When Zero Makes your Community Number One" and the idea of increasing participation through education, greater accessibility, incentives and technical assistance.

   a. Evaluate existing waste-hauling volumes to determine percentages of trash vs. recyclables vs. compostables.

   b. Provide compost kits for homes; partner with local schools to enlist students in building bins for resale to interested residents. Proceeds of sale will benefit participating schools' environmental education programs (or one of their choosing related to sustainability). Alternative: establish grant program which would allow students to be paid minimum wage for participating in program.



c. Form a task force of interested restaurant owners, business partners, and residents to be advocates for composting within their municipalities. Set up pilot project with one local (independent) restaurant, one local business facility, and one local multi-family housing facility to test a composting program.

d. Use incentives to encourage individuals to meet recycling goals and produce less trash. Example: Current green bags, priced at $2; encourage people to recycle vs. toss.

e. Use incentives to encourage recycling in public places (restaurants, public buildings, businesses, etc).

f. Incorporate educational tools – website and brochure- on how to compost.

General Actions

I. Encourage walking, biking, transit: Coordinate with "Connected Streets" and "Transit Options" actions listed for BPA 5 which are linked to Greenhouse Gas Reductions: These initiatives strive to provide better street connectivity and include walkable and safer routes to encourage walking and bicycling and use of transit as options to automobile travel.

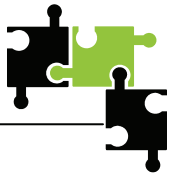
II. Engage with St. Cloud State University: Enlist St. Cloud State to work with a Sustainable Team and to classify one building on campus as "No Waste". Track and publish findings to highlight potential for campus-wide program.

III. Advertise local commercial examples: Enlist the Chamber of Commerce to promote good examples of energy efficiency. Target four buildings each year that have undergone retrofits that have improved efficiency, thereby reducing greenhouse gasses. Publish greenhouse gas reductions so public can make a connection between reductions and impact on totals.

IV. Recognize residential stars: Showcase a minimum of two residential properties each year that are performing better than the average. Publish "how-to" remedies that others can implement and source information for these ideas. Advertise rebate programs that residents can use to make their homes more energy efficient, by low-cost means such as added insulation, caulking and sealing.

V. Capitalize on available resources: Capture methane from landfills in locations where it is not currently being done.

VI. Promote action: Publish websites where people can calculate carbon footprint, and see solutions to reducing their carbon footprint.



VII. Focus on Buildings: Because buildings – residential and commercial – contribute up to 40% of GhG emissions through use of energy sources, it is important to coordinate GhG reduction efforts with actions in BPA 8 – Building Practices. These actions include:

a. Calculating emissions and setting targets for improvement (choose one building to start, publish results and set new targets; document annual improvements.

b. Audit buildings in bottom third of energy performance ranking and implement all energy efficiency opportunities that offer payback under 5 years.

c. Enter public building data into the MN B3 database and rank buildings in regard to energy performance.

d. Calculate CO_2 emissions from wastewater treatment, water towers and lift stations.

e. Work with local school districts to ensure that all schools are built to a green building standard.

f. Encourage private property owners (residential and commercial) to submit data to Energy Star, and to set annual goals for energy efficient improvement through upgrades and/or retrofits.

BEST PRACTICE AREA 4: LAND USE

Vision

The Joint Planning District is a vibrant area that sustains and regenerates itself by using land in a manner that simultaneously protects the area's natural resources, ensures a high quality of life for all residents, and strengthens the area's economy.

Background

How the Joint Planning District chooses to use land greatly affects the extent to which the area is moving toward sustainability. Once developed, land use is generally slow to change. For example, if prime agricultural land or a significant natural area is cleared at the outskirts of a community for development of a shopping center, it is highly unlikely that the land will ever be restored to its former natural state or agricultural use. Furthermore, the development of the shopping center may spur additional development in the area, which could exasperate sprawl and move the community away from sustainability. Therefore, it is critical that the community and region carefully plan the future use of land so that it moves the community and region closer to sustainability.

Goals

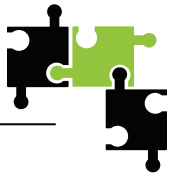
A. Conserve and enhance significant natural areas and functional open space as interconnected corridors, emphasizing the benefits for wildlife, for multi-modal transportation, and for outdoor activity and community health (see also Best Practice Area 9: Community Health).

B. Promote sustainable agricultural practices, permaculture, and the preservation of productive agricultural land.

C. Promote and strengthen compact development in areas with existing infrastructure. Encourage mixed-use in selected high-activity areas.

D. Encourage land uses that provide a range of housing opportunities, choices, and locations to meet the needs of residents.

E. Model the use of land after natural processes by considering the various inputs and outputs (such as water and energy use) associated with healthy ecosystems and promote land uses that support functional natural ecosystems (see also Best Practice Area 11).



Initiatives and Action Steps

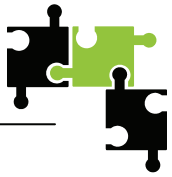
The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability.

The first initiative recognizes that a sustainable community starts with a functioning natural environment and that humans are an integral part of the natural environment. Therefore, if we contribute to the degradation of nature, we are not only hurting or destroying countless plant and animal species and other resources, but we are also affecting our ability to sustain our communities and ourselves. Consequently, this first initiative recognizes the importance of conserving, enhancing, and connecting significant natural areas in the region. It recognizes natural areas as a legitimate and important land use in the region.

The second initiative focuses on promoting compact, mixed-use development in high activity areas where existing infrastructure exists. This initiative is intended to discourage sprawl into rural areas. Sprawl not only uses potentially valuable natural areas and productive agricultural land, but it also contributes to the need for more roads, sewers, and other infrastructure. In addition, it results in more vehicle miles traveled to get to services and places of employment. In contrast, compact, mixed-use development in high activity areas where existing infrastructure exists does not require extension of costly infrastructure and it allows people to more easily walk, bike, or use mass transit to access services and places of employment.

The third initiative focuses on meeting the Joint Planning District's housing needs. A sustainable community must provide ways to meet basic human needs, including providing adequate shelter for its residents.

1. **Connect with nature:** Conserve and enhance significant natural areas and functional open space as interconnected corridors, emphasizing the benefits for wildlife, for multi-modal transportation, and for outdoor activity and community health (see also BPAs 11 & 14).
    a. Work with neighboring and overlapping jurisdictions, property owners, and other stakeholders to identify opportunities to conserve, enhance, and connect significant natural areas throughout the region. Develop, adopt, and implement a green infrastructure plan.
    b. Identify opportunities to connect fragmented natural areas by restoring natural systems in areas that have been degraded or developed in a manner that hinders the proper functioning of the natural system. This action does not require government acquisition of private land. The government can work with private landowners to



help restore natural functions and to allow for the connection of fragmented natural areas.

c. Where appropriate, coordinate with property owners and others to encourage the preservation of existing, privately owned natural areas. Consider the use of conservation easements, purchase of development rights, transfer of development rights, and other tools.

d. Ensure that new and planned development provides for the connection of natural open space corridors throughout the region.

e. Continue updating and enforcing environmentally sensitive areas ordinances as an environmental overlay zoning district to help protect and manage significant natural areas.

f. Where appropriate, sensitively integrate bicycle and pedestrian trails into green corridors as a means to promote community health and as an alternative mode to the use of automobile transit.

g. Require land subdivisions and development projects to identify existing natural features and how those features will be protected or mitigated. Local ESA ordinances have prepared inventories and identified best management practices for many of these features.

2. **Stop sprawl:** Promote and strengthen compact development in areas with existing infrastructure. Encourage mixed-use in selected high-activity areas.

a. Encourage infill development, redevelopment of brownfield sites, and combination of underutilized parcels.

b. Promote the renovation and reuse of existing buildings where feasible. Encourage measures to increase energy efficiency through LEED, B3, or other programs.

c. Promote high-density housing near transit.

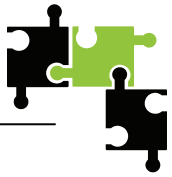
d. Where appropriate, reduce or eliminate minimum lot size requirements as a means to encourage compact development in areas with existing infrastructure.

e. Provide innovative opportunities to reduce the need for onsite parking.

f. Promote new civic facilities in areas of existing development, rather than in greenfield areas.

g. Update the Comprehensive Plan and Small Area Plans, as necessary, to encourage a mix of land uses in appropriate areas of the community.

h. Use innovative zoning techniques (such as form-based zoning or design guidelines) to help achieve quality mixed-use development.



i. Where appropriate, consider providing incentives for ground-floor retail and upper level residential uses in existing and planned development.

j. Explore the possibility of converting declining or vacant strip shopping centers into mixed-use developments.

k. Encourage more creative site design as an alternative to the existing large lot residential development in the region. Encourage a greater range of housing types and common open space.

l. Provide incentives to promote mixed-use development that enhance walkability and community health.

3. **Meet housing needs:** Encourage land uses that provide a range of housing opportunities, choices, and locations.

   a. Use a variety of tools, such as an inclusive housing ordinance that mandate or incent a variety of housing values/styles in each development or a streamlined review process, to promote the development of affordable housing.

   b. Promote opportunities to modify or renovate existing housing units and/or property in a manner that enables residents to stay in their homes and that provides an affordable way to provide additional housing for others. For example, consider allowing accessory dwelling units outright or as a conditional use. Also, consider allowing duplexes or twinhomes in single-family districts.

   c. Explore opportunities with others to meet community housing needs. For example, help facilitate the acquisition of land for organizations such as Habitat for Humanity. Also, ensure that ordinances do not unnecessarily prohibit or prevent house sharing.

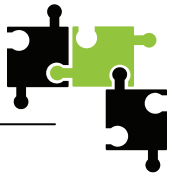
   d. Update the Comprehensive Plan and Small Area Plans to ensure that housing relates to existing and planned employment in the immediate area.

   e. Provide greater flexibility in the ordinances to allow a variety of housing types and smaller housing units on smaller lots. Identify ways that this can be done without using the Planned Unit Development approach.

   f. Strive for economies of scale so that infill development and mixed housing types can compete in the market.

General Actions

The following general actions have been identified as key steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.



I. Using zoning and other tools (such as, large minimum parcel sizes, conservation developments, urban growth boundaries, and purchase of development rights) to help ensure the preservation of productive agricultural land.

II. Recognize the value of agriculture to the region. If conflict arises between agricultural uses and other adjacent uses, work to resolve the conflict in mutually acceptable ways that allow continued appropriate use of agricultural land.

III. Encourage relatively small acreage sustainable farming enterprises at the urban edge. Promote enterprises that are likely to be profitable over the long term by helping meet the demand for local foods.

IV. Promote low impact development standards that reflect how natural systems function. For example, use rain gardens to help handle storm water runoff onsite.

V. Update the zoning ordinance and subdivision regulations to reflect the principles of sustainability. For example, allow for reduced road widths, where appropriate.

VI. Use community facilities as a showcase for sustainable land use development.

VII. Establish new resident campaign focusing on educating residents of rural and urban developments in natural settings about living in unison with wildlife and plant communities.

BEST PRACTICE AREA 5: MULTI-MODAL TRANSPORTATION

Vision

Joint Planning District residents can choose among many modes of transportation to perform daily activities, and bicycling, walking and transit constitute a larger share of trips. It is possible to live in the Joint Planning District without a car. Regional trails connect the cities to outlying areas, and commuter rail connects the region to the Twin Cities. Neighborhoods are walkable, streets are designed for multiple uses, and safety is improved for all transportation modes.

Background

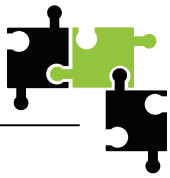
Conventional transportation planning focuses on addressing auto congestion and safety through roadway expansion and improvements. It supports automobile dependence, which in turn, increases congestion and air pollution. Multi-modal transportation planning, by contrast, includes more emphasis on non-automobile modes such as transit, bicycles and pedestrians, and more consideration of factors such as environmental impacts and mobility for non-drivers.

The St. Cloud region experiences a high level of congestion on many arterial roads and other major thoroughfares due to high levels of commercial development, limited number of river, highway, and railroad crossings, and a scarcity of viable alternatives to the single-occupancy vehicle. Workshop participants identified a lack of safe bike routes and paths paralleling major roads. The regional transit system, while improving, provides only limited coverage. However, there is increasing interest in alternatives to the single-occupancy vehicle for commuting and personal use. Transportation planning efforts by the Area Planning Organization, cities and counties are increasingly oriented towards multiple modes of travel to serve more compact and sustainable land use patterns.

Goals

A. Work to ensure that existing transportation infrastructure including roads, sidewalks, and trails are adequately maintained prior to investing in new road infrastructure; emphasize funding of alternative transportation infrastructure (transit, sidewalks and trails).

B. Improve the integration of transportation modes by designing and retrofitting streets for multiple modes where appropriate (the "complete streets" concept) and improve the connectivity (reduce gaps) of the transportation system for all modes, including bike, pedestrian, motor vehicle, transit and freight.



C. Reduce per capita fatalities and injuries from all modes of travel.

D. Better coordinate transportation with land use planning throughout the region with the goal of reducing VMT per capita and increasing mode share for public transit, bicycling, and walking.

E. Increase the availability and use of public transportation between the Twin Cities and the greater St. Cloud region and between communities within the planning region.

F. Increase the use of renewable/alternative fuels for municipal fleets and transit vehicles.

G. Reduce impacts on air, water, and neighborhoods from the transportation system.

H. "Right-size" vehicle parking requirements within communities in order to use land more efficiently, improve the tax base and community appeal, and reduce run-off to lakes and rivers.

I. Address congestion primarily through improved land use planning, complete streets, and increased mode share for transit, bicycling, walking, and carpooling (also trip chaining) rather than roadway widening.

J. Target roadway capacity increases to locations where they will accommodate higher density, mixed use development.

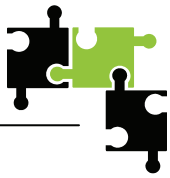
Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability.

1. Complete, Connected Streets: Improve the integration of transportation modes by designing and retrofitting streets for multiple modes where appropriate (the "complete streets" concept) and improve the connectivity (reduce gaps) of the transportation system for all modes, including bike, pedestrian, motor vehicle, transit and freight. Require bike parking as well as automobile parking; also explore separate standards for mopeds and scooters (a particular issue for the SCSU campus). Consider "right-sizing" off-street parking requirements.

The street standards currently in use in many communities date from an earlier era of transportation engineering; one in which unimpeded movement of motor vehicles was the primary goal. The new paradigm for street design is known as "complete streets," defined by federal legislation[3] as:

[3] HR 1443/S 584 The Federal Complete Streets Act of 2009.



> *"A roadway that accommodates all travelers, particularly public transit users, bicyclists, pedestrians (including individuals of all ages and individuals with mobility, sensory, neurological, or hidden disabilities), and motorists, to enable all travelers to use the roadway safely and efficiently."*

According to the Minnesota Department of Transportation (Mn/DOT),

> *"Complete Streets does not mean "all modes on all roads"; rather, the goal of Complete Streets should be to 1) develop a balanced transportation system that integrates all modes via planning inclusive of each mode of transportation (i.e., transit, freight, automobile, bicycle and pedestrian) and 2) include transportation users of all types, ages and abilities."*[4]

Adoption of complete streets policies by the communities in the Joint Planning District would provide an integrated set of strategies for accomplishing many of the goals of the Committee, including integration of transportation modes, funding of alternative transportation infrastructure, and increased safety. As noted above, it would not require all roads to be designed for all modes of travel. Rather, a complete streets policy includes a range of improvements for various types of streets and highways.

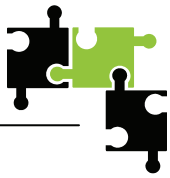
Complete streets policies are supported by the Joint Planning District Planning Organization (APO). The APO's Bicycle and Pedestrian Advisory Committee (including staff representing state, regional, and local jurisdictions, business owners, cyclists, walkers and other interested citizens) has worked with APO staff to establish a vision statement to guide pedestrian and bicycle planning:

> *"The St. Cloud Metropolitan Area is a place where people will choose to bicycle and walk for everyday transportation and recreational purposes. Residents and visitors will be able to walk and bike safely, conveniently, and pleasurably on a well-designed, maintained, and connected system of sidewalks and bikeways."*

One of the goals established in the APO's 2035 Transportation Plan is "Design and maintain Complete Streets that accommodate all modes of transportation through a functional network."

a. City governments consider revisions to street design standards to incorporate complete streets policies. New standards would apply to new streets and, where feasible, to reconstruction of existing streets. This strategy could include traffic calming techniques

[4] Minnesota Department of Transportation, *Complete Streets Report*, a report to the Minnesota legislature, December, 2009.
http://www.dot.state.mn.us/planning/completestreets/legislation.html#report



such as encouraging street trees and on-street parking in order to narrow the perceived width of the street.

b. APO and local governments seek funding for creation of separated bicycle/pedestrian paths along urban collector and arterial road corridors, and for trail connections to the regional trail system.

c. Counties adopt policies providing for installation of paved shoulders on rural county roads where appropriate.

d. Cities and the APO develop plans for bike routes on local streets parallel to main arterials, to enable bicyclists to "get across town" while avoiding congested streets.

e. Require bike parking as well as automobile parking; also explore separate standards for mopeds and scooters (a particular issue for the SCSU campus). Consider "right-sizing" off-street parking requirements.

2. Viable Transit Options: Increase the availability and use of public transportation between the Twin Cities and the greater St. Cloud region and between communities within the planning region.

The St. Cloud region is now well-positioned to build on the momentum and interest generated by the Northstar Commuter Rail. Bus ridership is increasing between St. Cloud and the current Northstar terminus in Big Lake, and reverse commuting to the SCSU campus is also increasing. Metro Bus, the region's primary urban transit provider, has undertaken a "Transit System Performance Analysis, System Redesign, Market Study and Long Range Plan Update" that will examine ways to increase the reach and effectiveness of the transit system.

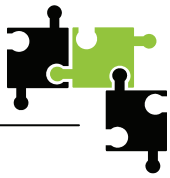
While funding for transit is always an issue, available funding could be focused on initiatives that would make transit use more comfortable and predictable. These initiatives could include:

a. Providing better infrastructure for high-frequency transit routes, such as improved shelters, lighting, and real-time information signage, to increase transit user safety and comfort.

b. Exploring the potential for using smaller buses on routes with lighter ridership.

c. Using transit to fill "gaps" in the trail system, emphasizing transit connections to trailheads and in between disconnected trails.

d. Improve the clarity of transit maps and schedules so that information is more readily accessible to new or occasional transit users.



e. Investigate the potential for a bike-share program like the new "Nice Ride" program in Minneapolis. A program of this type provides sturdy easy-to-use bikes for short rides within and around a downtown area, and can be very attractive to tourists and downtown employees.

3. Don't Build Your Way Out of Congestion: Address congestion primarily through improved land use planning, complete streets, and increased mode share for transit, bicycling, walking, and carpooling rather than roadway widening.

This initiative is essentially a "global" or philosophical approach to transportation and land use planning. Therefore, the action steps associated with this strategy are essentially those listed above under Strategies 1 and 2, in combination with the general actions listed below.

General Actions

The following general actions have been identified as key steps to move the Joint Planning District toward the goals for this Best Practice Area not selected as "initiatives" above.

I. Adopt policies that encourage or require street connectivity. In both suburban and rural areas, street design standards have tended to encourage cul-de-sacs and disconnected internal street networks. While cul-de-sac streets are popular among many homeowners and in some instances can support conservation designs in sensitive areas, they tend to push a disproportionate amount of traffic onto the collector and arterial streets from their single access points, as well as discouraging bicycle and pedestrian circulation.

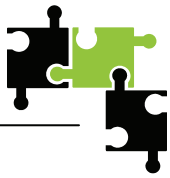
According to a recent publication by the Congress for the New Urbanism,[5]

> *"Streets in connected networks: Can improve emergency response times by providing several routes to any given address; and are safer for pedestrians, drivers, and emergency responders since they calm traffic below speeds that are more likely to result in fatal or serious injury collisions.*
> *Narrower streets in well-connected networks also help reduce stormwater runoff, require less energy to construct, and facilitate non-greenhouse gas emitting transportation alternatives like walking and bicycling."*

The LEED for Neighborhood Development rating system awards points for a high degree of street connectivity, beginning at a minimum of 200 intersections per sq. mi..[6]

[5] Congress for the New Urbanism, *CNU Report: Emergency Response and Street Design*, 2009. http://www.cnu.org/sites/www.cnu.org/files/CNUEmergency%20Response_FINAL.pdf

[6] LEED-ND Requirements are posted and updated at the U.S. Green Building Council website, https://www.usgbc.org/DisplayPage.aspx?CMSPageID=148



Where street connections are impractical, pedestrian connections should still be pursued. Sidewalks or paths can link otherwise disconnected streets and improve pedestrian safety on busy collector or arterial streets.

II. Continue to encourage walking by participating in the Safe Routes to School Program.

Minnesota's Safe Routes to School (SRTS) program is administered by MnDOT with federal transportation funds. Safe Routes grants may be applied for by schools, school districts, local governments, non-profits and many other organizations. Funds awarded under this program are also available for educational programs aimed at encouraging and facilitating safe walking to and from school. (The City of St. Cloud partnered with School District 742, the St. Cloud Area Planning Organization and other organizations to apply for a grant under the program in 2008 to install sidewalks in the Westwood School neighborhood.)

Comments at the May 27th meeting indicated some difficulties in gaining parent and school acceptance of the SRTS concept. An educational and outreach effort may help overcome these problems. Minnesota Department of Transportation (MnDOT) offers various educational tools, including a marketing toolkit (http://www.dot.state.mn.us/saferoutes/marketingtoolkit/index.html).
Blue Cross and Blue Shield's Center for Prevention has produced two new videos. The Safe Routes to School video shows how Red Pine Elementary School in Eagan supports more kids walking or biking to school. "Building a Walkable, Bikeable Community" tells the story of how community leaders have made strategic decisions to create an activity-friendly city in Hopkins (see www.preventionminnesota.com).

III. Start a car share program like HourCar or ZipCar.

IV. Encourage employers to participate in employer-sponsored transportation benefits programs, such as participating in the IRS Qualified Transportation Fringe Benefits Program and offering up to $230 per month in transit passes or $20 per month in transportation expenses for bicyclists.

V. Invest in bicycle wayfinding devices, such as signs, maps, and suggested routes to promote bicycling for commuters and recreationists of various abilities.

VI. Encourage employers to offer workplace shower access to promote bicycling.

VII. Install safe places to lock bikes, indoor bike parking, modern bike racks at work and recreation destinations.

VIII. Add bike lanes and establish bike routes on existing streets.

BEST PRACTICE AREA 6: RENEWABLE ENERGY

BEST PRACTICE AREA 7: ENERGY EFFICIENCY

Vision

The Joint Planning District is a state-wide model in the production of renewable energy and in energy efficiency for new and existing infrastructure. Renewable energy is readily available and is in use by all residents, businesses and governments. District heating and cooling has been implemented in central locations such as downtowns and campuses. Neighborhood energy production and distribution systems have been implemented in many locations.

Background

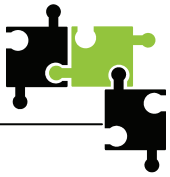
Local government can play a vital role in reducing energy use and carbon dioxide (CO_2) emissions. Energy efficiency saves taxpayers money and is the most cost-effective way to reduce greenhouse gas emissions. Cities can lead by example by reducing energy use of city buildings and by educating residents and businesses about how to reduce their energy use. Creating strategic partnerships with business and educational institutions can also help to educate the public and promote energy efficiency and conservation.

Solar, geothermal, and wind have great potential as alternatives to fossil-fuel-based energy generation. Solar electric systems use photovoltaic panels to convert sunlight into electricity, which is converted from direct current to alternating current by the use of an inverter. Solar electric systems have been the most expensive renewable energy option, but costs are coming down dramatically. Solar hot water systems can be cost effective and efficient.

Geothermal or ground-source heat pump system uses the earth's ability to store heat in the ground and water. The U.S. EPA has called geothermal the most energy-efficient, environmentally clean, and cost-effective space conditioning system available.[7] These systems are warranted for 25 to 50 years, are expected to last in excess of 50 years, and have typical paybacks from the initial investment of three to five years.

Wind power is often the most cost-effective renewable energy source. To be effective, wind turbines need to be placed high up in the air to avoid turbulence. This height factor makes the use of wind power most appropriate for large open spaces, making them ideally suited

[7] U.S. EPA. "Space Conditioning: The Next Frontier – Report 430-R-93-004," 1993.



to agricultural areas. Wind measurements are needed to confirm whether wind power is feasible for each locale.

Many utilities offer incentives for the installation and use of renewable energy alternatives.

Goals

A. Continue efforts to conserve energy.

B. Encourage and support the use of renewable energy in new construction and redevelopment, in both public and private sectors.

C. Recognize and create incentives for the use of renewable energy within each jurisdiction's system of environmental regulations.

D. Encourage investment in renewable energy technologies that will use existing infrastructure and create jobs and businesses.

E. Take advantage of local and regional hydroelectric, solar, wind, and non-food based biomass opportunities to support local energy security.

F. Gather building performance data that support the use and financing of renewable energy technologies such as geothermal and solar hot water.

G. Remove regulatory barriers to the use of renewable or more efficient technologies.

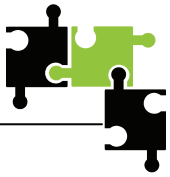
H. Support ongoing efforts to conserve energy through rebates and other utility incentive programs.

I. Encourage the use of renewable/ alternative fuels (see Transportation goals).

Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three initiatives prioritized focus on partnering with utilities, moving towards more renewable and cleaner sources of energy and changing overall behaviors that reduce energy consumption and demand.

1. **Use less:** Support ongoing efforts to conserve energy through rebates and other utility incentive programs.
    a. Utilize the Minnesota Municipal Energy Challenge as a format to promote energy efficiency. The Challenge involves teams of participants from government agencies, businesses, and other formal and informal groups. Promote the Challenge at least six times per year. www.mnenergychallenge.org



   b. Promote participation in utility-sponsored programs to the community at least four times per year. Establish goals and monitor participation levels.

   c. Use data from successful passive solar housing— learn from good examples and give a head start to projects wishing to incorporate this technology. (See work by Ed Mazria, AIA 2030, on passive solar)

2. **Transition to Clean:** Encourage and support use and financing of alternative energy technologies.

   a. Explore and research potential for installing a demonstration photovoltaic system on a city building.

   b. Partner with a school or business facility to install a solar thermal domestic hot water system.

   c. Offer tax credits, code revisions, and utility rebates for alternative energy technologies.

   d. Research potential for wind turbine installation, including measurements of wind factors.

   e. Consider implementing a Property Assessed Clean Energy (PACE) program. New legislation adopted in 2010 enables local governments to create voluntary programs that will allow property owners to finance solar, other renewable energy, energy efficiency, and electric vehicle plug-in improvements to their homes or businesses through voluntary property assessments. See http://www.cleanenergyresourceteams.org/greensteps .

3. **Measure and Monitor:** Gather building performance data that support the use and financing of renewable energy technologies such as geothermal and solar hot water.

   a. Select and promote local case studies of different building types and different energy technologies.

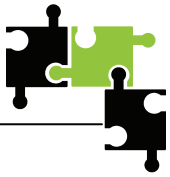
   b. Partner with local venders to promote renewable energy technologies.

   c. Create benchmarks and quantifiable goals for overall energy usage from renewable and non renewable sources.

General Actions

I. Market programs through local utilities for home energy audits.

II. Market Home Performance Rebate Program offered by Xcel, Stearns Electric, East Central Energy, and other providers as an incentive to make energy-saving home improvements and receive money in return.



III. Offer workshops for improved in-home energy efficiency: install programmable thermostats, add storm windows or replace old windows with new EnergyStar rated windows, add insulation, change furnace filters, etc.

IV. Offer programs to test efficiency of appliances and light fixtures; work with local businesses to offer promotions on energy efficient appliances and fluorescent light bulbs.

V. Encourage people to take ownership of their energy use and behavior by testing their energy use themselves. Promote Kill A Watts for purchase or for checkout at the library and other public places.

VI. Promote programs like the XCEL Energy and Neighborhood Energy Consortium Community Energy Efficiency Workshops to help people change their behavior and take control of decreasing their energy use.

VII. Offer an energy efficiency loan or grant to provide financing to businesses to improve their facilities in ways that decrease their environmental impact.

VIII. Replace traditional meters with Smart Meters to encourage decreased energy use.

BEST PRACTICE AREA 8: BUILDING PRACTICES

Vision

New buildings are right-sized, generating their own energy, located to take advantage of existing infrastructure and maintain neighborhoods, respecting natural habitat and productive agricultural land. Existing buildings are re-purposed and retrofitted to take advantage of embodied energy, and all new buildings surpass state energy codes enough to be net zero energy users. Secondary markets are available for recycling of construction waste materials.

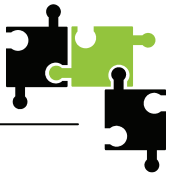
Background

The application of sustainable principles and green building practices is central to how sustainability will be perceived, implemented and measured. Buildings consume nearly 70% of energy produced, and contribute up to 40% of greenhouse gas emissions, so ensuring that buildings are energy efficient and thereby reducing energy demand and greenhouse gas emissions must become the new standard. A variety of programs exist to address new construction (public and private) and existing buildings, and it is equally important to focus on education and training in order to build knowledge base within the community and garner support for implementing sustainable building practices.

Energy Star is a U.S. EPA program which applies to products and buildings. The website, www.energystar.gov offers links to resources, with Energy Star rated products, and tools for homeowners wanting to improve energy efficiency of their residences.

B3-MSBG (Buildings, Benchmarks and Beyond, Minnesota Sustainable Building Guidelines), developed in 1998 and revised in 2009, is a rating system developed through a partnership between the University of Minnesota, Architects, Engineers, and others, and is specific to building design in Minnesota. Version 2.1 is similar to LEED™ in intent, but is performance-based, and focuses on improving building performance and quality. If bond monies are received from the State of Minnesota for either a new or renovation project, the use of B3-MSBG rating system is required – there are few exceptions. Go to http://www.msbg.umn.edu for information and downloads.

The **LEED™** rating system was first issued by the U.S. Green Building Council (USGBC) in 2001, and has been through multiple revisions, most recently in 2009. It is a point-based, prescriptive system, and has been adopted as a standard by numerous cities across the U.S. www.usgbc.org



B3 and LEED are most useful for new building construction. The rating systems are most effective when they are implemented and agreed upon by all stakeholders in the project – client/owner, architect, interior designer, engineer, contractor, facility manager, and a cross-section of end users.

MN GreenStar is a residential-based green building standard and certificate point-based program with similar categories to LEED (Energy Efficiency, Resource Efficiency, Indoor Environmental Quality, Water Conservation, Site and Community Impacts). This program promotes healthy, durable, high performance homes. An online checklist is available for new homes as well as for residential remodeling projects. Third-party verification is fundamental to the rating system and assures homeowners that the new home or remodeling project performs as designed. The GreenStar rating system is supported by a mandatory green education program for architects, designers, builders and remodelers, as well as general education for homeowners, lenders, real estate agents, and public officials. www.mngreenstar.org.

Goals

A. Employ rating, benchmarking and monitoring systems for building performance, including Energy Star, B3 (Buildings, Benchmarks and Beyond), LEED, and the Sustainable Sites Initiative.

B. Design buildings to facilitate their reuse.

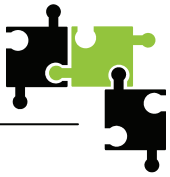
C. Educate building occupants and the general public about the energy savings inherent in efficient building performance and support education efforts with benchmarking and monitoring of building performance (see Goal A).

D. Recognize and conserve the embodied energy within buildings and building materials. Encourage the use of both locally-produced and other environmentally preferable building materials as well as reduction and eventual elimination of construction waste through Construction Waste Management practices.

E. Work to increase the amount of building materials that can be re-used and provide support to ease the process to certify re-use of structural materials.

F. Support deconstruction of buildings as a method to salvage usable materials, and further reduce construction waste.

G. Build on the activities of the private sector by engaging private sector volunteers to provide educational information on their innovative activities.



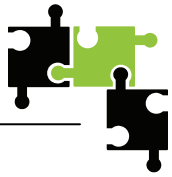
Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three initiatives prioritized focus on documentation in order to set targets for improvement, education and public engagement to garner public support, and deconstruction for salvage and market potential for sale and reuse of materials.

1. **Document Baseline and Set New Targets;** Employ rating, benchmarking and monitoring systems for building performance, including Energy Star, B3-MSBG (Buildings, Benchmarks and Beyond, Minnesota Sustainable Building Guidelines) , LEED, and the Sustainable Sites Initiative.
    a. Calculate CO_2 emissions from individual public buildings, including publicly-owned recreational and utility buildings.
    b. Audit (or re-commission) all buildings in the bottom third of the energy performance ranking and implement all energy efficiency opportunities that offer a payback under 5 years.
    c. Enter yearly public building data into the Minnesota B3-MSBG database and rank buildings in regard to energy performance.
    d. Calculate CO_2 emissions from wastewater treatment, water towers, and lift stations.
    e. Work with local school districts to ensure that all schools are built to a green building standard.
    f. Encourage private property owners (residential and commercial) to submit data to Energy Star.

2. **Educate and Engage Public:** Educate building occupants and the general public about energy savings inherent in efficient building performance and support education efforts with benchmarking and monitoring of building performance.
    a. Encourage property owners/managers to incorporate signage that provides information on the energy efficiency features of buildings.
    b. Encourage building managers to share information regarding building performance.

3. **Renovate First, Deconstruct and Sell Next, Demolish Not:** Recognize and conserve the embodied energy within buildings and building materials; encourage the use of both

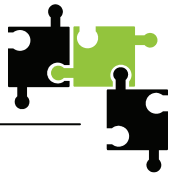


locally-produced and other environmentally preferable building materials as well as reduction and eventual elimination of construction waste through Construction Waste Management practices; support deconstruction of buildings as a method to salvage usable materials and further reduce construction waste.

Existing buildings represent a significant investment by the community in resources and materials, and demolition should be avoided. Buildings should be seen as an investment to be maximized, and should be evaluated for potential reuse, then renovated appropriately. Historic buildings in particular, serve an important role in the community, and maintain the historic connection to place-making. When demolition is unavoidable, a building should then be evaluated for potential to deconstruct, and salvage all usable materials. Construction and demolition waste accounts for 20% of the solid waste stream, so deconstruction can divert a large percentage of the building materials from the landfill.

Deconstruction has multiple positive effects: reclaiming materials for reuse reduces the need for virgin materials, which in turns reduces emissions and energy use from refining and manufacture of new materials. When done on a local level, transportation costs and emissions are reduced from transport of materials from suppliers. On the business-side of this equation, deconstruction can support the community by providing local jobs. There are models around the country that serve as examples of deconstruction operations, establishing markets for product in municipalities that have revised codes to allow the use of salvaged materials.

a. Develop and adopt historic preservation ordinances that encourage adaptive reuse, with attention to energy and resource conservation, waste reduction and recycling of construction waste.
b. Work with local schools to repurpose space into non-school uses, with attention to sustainable building design.
c. Work with local school districts to ensure that all new or remodeled schools over a specified dollar amount are built to a green building standard.
d. Provide incentives, such as density bonus, to builders who build to green building standards.
e. Review and adapt building codes to accommodate reuse of salvaged material.
f. Continue to explore options for making recycling of sheetrock cost-effective. (Noted problems with a potential start-up recycling business.)
g. Educate residents, developers and builders to understand the value of building materials, based on life-cycle assessment.



h. Require that municipal buildings receiving city financing over a specified dollar amount meet B3-MSBG standards.

i. Consider establishing green building standards as a requirement or criteria for consideration of conditional use permit, variance or rezoning requests (this provides an opportunity for education).

General Actions

I. Offer incentives: to builders, homeowners and commercial markets to encourage sustainable building practices.

II. Provide technical assistance: from college professors, professionals and builders in the building industry, and the sustainability committee. Make information and resources readily available and easy to find.

III. Review barriers to see what regulatory institutions are limiting or impeding innovation in green/sustainable building.

IV. Set voluntary green building targets and discuss mandatory requirements that could be reviewed annually for appropriate updates.

V. Publicize challenges and successes of early adopters of voluntary green building targets. Use these examples to show what can be accomplished and how. Include links to products and information to help others act on similar ideas.

VI. Capitalize on existing buildings and infrastructure which represent significant investments of resources and materials, and in many cases, are linked to community history. Always evaluate for reuse/repurpose opportunities. Take advantage of preservation tax credits, grants and incentives which can make projects economically feasible.

VII. At the city level, evaluate and maintain existing stock of buildings by first making reduction of energy consumption a priority.

BEST PRACTICE AREA 9: COMMUNITY HEALTH

Vision

Joint Planning District residents have a high quality of life rooted in healthy natural, social, and economic environments.

Background

Community health is a key component of a sustainable community. Contrary to conventional thinking, community health involves more than providing biking and walking trails as a means to promote the physical fitness of residents. At its core, community health is really about addressing basic human needs, which includes physical health, but it also includes providing opportunities for participation, leisure, creation, identity, freedom and other basic human needs (refer to the work of the economist, Manfred Max-Neef for additional information). It is important to recognize and understand the strong connections that exist between community health and the natural, social, and economic environments that contribute to a sustainable community.

Goals

A. Promote the availability and use of locally, humanely, and sustainably produced healthy food. (Refer to Best Practice Area 17: Food and Agriculture Goals for additional information.)

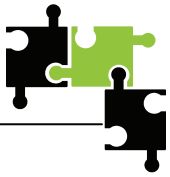
B. Use a variety of means, including education and regulation, to help ensure that the Joint Planning District has clean indoor and outdoor air and water and other physical conditions necessary to sustain community health.

C. Work with government agencies, schools, non-profit organizations, and others to ensure all residents have access to quality physical and mental health care and support services.

D. Create interconnected, walkable, and bikable communities that reduce our use of fossil fuels and that promote healthy, physical activities that can help reduce the obesity rate and promote overall fitness.

E. Enhance access to and development of natural and cultural amenities and activities as a means to build a strong sense of community for the region and the individual communities within the region.

F. Work with government agencies, non-profit organizations, businesses, industries, and others to build a sustainable economy in the region that includes strong employment opportunities with good living wages.



G. Use Crime Prevention through Environmental Design (CPTED) techniques to help ensure that the Joint Planning District is a safe and attractive community.

Initiatives and Action Steps

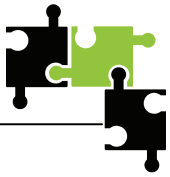
The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability.

The first initiative refers to the value of getting people to venture outside the confines of their work and/or home and become involved in the community in ways that benefit the community and themselves. For some, this may involve community gardening; for others it may involve working with organizations like Habitat for Humanity; or, it may involve participating in community celebrations. There are countless opportunities for people to get involved in the community in ways that can help meet basic human needs and build a strong sense of community. This will in turn help strengthen community health.

The second initiative recognizes that the area's economy cannot be considered apart from the area's social and natural environments. This initiative focuses on the concept that a strong economy is dependent, in part, on a healthy livable community that meets basic human needs. Those communities that proactively work with businesses and others to ensure that the community has ample ways to help meet basic human needs are in a far better position to have a sustainable economy than those that simply allow time to pass and the status quo to continue.

The third initiative focuses on a more conventional approach to community health, which involves providing biking and walking trails that benefit our physical health as well as our natural and economic environments.

1. **Animate the system:** Provide activities that will get people outside and build a strong sense of community.
    a. Work with neighborhoods, organizations, and others to support efforts such as community gardens that can meet multiple basic human needs, including providing healthy food, leisure opportunities, and participation in the community.
    b. Use a variety of means to encourage government employees, businesses, and others to participate in service activities that promote a healthy community. For example, encourage employers to allow employees time off work to participate in community service events.



c. Continue to program a variety of activities and celebrations that cater to a broad range of residents. For example, continue to program fun runs and other parks and recreation activities. Also work with the Chamber of Commerce and others to promote community celebrations and activities that help build a strong sense of community.

d. Provide (or support others in their efforts to provide) community events and celebrations that contribute to a strong sense of community. Ensure that the events are held in a sustainable manner.

e. Develop and implement Crime Prevention through Environmental Design (CPTED) techniques to help ensure that the Joint Planning District is a safe and attractive community in which people are not afraid to participate in outdoor activities.

f. Create active, lively, and secure open spaces.

2. **A strong economy does not exist in a vacuum:** Promote economic sustainability through livability and community health.

a. Work with businesses, industries, and others to develop a shared understanding of the links between economic sustainability and community health.

b. Market and support the creation of sustainable businesses in the Joint Planning District, especially those that would have a synergistic relationship with existing sustainable businesses and institutions of higher education.

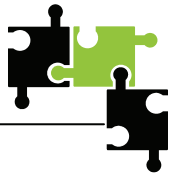
c. Retain and support local businesses and industries. Strive to enhance their capabilities to meet the needs of local and regional customers in a sustainable manner.

d. Coordinate with energy providers and others to help businesses conserve energy and resources and reduce operating costs.

e. Coordinate with businesses, industries, and others to explore opportunities for the community and region to stand out as a leader in sustainable business and community development.

f. Take advantage of the savings that can be achieved through more compact development patterns. If feasible, pass along any savings to developers and the public.

g. Recognize the relationship between community health, livability, multi-modal transportation options, and the resulting attractiveness of the region for future investment.



3. **Promote fitness on the road to sustainability:** Create interconnected, walkable, and bikable communities that reduce our use of fossil fuels and that promote healthy, physical activities that can help reduce the obesity rate and promote overall fitness.

   a. Develop, periodically update, and implement a pedestrian and bicycle trails master plan that provides important bicycle and pedestrian connections throughout the community and region.

   b. Work with the Safe Routes to School Program to facilitate the ability of kids to safely walk or ride their bikes to school.

   c. Work with others to promote walking and bicycling programs.

   d. Provide staff opportunities to bicycle or walk to meetings, when feasible.

   e. Help promote and/or support bike or walk to work programs and celebrations.

   f. Provide incentives for uses that participate in qualified walk or bike to work programs. For example, allow for a reduction in the amount of required parking spaces.

   g. Where feasible, cluster critical services near residential and employment centers so that more people have the opportunity to walk or bike to those services.

   h. Adopt and implement standards for streets and trails that ensure safe and universally accessible transportation modes.

   i. Work with the state and with school districts to rein in "school sprawl", which involves excessive reliance and busing, excessive acreage requirements, acquisition and development of school sites distant from urban services, and then forcing communities to extend those services.

General Actions

The following general actions have been identified as key steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.

I. Where appropriate, consider opportunities to develop organic community gardens that are readily accessible to the public. Identify existing underutilized public and private land, including public parks and along public trail corridors. Also, work with developers to integrate food gardens into new subdivisions, where appropriate. Promote "Plants in the Ground".

II. Identify and remove inappropriate zoning obstacles to local food production. For example, consider adopting appropriate ordinances for the keeping of hens and honeybees on residential properties.

III. Strive to use locally, sustainably produced food at publicly sponsored events. Encourage others to do the same.

IV. In coordination with applicable agencies, continue to review, refine, and enforce environmental regulations.

V. Use green cleaning products and environmentally safe landscape maintenance products to maintain public facilities. Encourage others to do the same.

VI. Use LEED, B3, Sustainable Site Initiatives, and other tools to help ensure that buildings and sites are energy efficient and healthy.

VII. Work with neighboring and overlapping jurisdictions and organizations to conduct a health impact assessment of the region. Develop a plan to address concerns.

VIII. Promote accessibility and availability of community health programs to all residents, regardless of income.

IX. Promote the preservation and restoration of historic buildings and landscapes that help foster a distinct sense of place.

X. Continue to encourage strong property maintenance and enhancement activities, such as promoting neighborhood cleanup days and awarding maintenance and renovation activities.

BEST PRACTICE AREA 11: HEALTHY RURAL AND URBAN LANDSCAPES

Vision

The Joint Planning District supports healthy, abundant, and diverse landscapes that enrich communities and provide environmental and economic benefits to the region.

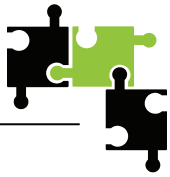
Background

The landscape of the St. Cloud Region has changed dramatically since European settlement. The Region sits in the zone of transition from prairie to the west, and hardwood forests to the east and soils, topography, hydrology, and the influence of fire played a large role in determining the pre-settlement ecosystems. These conditions created a diverse mosaic of ecosystems across the region including prairie, oak savannah and oak openings, and forests along waterways and in protected areas.

However, as European settlement began to dominate the region, this rich mosaic turned almost exclusively to agriculture. Agricultural lands have evolved over time into single species monocultures of mainly corn and/or soybeans. More recently, rich agricultural lands are being converted to residential, commercial, and industrial development as the Region's cities expand outward. This new landscape is generally made up of impervious surfaces, turf grass, and selected plantings of deciduous overstory, coniferous evergreens, and ornamental trees. Additionally, new development often impedes on and destroys some of the remaining healthy landscapes and ecosystems that had not yet been plowed under.

Both the agricultural and developed landscapes currently require a significant amount of inputs to make their landscapes productive and appear healthy. These inputs consist of massive amounts of fertilizers, herbicides, and pesticides, as well as the embodied energy to create, transport, and apply these inputs on the landscape. Additionally, the rich soils of the prairie and forest landscapes have been mined of their nutrients and are often compacted to the point that they function as an impervious surface. The continuing cycle of added inputs and poor soil structure leads to large amounts of contaminated runoff reaching surface waters. Additionally, the poor root structure of turfgrass, and the often bare soils of agricultural areas often speeds up erosion and runoff and provide minimal habitat opportunities.

The goal of this BPA is to protect the remaining healthy landscapes and begin to improve the overall landscape by creating opportunities to reintroduce beneficial elements of the pre-settlement landscape that will provide environmental services to the community. Creating



Healthy Rural and Urban Landscapes will provide a number of benefits to the Region by 1) reducing the need for toxic inputs into the landscape (e.g. fertilizers, pesticides, and the use of gasoline engines) and 2) creating landscapes that provide multiple functions to their communities. A few of the sustainable benefits that healthy landscapes provide include improving air quality, treating stormwater, mitigating urban heat island effects, protecting biodiversity, absorbing carbon dioxide, and adding an aesthetic that celebrates the uniqueness of the St. Cloud Region.

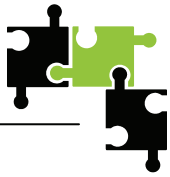
The initial focus of this BPA was limited to Urban Forests but was expanded to include rural and developing areas because of the historically strong agricultural community and the development pressures throughout the region. As development occurs, there are many impacts to landscapes as they change between land uses. Protecting and creating healthy landscapes is an important part of sustainability throughout the region.

The areas of greatest concern are protecting the remaining high quality landscapes and increasing the health of existing landscapes that currently deliver few environmental services to the community. This BPA overlaps with several others, especially BPA's 13 and 14, and can be combined to produce dramatic sustainability results. An example of a simple, high quality stream buffer in an agricultural area has the potential to protect the Mississippi and it's tributaries, provide habitat corridors through agricultural areas, and increase the sustainability of that farm field. High quality urban trees have the ability to absorb stormwater, improve air quality, capture greenhouse gases, lower cooling costs, and prolong the life of pavements.

A valuable resource for creating healthy landscapes, whether retrofitting or new development, is the Sustainable Sites Initiative (SSI) – "an interdisciplinary effort by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower center at the University of Texas at Austin and the United States Botanic Garden to create voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices" (from http://www.sustainablesites.org/). The guidelines provide a wealth of information on the planning, design, materials selection, construction, and maintenance of sustainable sites and landscapes. SSI is anticipated to be incorporated into future versions of LEED.

Goals

A. Gather data to support urban forestry and natural resources protection and to quantify economic and other benefits to communities (ex. Create and maintain tree inventories for all municipalities, complete Natural Resource Inventories NRI).



B. Protect Environmentally Sensitive Areas (ESA), high quality existing trees and preserved forest patches threatened by development.

C. Increase the percent of tree cover and the diversity of native tree species in urban and suburban areas and in agricultural hedgerows and existing woodlots.

D. Increase the amount and quality of native prairie patches throughout the region including aquatic buffers, transportation corridors, parks/open spaces, and agricultural conservation areas.

E. Increase the number and type of gardens and natural landscaping in urban and suburban areas (e.g. backyard and community/neighborhood food gardens, permaculture gardens, raingardens, native landscaping, woodland gardens, etc.)

F. Reduce and control the establishment and spread of invasive species in all landscapes.

G. Reduce the amount of high input landscapes that depend on pesticides, herbicides, and regular irrigation, like turf grass, by promoting the use of native vegetation.

H. Enhance open spaces to function as ecological systems providing benefits to the region's biota as well as humans.

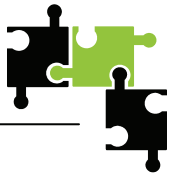
I. Protect agrarian nature of rural areas including viewsheds.

Initiatives and Action Steps

The following three initiatives for action were identified through public input and reflect local stakeholder views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. These initiatives were identified as important to protect and make the St. Cloud Region's landscapes healthier. Public input participants noted that much work has already been done throughout the region to identify and protect Environmentally Sensitive Areas (ESA's) with the use of Natural Resource Inventories and County Biological Surveys. The group agreed that further improvements could be made in protecting these resources; however, they felt that addressing more highly degraded landscapes would greatly improve the overall health of the Region's landscapes.

Several members of the group also felt that timing was important, and the following initiatives could take advantage of the public's perceived interest, level of education, and desire to address landscape issues in the community. Generally, people are more conscious of raingardens, xeriscaping, and/ or native landscaping than they have been at any other time.

1. **Healthy Parks Build Healthy Communities:** Reduce and control the establishment and spread of invasive species in all landscapes and enhance open spaces to function as ecological systems, providing benefits to the region's biota as well as humans. Resources such as the Sustainable Sites Initiative contain guidelines, benchmarks, and



resources for creating sustainable landscapes - *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009,* from http://www.sustainablesites.org/.

a. Integrate native landscaping into existing publicly owned parcels: a) create a policy that new public projects and replacement landscaping must have 70% of plants be native or non-invasive drought tolerant species b) create new landscaping areas within publicly owned areas that contain a minimum of 70% native plant or non-invasive drought tolerant species.

b. Invasives: Incorporate an active multi-year invasive species management plan with an integrated pest management strategy as defined in Prerequisite 4.1 of *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009,* from http://www.sustainablesites.org/. This approach focuses on combining biological, cultural, physical and chemical tools in a manner that minimizes risks. Require all new developments preserving or creating natural resource based open spaces, as a part of their development, to develop and implement an active multi-year invasive species management plan.

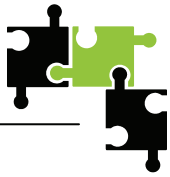
    i. Example- buckthorn control strategies:

        1. Organize regular volunteer buckthorn removal events.
        2. Plant more native fruit producing trees and shrubs to provide alternate bird food to invasive buckthorn berries.

c. Planting: Discourage or ban the sale and planting of horticulturally popular, invasive species such as Norway and amur maples, black locust, Russian olive, Siberian elm and other shrubs and perennials from the MnDNR Invasive Species Lists.

    i. Use only plants with a minimum nursery standard of ANSI Z60.1-2004 American Standard of Nursery Stock. Use only plants that are nursery grown, legally harvested, or legally salvaged for reuse.

d. Soils: Enforce existing MS4 requirements for erosion and sedimentation control. Eliminate or reduce the use of heavy machinery that compacts soil, most notably under existing trees. Encourage the use of BMPs that loosen the soil and incorporate organic matter into the soil prior to planting, or aerate soils in existing landscapes that show signs of compaction. Soil improvement BMPs can be incentivized within stormwater utilities and appropriate Low Impact Development Ordinances (see BPA 13).



2. **Just Say No To Drugs for the Landscape:** Reduce the amount of high input landscapes that depend on pesticides, herbicides, and regular irrigation, like turf grass, by increasing the number and type of gardens and natural landscaping in urban and suburban areas (e.g. backyard and community/ neighborhood food gardens, permaculture gardens, raingardens, native landscaping, woodland gardens, etc.)

    a. Ordinances: Change local zoning ordinances to allow native landscaping and the use of native grasses across all land uses. Many current regulations require mowing before grasses reach a certain height or go to seed – this prevents native plantings.

        i. Revise any ordinance that would disallow the use of natives or the installation of small scale stormwater management facilities. Model ordinances are available as tools to define native plants as separate from weeds and to separate native landscaping from one that is overgrown in ways that adversely affect human health and safety. Example model municipal ordinances include the following:

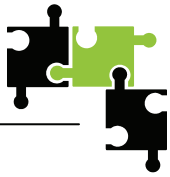
            1. Wild Ones – Model Municipal Ordinance, from http://www.for-wild.org/weedlaws/model_ord.html
            2. CR Planning – Ross, Brian Community Resources Planning, Inc., "Model Ordinances for Sustainable Development – Landscaping and Maintenance of Vegetation", from http://www.crplanning.com/pdfs/susdo6_09/landscaping.pdf

    b. Education: Create an educational demonstration site(s) for different types of gardens to educate homeowners, business owners, and the general public. Continue constructing in public places or an "adopt a street or block" strategy that could retrofit public streets with raingardens. Projects could occur as streets are being reconstructed or repaired. Universities in the region are a potential partner for assistance including: design, student labor, funding, education, etc.

    c. Create a "Green Team" of educated volunteers to help implement and maintain one to three high profile healthy landscape projects that can be used as an educational tool to teach the rest of the community.

    d. Incentives: Facilitate existing SWCD, Watershed Districts, and Counties' cost share and education programs and consider supplementing. Provide incentives through stormwater utilities and regulations to reduce the amount of turf and impervious surfaces. Consider a tiered pricing structure for water use to encourage reductions in irrigation.

    e. Resources: Create a single resource that acts as a clearinghouse of information, directing people to local sources of compost, mulch, and other landscape materials, as well as sources of existing cost share and grant funding from SWCDs, Watershed Districts, and other agencies. Provide links to education for homeowners,



contractors, and designers. This resource should be web based with critical links to other information. Signage at demonstration sites as well as links from community newsletters could all refer back to this information clearinghouse.

3. **More Trees for Healthy Streets:** Increase the percent of tree cover and the diversity of native tree species in urban and suburban areas, specifically linear roadway corridors, and in agricultural hedgerows and existing woodlots.

   a. Tree Planting - Quantity: Begin an aggressive tree planting program on public rights-of-way or adjacent private property planting easements and greenways with goal of increasing aerial tree cover 30% within 10 years. Increase the proportion of vigorous native or non-invasive species where appropriate. Increase the proportion of overstory trees to ornamental trees and balance the diversity of tree species so that no one tree is dominant.

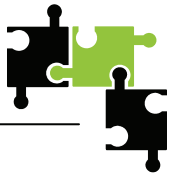
   b. Tree Planting – Quality: Create design standards and planting number minimums for each class of street, as well as communities in commercial areas, residential areas, natural areas, and agricultural areas. Planting goals should be based on species mix and percent canopy cover. Coordinate with utilities mapping and design to minimize conflicts. Create tree planting standards that include minimum soil volumes per tree, and standard details showing tree pit dimensions, planting techniques, cover type and subgrade drainage. See BPA 11 Initiative 1c for minimum quality of plant material.

   c. Tree Planting – Maintenance: Reject low quality, "park grade", and trees with girdled roots. Choose trees with lower maintenance needs, such as choosing common varieties instead of specialty cultivars when appropriate. Conduct formative pruning after tree establishment to reduce pruning needs when trees are mature. Use locally grown materials when possible. Create design standards that include minimum distance from existing and proposed utilities to minimize conflicts. See BPA 11 Initiative 1c for minimum quality of plant material.

   d. Develop a significant tree protection and replacement ordinance for all communities that protect significant trees and requires significant replacement ratios. Realistically assess proposed tree impacts on site development plans submitted for review and provide stronger follow-up during construction phases to ensure existing and planted tree survival.

   e. Incentivize tree planting - develop additional ordinances to protect and plant trees – e.g.- giving stormwater credit for trees on a site (see the Watershed Forestry Resource Guide for links to municipalities giving stormwater credit for trees http://www.forestsforwatersheds.org/storage/stormwater%20credits.pdf).

General Actions



The following general actions have been identified as measures that will allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above. These actions are based on the input of stakeholders throughout the planning process.

I. Gather data to support urban forestry and natural resources protection and to quantify economic and other benefits to communities

   a. (ex. Create and maintain tree inventories for all municipalities, complete Natural Resource Inventories NRI).Contact agencies (DNR, County parks, Extension Service, others) to identify and compile list of existing inventories of rare/critical/vulnerable natural resource areas.

   b. Create a web based interactive mapping tool to keep information current. A tool like GEOMOOSE allows queries, uploading, text, and maps that could be accessed by a broad range of users.

II. Protect Environmentally Sensitive Areas (ESA), high quality existing trees and preserved forest patches threatened by development.

   a. Create a Tree Preservation Ordinance – penalty for removing significant trees and woodlands.

   b. Public purchase and enhancement of parcels as they're available – continue throughout region, not just St. Cloud.

   c. Use soil surveys and natural resources to frame development.

   d. Promote Conservation Design Developments and Low Impact Development – provide density incentives for protecting Natural Resources areas.

III. Increase the amount and quality of native prairie patches throughout the region including aquatic buffers, transportation corridors, parks/open spaces, and agricultural conservation areas.

   a. Agriculture – farm visit demonstration site for other farmers and the public – tours of sustainable farm techniques as well as buffers, composting, etc.

   b. Provide training for contractors, installers, designers, maintenance construction practices – Part of a Job Training program.

   c. Build/ expand upon current County, State, and National conservation programs such as Conservation Reserve Program, buffer and shoreline cost-shares.

IV. Protect agrarian nature of rural areas including viewsheds.

   a. Conservation design ordinances that protect natural resources and Prime Ag. Land – consider density bonuses for protection.

   b. Create other ordinances and easements to preserve important viewsheds – Conservation and Scenic Easements.

BEST PRACTICE AREA 12: SUSTAINABILITY EDUCATION

Vision

Sustainability education generates a shared understanding of sustainability, vision, action planning and engagement among all citizens. The Joint Planning District builds on its existing stewardship ethic to engage the entire community in sustainability efforts.

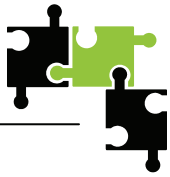
Background

According to the United Nations Agenda 21 approved by the U.S. and all the other 177 countries attending the U.N. Conference on Environment and Development:

> *"Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues...Both formal and non-formal education are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication"*

To underscore the need for sustainability education, the United Nations General Assembly declared 2005-2014 as the UN Decade of Education for Sustainable Development.

The Third Minnesota Report Card on Environmental Literacy documents the results of the third statewide survey concerning environmental literacy of adults in Minnesota conducted in 2007. It found that only about 40% of Minnesota adults believe that they are knowledgeable about environmental issues and problems. Almost 38% of the state's adults have a below-average level of knowledge about the environment. While 44% of people thought they were knowledgeable about energy issues, only 13% actually earned an A or B (five out of five correct or four out of five correct respectively) on energy knowledge. And fully one-third (33%) earned a failing grade (0-1 questions correct), and 31% only answered two questions correctly. The vast majority of Minnesotans (93%) wanted schools to provide environmental education.



Goals

A. Create a shared understanding of sustainability in public and private K-12 schools, vocational schools, colleges, universities and other higher education institutions, government agencies, businesses, faith organizations, service organizations, foundations and other non-profits that includes learning by practice and hands on activities.

B. Create a vibrant web presence for this sustainability effort.

C. Utilize traditional and new media (e.g., TV, web, newspapers) to distribute creative, informative and impactful messages and stories about sustainability that will create broad public support for sustainability among opinion leaders and the public.

D. Develop a coordinated creative media and public information campaign that is both broad-based and targeted to specific groups to build awareness, generate broad support for sustainability and motivate groups to become active.

E. Encourage every public, private and non-profit institution in the Joint Planning District to make a commitment to sustainability and develop a public sustainability vision, baseline assessment, goals, action plan, metrics and annual report.

F. Set practical, measureable community-wide sustainability goals and indicators which are widely publicized and incorporated into a public annual report.

G. Create an annual sustainability recognition and award program that recognizes individuals and institutions in every sector at an annual community-wide sustainability celebration.

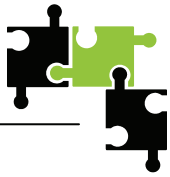
H. Identify the best examples of sustainability in every sector and offer tours and information about their practices.

I. Create an area-wide sustainability leadership team made up of leaders from the public, private and non-profit sectors to help coordinate on-going sustainability efforts in the community.

J. Develop and enhance green jobs training and economic development programs to utilize current and innovative technologies and maintain certifications for the local work force.

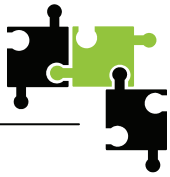
Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. Sustainability education offers perhaps the best "bang for the buck" in terms of taking steps toward sustainability and can provide other benefits, such as helping to build the community and save money for business, government and homeowners. These three were selected because it was felt that



government must walk the walk if it's going to ask others to do the same. It was then felt that it was important to have community-wide sustainability education because approximately 95% of a community's energy use and greenhouse gas impact comes from business, citizens and the community. Third, there is a focus on educational institutions because of the significance of their role in education, as well as the environmental impact of their operations

1. **Municipalities Educating Themselves to Practice What They Preach:** Individual City and County Sustainability Education and Commitment.
    a. Individual City and County Sustainability Education, Baseline Assessment, Visioning and Action Planning – This is perhaps the most important step each governmental unit can take in becoming sustainable.
        i. First Workshop on Sustainability and NSF for Each City and County's Leaders – This is a critical opportunity for the leadership of each governmental unit to come together to all be on the same page and develop a shared understanding of sustainability, as well as a sustainability assessment, vision, and action plan. It also would allow the leadership to assess the value of utilizing the NSF as a tool for use throughout the government and community. The leadership should include elected officials, department heads and public commissions/boards.
        ii. The first half of the 7-hour workshop examines sustainability, the sustainability tipping point, a summary overview of the NSF, visioning, the story and purpose of the NSF, systems thinking, the science of the NSF, practical examples of the four principles of the NSF, and an easy, re-enforcing baseline assessment homework exercise. The second half of the workshop addresses questions and challenges, the homework assignment, a deepened understanding of sustainability, who's using the NSF, the benefits, case studies, small working groups (based on operating teams) doing the B-C-D process, group reports, next steps and evaluation.
        iii. The result is that the leaders will have a shared understanding of challenges and opportunities, with each working group having completed a preliminary assessment, overall vision and first steps in an action plan for their specific area. They'll know which items are easily implemented, inexpensive low-hanging fruit and those having a longer-term payback that will require budgeting or a capital investment. A discussion can then be held about how to integrate and prioritize those actions within and across departments.
        iv. NSF Presentations for All City/County Staff and Commission Members – One and a half hour presentations on Sustainability and the Natural Step



Framework would be conducted that would reach the rest of the city/county staff and commission members. This would build the basic understanding of sustainability and the NSF in a way that would engage the entire city/county and encourage them to be actively involved in the implementation. This is a critical element in the NSF's bottom-up approach and will help create the sustainability tipping point in each governmental unit. It will almost immediately pay for itself in terms of aligned teams, employee energy and retention, creative solutions by line workers, incorporation of the NSF in the staff's homes, schools and congregations, and more active community participation. There is no limit to how many participants there could be in any session.

v. Department Meetings – Each department would have a meeting where they would do their own departmental baseline analysis, create a vision and develop their action plan. This work will then be integrated in the larger plan.

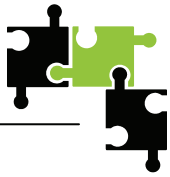
vi. City or County Sustainability Action Planning Meeting – This meeting will allow each city or county to integrate all of the baseline assessments, visions and action plans, while encouraging prioritization and integration across departments. It would incorporate input from the staff in each department and develop an integrated vision and action plan for the City/county.

vii. Ongoing Staff Sustainability Education – Sustainability education should be offered in various forms to city/county staff to deepen their knowledge on various aspects of sustainability. This could be done through presentations at staff meetings, lunch time brown bags and videos, online learning, study circles of books and case studies, and newsletter articles.

viii. Train-the-Trainer Program – The City/county should conduct a Sustainability and NSF Train-the-Trainer Program for interested city/county staff so that Governmental unit will have its own set of trainers to work with new employees and community groups.

ix. New Staff Orientation – All new city/county staff should go through an introductory session on sustainability and the Natural Step Framework led by the city/county of governmental unit trainers.

b. City or County Sustainability Resolution – Once the city or county leadership has fully experienced the NSF, they have the opportunity to make a public statement about the city or county's commitment to sustainability. They can pass a resolution stating that governmental unit will utilize the NSF as its guide to sustainability and develop a sustainability action plan. They would then become one of the first eco-municipalities in Minnesota and part of a larger national movement.



c. City or County of Sustainability Coordinator – The city or county should either create a new part-time position of Sustainability Coordinator or shift an existing staff person responsibilities (or perhaps two people to co-coordinate) so they can coordinate the city or county's sustainability efforts with the Sustainability Team, City Council/County Board, departments, commissions and a public Sustainability Commission. It is essential to have someone (or two people) serve as the point person for sustainability efforts and facilitate the Sustainability Team. In addition, they would provide sustainability resources to city/county staff, commissions and the public. The coordinator should have strong organizing, communication and facilitating skills, as well as knowledge about sustainability.

d. City or County Sustainability Team – The city/county should have a Sustainability Team to include a representative from each department and hold monthly or bi-monthly meetings to regularly discuss the progress each department is making in implementing its sustainability action plan. The departmental representative would serve a two-way role of sharing information with their department and bringing departmental discussions to the Sustainability Team. The meetings would be facilitated by the Sustainability Coordinator.

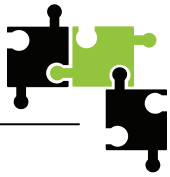
e. City or County Sustainability Commission – The city or county should establish a Sustainability Commission composed of community members that would work in conjunction with the Sustainability Team and regional effort to get public input and review the sustainability plan and ongoing efforts. The Sustainability Coordinator would staff the Commission.

f. Draft City/County Sustainability Plan – The Sustainability Team should take the departmental plans and integrate them into a proposed city or county sustainability plan and coordinate with the regional effort.

g. Public Comment on the Sustainability Plan – The City Council or County Board, Sustainability Team and Sustainability Commission should conduct at least one public presentation to get public comments on the proposed sustainability plan. That input would then be reviewed by the Sustainability Team and approved by the City Council or County Board.

h. Publication of Sustainability Plan – The Sustainability Plan and sustainability indicators should be posted on the website and promoted to the staff and public. A short version of the key goals should be printed and widely disseminated.

i. Ongoing Staff Communication – An internal city/county sustainability list serve should be created for anyone within the city/county to easily share ideas, challenges and questions.



j. Quarterly Departmental Sustainability Reporting – Each department should prepare a quarterly electronic report on its progress in implementing its sustainability action plan. This report would be disseminated to the City Council/County Board, Sustainability Team, and Sustainability Commission, as well as to city/county employees through e-newsletters and to the public through website postings and the City/county's newsletter.

k. Incorporation of Sustainability into Job Descriptions, Work Plan and Performance Reviews – Sustainability should be incorporated into each staff member's job description and work plan. It should then be made part of their annual performance review.

l. Sustainability Accounting System – The city or county should establish an accounting system that can track the costs and savings as well as key sustainability indicators by department from implementing the sustainability plan.

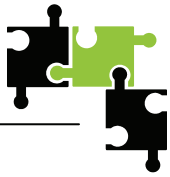
m. Ongoing Public Relations – Creative, engaging and inspiring stories should be written up and widely publicized on the website, newsletter, social media, news releases and posting at City Hall/County Seat about all the creative ways that employees have been sustainable.

n. Suggestions for Continual Improvement – An atmosphere of openness should be created for getting employee ideas on sustainability, including time at staff meetings and a suggestion box (including anonymous suggestions) at City Hall/County Seat that will be reviewed.

o. Annual Anonymous Employee Survey – To assure that departments are responding to employee concerns and to measure the overall attitudes of employees, an annual anonymous employee survey should be conducted by the Sustainability Coordinator in conjunction with City/County management.

p. Sustainability Indicators – The Sustainability Team, in conjunction with the Sustainability Commission (as well as the Minnesota Technical Advisory Panel and Sustainability Corps), should develop a set of key sustainability indicators that can be tracked over time to monitor the city/county's progress in achieving its goals and becoming sustainable. There should be a process for engaging community leaders and the public with final approval by the City Council or County Board.

q. Annual Sustainability Report and Review– The Sustainability Coordinator and Team will be responsible for creating an annual report describing the progress in meeting the goals and objectives specified in the Sustainability Plan. The report will summarize the costs and savings by department from the sustainability plan, as well as progress in meeting the sustainability indicators. This should be posted on the website and widely disseminated to the City Council or County Board, staff and the



public. The City Council/County Board should review the Annual Sustainability Report and give their comments and approval.

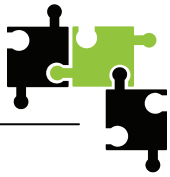
r. Annual Celebration and Awards – Based on the results in meeting the plan, there should be a fun, informative annual celebration for the staff with awards given to all those departments and individuals that meet their goals. In addition, awards should be given to everyone who has commuted to work by walking, biking, public transit or car pooling.

s. Annual Sustainability Planning – A process should be conducted whereby each department reviews and updates its plans for the coming year and then shares them with the Sustainability Team where they are reviewed and coordinated. The recommended plan would then be reviewed by the City Council or County Board and their comments brought back to the Sustainability Team for modifications and preparation of the final plan with approval by the City Council or County Board.

t. Local, Regional, National and International Networking – The City or County should become an active partner in various municipality sustainability efforts at all levels in order to learn about and share best practices. This would include the Alliance for Sustainability's Sustainable Community Network, the North American Eco-Municipality Network and ICLEI. It should also encourage department heads (Public Works, Finance, HR, Planning, etc.) to be active in their respective professional group's sub-group or committee to learn about sustainability practices that are specific to their field.

u. Seek Sustainability Awards – The City or County should seek awards, ratings and public acknowledgement in its efforts to become sustainable, both to increase the pride of staff and officials, as well as the public. This will also be important in establishing the city or county as a national sustainability leader, which will help draw business and increased funding. Some of the awards and acknowledgement will include the MN Environmental Initiative Awards, the Governors Pollution Prevention Awards and Sustainlane ratings.

v. Review of City or County Ordinances and Create a Unified Development Ordinance (UDO) - A review should be conducted of all city/county ordinances to determine whether they contribute to, or conflict with, sustainability and the NSF. Many communities have numerous conventional development ordinances that they have revised and updated over the years. As a result, often the ordinances gradually become uncoordinated, outdated, and inconsistent. A UDO takes all the pertinent development ordinances in the city/county (zoning, subdivision, wetlands, storm water management, etc.) and integrates them into a single, unified ordinance. The creation of a UDO would allow the city/county to develop an overarching or "systems" approach to integrating sustainability into the development process,



which is far more efficient and effective than a "silo" approach to development where each development ordinance tries to address sustainability issues separately. It overcomes a piecemeal approach and thereby saves money and creates a more consistent approach that reflects the city/county's sustainability values.

2. **Upping the Community Sustainability IQ:** Community Sustainability Education and Commitment

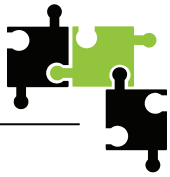
   a. Community-wide Sustainability and NSF Education, Assessment Visioning and Action Planning – Once the city/county has passed a Sustainability Resolution, it's important to expand the efforts to reach key community leaders and institutions.

      i. Community Leader Workshop on Sustainability and NSF – Using a format similar to the city and county NSF Workshop, there would be a two evening workshop on Sustainability and the Natural Step Framework for community leaders (and any city/county staff who were not able to participate in the earlier workshops or wanted to develop a deeper understanding than just the introductory presentation). The community participants that would be invited would be the leadership of the Chamber of Commerce, Rotary and other service clubs, congregations, healthcare institutions, nonprofits, and community groups. This will play an important role in building a solid base of support for the city or county's sustainability initiatives among county and other key opinion leaders, as well as encouraging the adoption of the NSF by institutions ranging from leading businesses and service organizations to hospitals and non-profits.

      ii. NSF Presentations for Community Leaders and Citizens – One and a half hour presentations on Sustainability and the Natural Step Framework would be conducted to reach other community leaders and citizens. This would build the basic understanding of sustainability and the NSF in a way that would inspire and engage the entire community and encourage them to live a sustainable lifestyle and be actively involved in the implementation. This will further the NSF's bottom-up approach and will help create the sustainability tipping point in the city or county.

      iii. Community Leader NSF Sustainability Action Planning – This meeting would provide the opportunity for a broad array of community leaders to develop an action plan for their institution. This will be an inspiring and interconnecting session that will help create the tipping point for sustainability in the community.

      iv. Public Community Workshops on Sustainability and NSF – Using a format similar to the city or county's NSF Workshop, there would be full Sustainability



and NSF workshops for businesses, service organizations, healthcare, congregations, neighborhood groups, nonprofits and the public to educate them and support them in developing their own sustainability visions and action plans. This will play an important role in broadening the base of support for the city/county's plan and engaging all community institutions.

v. Public Community NSF Sustainability Action Planning – Public action planning would be held for the public community participants to work on developing their institution's action plans. In addition to this being an inspiring experience, it will build collaboration between groups and play a major role in moving all of the community towards sustainability, create a network of groups and build political support for it.

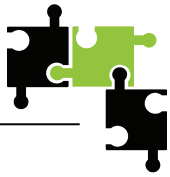
b. Community Sustainability Plan – Every business, school, nonprofit and other Government organization will be encouraged to submit their sustainability plan to the Sustainability Commission and have it published as part of a Community Sustainability Plan that will be widely publicized on the website and newsletter.

c. Ongoing Public Relations – Creative, engaging and inspiring stories should be written up and widely publicized on the website, newsletter, social media, news releases and posting at City Hall/County Seat about all the creative ways that organizations and citizens have been sustainable.

d. Annual Sustainability Report and Review– The Sustainability Commission will create an annual report describing the progress made by businesses, schools, congregations and organizations in meeting the goals of their sustainability plans. The report will also seek to summarize the costs and savings by each organization. This should be posted on the website and widely disseminated to the City Council/County Board, staff and the public.

e. Annual Community Sustainability Celebration and Awards – Based on the results in meeting each institution's sustainability plan, there should be a fun, informative annual celebration for businesses and community groups recognizing and awarding all those who meet their goals. In addition, there should be some individual awards recognizing individuals who've done the most to bring about sustainability or lead a sustainable life.

f. Early Adopters Group – The city/county should encourage the creation of an Early Adopter's Group that would be made up of businesses, schools and community groups that have committed to using the NSF and developed an action plan. They would hold regular meetings to further their efforts and encourage peer-to-peer learning. The participants would be publicly recognized by the city or county on the website, through news releases and in the newsletter.



g. Ongoing Networking and Communication – There should be an email list serve and facilitated quarterly meetings of community groups to continue to share new ideas and support each other in becoming sustainable.

h. Ongoing Community Sustainability Education – The city or county should utilize a range of fun, positive and informative approaches for continuing to educate and engage the public in its sustainability initiatives, including: website, emails, cable television, newsletter, sustainability and NSF Study Circles (groups that would meet monthly to see videos or read resources like *The Natural Step for Communities*), contests (like school art), and public events.

i. Annual Sustainability Planning – A process should be conducted whereby each community institution should be encouraged to review and update its plans for the coming year and then share them with the Sustainability Commission.

j. Sustainability Expo - Hold an expo day, similar to the Living Green Expo, and provide tours of renewable energy sites and education from volunteers from local colleges and universities.

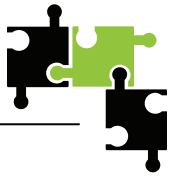
k. Model Sustainability Site - Establish a fully-sustainable example site with sustainable water use, tree planting, etc.

3. **Education for Our Future and Present:** Provide Sustainability Education within Every Academic Institution

   a. Leadership Training on Sustainability and the Natural Step Framework (NSF) – Provide a one-day or two half-day training on Sustainability and the NSF for the leadership (administrators, facilities staff, teachers and/or Board members) of all public and private K-12 schools, vocational schools, colleges, universities and other higher education institutions. Hopefully, at least three people would come from each institution. It would include an institutional baseline assessment, vision and sustainability action plan. This will provide a shared understanding and commitment to sustainability, as well as an assessment of the value of the approach and a strategy for their individual institution.

      i. Individual Academic Institution Training on Sustainability and the NSF – With each academic institution, provide a one-day or two half-day training on Sustainability and the NSF for all department heads and interested teachers, staff, administrators and Board members. In the case of high schools and higher education, student leadership would also be invited. Each institution will develop its own baseline assessment, vision and sustainability action plan. This will create a full commitment to sustainability within the institution.

      ii. Sustainability Presentations Within Each Institution – Provide a one and a half hour presentation on Sustainability and the NSF for all teachers, staff and



administrators within each academic institution. This will build broad-based support, excitement and commitment within the institution.

iii. Create a Sustainability Team Within Each Institution – Once the training and sustainability presentations are completed within each institution, a Sustainability Team should be created with representatives from each department of the institution, as well as students in the case of junior high, high school and post-secondary institutions. The team will meet monthly or bi-monthly to finalize the sustainability plan and discuss progress with implementation. Representatives will both solicit ideas and feedback from their department for the Team and share progress and recommendations from the Team with their department.

iv. Sustainability Presentations for Parents at Each K-12 Institution – Each K-12 institution will have a one and a half hour presentation on Sustainability and the NSF for all parents and interested community members. The institution's sustainability plan will be shared and feedback given. This will build broad-based support, excitement and commitment from the parents for the initiatives.

v. Sustainability Presentations for Students at Each K-12 Institution – Each K-12 institution will have a school-wide 40-60 minute presentation on Sustainability and the NSF for all students. This will create awareness and support for sustainability.

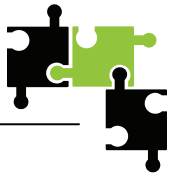
vi. Sustainability Presentations for Students at Each Post-Secondary Institution – Each higher level academic institution will have several one and a half hour presentations on Sustainability and the NSF for all students. The institution's sustainability plan will be shared and feedback given. This will build broad-based support, excitement and commitment from the students for the initiatives.

b. Inclusion of Sustainability in the Curriculum – Each institution should examine what is the best way to incorporate sustainability into its curriculum.

c. Public Measures of Sustainability – Each institution should develop easily acquired, informative metrics and indicators for measuring and reporting its progress in moving towards sustainability.

d. Earth Month Activities – Each institution should utilize Earth Month to conduct sustainability education and action projects in the community.

e. Sustainability Handout – There should be a fun, informative handout describing policies, actions and expectations for sustainability within the institution. It should be



posted on the website and given electronically to all staff, teachers, administrators, parents and students.

f. Sustainability at Orientation – At orientation each year there should be a discussion about the expectations and goals for sustainability. The sustainability handout should be included in any orientation materials.

g. Sustainability Awards and Celebration – There should be a fun, informative annual celebration recognizing the accomplishments of individuals and groups who've done the most to bring about sustainability.

h. Sustainability Communications - Creative, engaging and inspiring stories should be written up and widely publicized for posting on the website and in newsletter, bulletins, social media and news releases about all the creative ways people and groups have been sustainable.

i. Sustainability in Staff/Teacher Job Description, Evaluation and Review - Sustainability should be incorporated into each staff member's job description and work plan. It should then be made part of their annual performance review.

j. Sustainability Educational Signage – Creative, fun and engaging sustainability educational signage should be created for electronic kiosks and physical signs in the classrooms, food service area, restrooms and entrance to academic institutions.

k. Sustainability Demonstration – Every school should have an organic garden, greenhouse and composting area.

l. Sustainability Club – Sustainability Clubs should be encouraged with membership in YEA MN! (Youth Environmental Activists Minnesota).

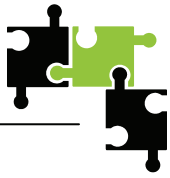
m. Minnesota Energy Challenge – Encourage schools to compete as part of the Minnesota Energy Challenge and do a carbon footprint analysis.

n. College Sustainability Scholarships – Offer sustainability grants & scholarships for college.

o. Expand the Adopt-a-Block Program – Expand the St. Cloud State student volunteer Adopt-a-Block program where they help the neighborhood with sustainability, including clean up.

p. Green Buildings – Assure that all new academic buildings are green.

General Actions



The following general actions have been identified as additional possible steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.

I. Provide experientially-based education for young people.

II. All technical colleges should have green buildings.

III. Offer internships for students to work on sustainability education.

IV. Provide practical, hands on education for food growing, preservation and composting.

V. Create awareness for students about where their food comes from and provide information about healthy, sustainable food and the impacts of certain foods, including dairy and meats as well as some practices, like pesticides.

VI. Have people understand the benefits of sustainability and why products sometimes cost more.

VII. Have businesses (especially polluters) fund local sustainability education initiatives.

VIII. Provide residential education on water reuse/recycle.

IX. Have local composting sites and encourage homeowner composting.

X. Create a tax on plastic bags and take-out containers to create awareness of their real costs and encourage reusable and biodegradable containers.

XI. Provide complete transparency on how tax money is being used.

XII. Have education days with events like the Living Green Expo and tours of renewable energy and with CMBA.

XIII. Have Earth Month activities that move from clean up to sustainability and include workshops and tours.

XIV. Have a model, fully integrated sustainability site that can serve as a good example of how people can deal with everything from growing food to water collection.

XV. Provide information on how to "update" an older home so each person can get guidance and doesn't have to start from scratch or "the ground up".

XVI. Work with Habitat for Humanity to address sustainability, including people's yards.

XVII. Have Natural Step Framework study circles to engage and educate the community.

XVIII. Encourage thinking about full costs of items or projects over their entire lifetime and show the sustainability economic savings and benefits.

XIX. Have the Mayor mention progress on sustainability and goals in the State of the City.

BEST PRACTICE AREA 13: SURFACE AND GROUNDWATER PROTECTION

Vision

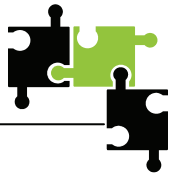
The land use and land management practices of the Joint Planning District support healthy lakes, streams, and rivers. The groundwater resources of the Joint Planning District are protected from contamination and are used for potable water at a sustainable rate.

Background

Rivers, streams, lakes and wetlands are a fundamental part of the Minnesota landscape and are often a point of pride and a focus for recreation in a community. Groundwater is an equally fundamental, but less visible part of the Minnesota landscape. Groundwater and river water are common sources of water for drinking, irrigation, and industrial use in communities.

These surface water and groundwater resources are natural systems that operate within the context of the local and regional environment including human-dominated areas like cities and agricultural areas. Thus the water quality in a river, for example, is influenced by the river itself, by the living organisms in the river, and by all the land uses and land practices in the area of land that contributes drainage to the river. Similarly, the quantity and quality of groundwater depends on the geology of the area as well as on the land uses and land practices in the area overlying the aquifer. Impervious surfaces like roads and buildings limit the amount of water that can enter the soil to sustain an aquifer and lead to increases in the amount of water that is transported to rivers, streams, lakes and wetlands. Materials and chemicals applied to soils and impervious surfaces can wash off, filtering into the groundwater or entering rivers, streams, lakes and wetlands. Depending on the rate of aquifer recharge, the use of groundwater can decrease the amount of water available in the aquifer. Sustainable management of surface and groundwater resources recognizes the importance of these resources to the community and establishes policies and programs to ensure that land use, land management, and water use allow the continuing benefits and use of these resources into the future.

Of course, land use isn't the only area of sustainability that is related to water. Energy issues, natural resources, and agricultural systems are also interrelated to water issues. Energy is required for water treatment and distribution as well as the manufacture and installation of water treatment and distribution infrastructure. Natural resources often depend on water for sustenance and agriculture requires water to raise crops and livestock and to process raw goods into the products sold at grocery stores.



The following goals address the areas identified as the key concerns of stakeholders in the Joint Planning District as related to surface and groundwater resources.

Goals

A. Dramatically reduce the use of potable groundwater for residential and commercial irrigation with the long-term goal of eliminating its use for irrigation.

B. Work with state agencies to update plumbing codes to allow and encourage the use of greywater and rainwater (see also BPA 3: Greenhouse Gas Reductions).

C. Reduce disposal of potentially harmful substances (e.g. pharmaceuticals) into surface and groundwater resources in order to protect water quality, sustain human health, and sustain healthy fish and wildlife populations by enhancing or expanding existing programs and by providing education on these programs.

D. Adopt consistent ordinances throughout the Joint Planning District that require low-impact development (see also right-sizing parking in Best Practice Area 5).

E. Increase the number of stormwater Best Management Practices in existing developed areas.

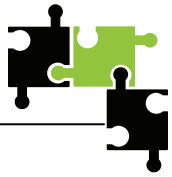
F. Educate consumers, designers, contractors, government officials, etc. on the design, construction and implementation of best management practices.

G. Increase the extent of multi-functional landscapes in the Joint Planning District (e.g. trail corridors providing integrated stormwater treatment) (see also BPA 4: Land Use).

H. Increase the use and extent of agricultural best management practices (including erosion control, buffers along water bodies, organic production, composting, etc.).

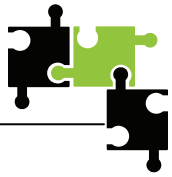
Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three identified initiatives address education, limiting the input of toxins into waters, and the establishment of consistent ordinances to support sustainability in the area of surface water and groundwater protection. These three areas are expected to have a large impact on the sustainability of surface water and groundwater resources in the Joint Planning District because they will ensure that the Joint Planning District is managing its water resources from a consistent baseline of understanding of the construction, operation, and maintenance of stormwater management systems and a consistent baseline of ordinances, policies and programs protecting surface water and groundwater resources.



1. **Stormwater Wise:** Educate consumers, designers, contractors, government officials, etc. on the design, construction and implementation of best management practices.
    a. Develop a regional education program that addresses MS4 program requirements for all participants in the program. The program could be expanded to all communities based on one community's current successful education program, could be modeled on the East Metro Water Resource Education Program, or could build on University Extension Stormwater Education programs or other available programs. A regional staff person will be needed to implement and manage the developed program. The program would be expected to meet MS4 requirements and build on those requirements through efforts such as:
        i. Training sessions on design, construction, and maintenance of best management practices targeted to designers and contractors.
        ii. Training sessions on best management practice maintenance targeted to municipal maintenance staff.
        iii. Promoting the use of best management practices through a variety of media (web, newspaper, newsletter, radio, magazines, conferences, etc.) targeted to specific audiences: designers, contractors, government officials, residents.
        iv. Interactive sessions leading residents in the design, construction, plant selection, and maintenance of raingardens and rain barrels for their property.
        v. Tours of public and private best management practices to demonstrate benefits and aesthetics of the systems.
    b. Identify three public facilities or roadway corridors as demonstration sites for stormwater best management practices in the Joint Planning District and design and install practices to address stormwater management onsite. Utilize the demonstration sites for education of the public as well as for specific training and recommendations on construction and maintenance of stormwater best management practices for design, construction and maintenance professionals.

2. **Healthy Waters, Healthy People:** Dramatically reduce the input of toxins, including pharmaceuticals, agricultural pesticides and herbicides, into surface and ground waters in order to protect water quality, sustain human health, and sustain healthy fish and wildlife populations.
    a. Promote existing programs for safe disposal (e.g. pharmaceuticals, hazardous materials) using a variety of media (web, newspaper, newsletter, radio, etc.).
    b. Expand disposal programs to ensure all residents and businesses in the Joint Planning District have access to safe disposal options and ensure that programs address all



toxins of concern including pharmaceuticals and agricultural pesticides and herbicides.

c. Hold publicized safe disposal events at locations throughout the Joint Planning District.

d. Conduct monitoring of the health of the aquatic organism population and measure the concentration of toxins, including pharmaceuticals, agricultural pesticides and herbicides in sites upstream and downstream of the wastewater treatment plants in the Joint Planning District to evaluate the impact of safe disposal programs.

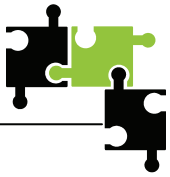
e. Work with companies that make pharmaceuticals, agricultural pesticides & herbicides to ensure that they take their products back for disposal.

3. **Sustainable Ordinances for a Sustainable Joint Planning District:** Adopt consistent ordinances and incentives throughout the St. Cloud Area Joint Planning District that require Low Impact Development.

   a. Establish local ordinances in each municipality using the Updated Model Ordinances for Sustainable Development (CR Planning, 2008) as the baseline to ensure consistent ordinances supporting sustainability throughout the Joint Planning District. The Stormwater and Erosion and Sediment Control Ordinance and Landscaping and Maintenance of Vegetation Ordinance are directly relevant to surface and groundwater protection, but are only successful as part of a sustainable system when aspects such as minimizing road widths and reducing sprawl are addressed as well. The available model ordinances address protection of agricultural areas, support of local foods, village districts, downtown and commercial districts, transit-oriented and pedestrian-oriented design, natural resource protection, solar and wind energy, and other relevant issues to sustainability.

      To support regional sustainability efforts, the full set of ordinances should be implemented in all communities in the Joint Planning District as applicable to the land use of the area. For example, a community with no areas of food production or forestry may not need to establish an agriculture and forest protection district, but each community should evaluate each model ordinance and district and adopt all that are relevant to the current land use as well as those needed to allow for sustainability into the future. It is recommended that the St. Cloud Area Joint Planning District act as the forum for coordinating the ordinance and zoning district updates throughout the Joint Planning District and ensuring that ordinances and zoning are cohesive between communities.

   b. Utilize County Water Management Plans to establish and promote consistent programs and ordinances throughout each county and between counties. County



plans should also establish and promote policies and ordinances that require Low Impact Development. Counties with land use authority should update ordinances as discussed above (a).

General Actions

The following general actions have been identified as measures that will allow the St. Cloud Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above. While a number of these actions are currently in use and/or required within the Joint Planning District by local or state government, input from local stakeholders have suggested that greater utilization of these practices should be considered .

I. Encourage the use of low water needs landscaping and "self-watering" landscaping such as raingardens. Revise any ordinance that would disallow the use of natives or the installation of small scale stormwater management facilities.

II. Establish local ordinances requiring all new irrigation system installations to include water conserving measures such as drip irrigation systems and weather sensing equipment for sprinkler systems.

III. Establish local ordinances requiring all new irrigation system installations to use collected stormwater runoff, rainwater harvesting systems, or greywater for irrigation to the maximum extent practicable.

IV. Establish assistance programs to help pay for the retrofitting of existing irrigation systems to utilize water conserving measures and non-potable water sources.

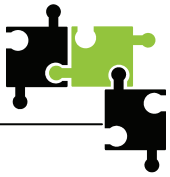
V. Ensure that municipal and campus landscaping focus on low water needs plants and that any needed irrigation systems include water conserving measures and utilize surface water and non-potable water sources.

VI. Track use of municipal water supplies to evaluate progress toward the goal with the Joint Planning District acting as a central location for tracking and evaluation of progress in the Joint Planning District.

VII. Utilize the Sustainability Committee to facilitate discussion on changes needed to plumbing codes to allow and encourage the use of greywater and rainwater and bring and promote the recommendations to state agencies.

VIII. Establish programs to provide technical support and potentially cost support for the design and installation of stormwater BMPs on residential and commercial sites.

IX. Establish a consistent policy by road authorities to include stormwater management retrofits into all road construction and reconstruction projects (excluding mill and overlay).



X. Establish policies and ordinances that encourage and allow boulevard trees where they won't interfere with utilities.

XI. Establish a consistent policy by municipalities, educational institutions, and park, trail and road authorities that all green spaces and landscapes will provide stormwater management benefits to the maximum extent possible in addition to the other benefits.

XII. Actively promote and encourage participation in existing BMP implementation and technical support programs provided through organizations such as Soil and Water Conservation Districts and the National Resource Conservation Service.

XIII. Establish ordinances that allow and encourage the production of local foods using sustainable methods (see Updated Model Ordinances for Sustainable Development (CR Planning, 2008)).

XIV. Hold learning tours of sites using agricultural best management practices and organic practices.

BEST PRACTICE AREA 14: MISSISSIPPI RIVER CONSERVATION

Vision

The Mississippi River is a landmark that unites the communities of the Joint Planning District through a common focus on water quality, stewardship, water conservation, and recreation.

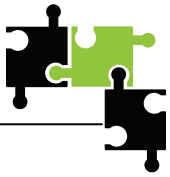
Background

The Mississippi River is an iconic river that flows through the heart of the Joint Planning District. The people of the Region depend on the River as a drinking water source, a recreational amenity, and a scenic linkage between the Headwaters to the Twin Cities and beyond. The St. Cloud Region is one of the first population centers to use the River as a drinking water source for thousands of people. It is also one of the first population centers to send its treated wastewater down river. The Mississippi River is also a major fishery and provides a significant recreational amenity for the Region. As the major natural resource in the region, the Mississippi River is a major part of the community's identity; and protecting the waters of the River is a major part of building a sustainable Region.

In order to fully protect the Mississippi River, several BPAs will need to be addressed because of the inherent connection of the River with its watershed. Tributaries throughout the region cross multiple land uses, pick up pollutants and nutrients, and deliver them to the river. Over 68,000 people receive drinking water, and over 7,500 homes and several businesses receive power from dams on the river. The connection between other BPAs is engrained in the river's connection to the region, especially BPAs 11 and 12.

Creating healthy landscapes throughout the watershed that include stormwater BMPs and drought tolerant native landscaping will improve the water quality of the river, which will improve the fishery production and recreational user populations, which will expose the dramatic Mississippi scenery to many more people, which will endear the river to more people and lead them to want to protect this resource. Municipal water and wastewater treatment facilities account for up to 50% of the electricity consumed by city governments[8]. Saving on irrigation will lessen the need for water to be pumped, reducing energy demands, saving government money, lessening the release of greenhouse gases, improving air quality, etc.… Protecting water quality of the Mississippi also sets precedence for municipalities

[8] Lawrence Berkeley National Laboratory Water Energy Technology Team, "Wastewater Treatment and Water Reclamation"



down river that will benefit from the St. Cloud Region's stewardship and leadership in sustainability.

The following goals and initiatives will focus on conservation from the natural resource and water quality perspective. There has been a lot of work previously completed on these issues as outlined in the Mississippi River Renaissance Vision and ongoing development of actions to support that vision.

Goals

A. Improve and unify shoreline ordinance standards for the region.

B. Improve the water quality of the Mississippi River and its tributaries.

Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability.

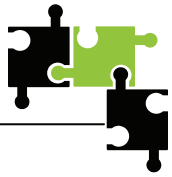
1. **Renaissance, Renaissance, Renaissance:** Support and implement goals and practices of Mississippi River Renaissance Project to unite the Joint Planning District in the protection and improvement of this scenic and recreational resource.

    a. Adopt the final Vision and Actions of Mississippi River Renaissance Project into and update accordingly. In addition, formally acknowledge the Mississippi River Renaissance Project in this Sustainability Plan and in future amendments, education sessions, and education literature. Linking these two initiatives and documents will strengthen both and reinforce that Regional Sustainability is dependent on the health of the Mississippi, and the health of the Mississippi relies on the Joint Planning District Sustainability Plan.

    b. Maintain at least one member on both the Sustainability advisory committee and the Mississippi River Renaissance advisory committee. Over time this will be important to keep up to speed with both initiatives and evaluate the compatibility of both efforts as they change.

2. **Less is More… Water:** Reduce the use of potable surface water for residential or commercial landscape irrigation by 50% with the long-term goal of reducing by 75% or more.

    a. Vegetation: Encourage the use of low water needs landscaping and "self-watering" landscaping such as raingardens. Choosing the right plant is a major determinant of irrigation need. Traditional turf grass water needs are very high and require a



significant investment in irrigation and ongoing water replenishment. Cutting back on overall areas of turf grass that need to be irrigated is an easy way to cut back on irrigation. There are many attractive native and non-invasive drought tolerant perennials and shrubs that have little to no need for supplemental irrigation upon establishment. Many of the following initiatives are similar to initiatives found in BPA 11. A major component of creating healthy landscapes is to balance water needs. Resources such as the Sustainable Sites Initiative contain guidelines, benchmarks, and resources for creating sustainable landscapes - *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009,* from http://www.sustainablesites.org/.

i. Revise any ordinance that would disallow the use of natives or the installation of small scale stormwater management facilities. Model ordinances are available as tools to define native plants as separate from weeds and to separate native landscaping from one that is overgrown in ways that adversely affect human health and safety. Example model municipal ordinances include the following:

   1. Wild Ones – Model Municipal Ordinance, from http://www.for-wild.org/weedlaws/model_ord.html

   2. CR Planning – Ross, Brian Community Resources Planning, Inc., "Model Ordinances for Sustainable Development – Landscaping and Maintenance of Vegetation", from http://www.crplanning.com/pdfs/susdo6_09/landscaping.pdf

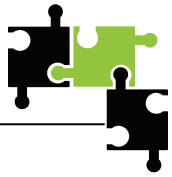
ii. Reduce high irrigation needs turf grass in new public projects:

   1. Create a policy that only 50% or less of the total landscaped site area of new public projects can be irrigated turf grass. Turf areas above the 50% threshold cannot receive irrigation.

   2. Use low irrigation turf grass alternatives such as buffalo grass or some of the emerging "no mow" fescue based lawn mixes. These alternatives are newer technologies, and inherently higher risk, and could use some public agency initiative and leadership to test, learn from, and educate the rest of the public. The potential benefits could be very high for individual landowners.

b. Irrigation: In the United States, the average family of four uses approximately 30% of their daily water use on irrigating lawns and gardens. An estimate of up to 50% of irrigation water can be wasted due to overwatering, evaporation, wind, and improper design[9]. Implementing efficient, well designed irrigation systems in

[9] U.S. Environmental Protection Agency, "Outdoor Water Use in the U.S."



addition to planting native and drought tolerant plant material can provide significant water conservation for landscape use.

i. Establish local ordinances requiring all new irrigation system installations to include water conserving measures such as drip irrigation systems and weather sensing equipment for sprinkler systems. Consider requiring all irrigation systems designed by professionals.

ii. Establish local ordinances requiring all new irrigation system installations to use collected stormwater runoff, rainwater harvesting systems, or greywater for irrigation to the maximum extent practicable. Establish or expand existing cost share assistance programs to help pay for innovative new systems and retrofitting existing irrigation systems to utilize water conserving measures and non-potable water sources.

c. Water Harvesting and Reuse:

i. Incentivize rainbarrel use and rainwater harvesting by creating stormwater ordinances that give credit for water harvesting, cost share programs for rainbarrels and larger scale rainwater harvesting.

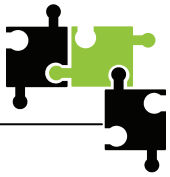
ii. Require all new publicly financed projects to use captured rainwater as the primary irrigation source.

iii. Utilize the Sustainability Committee to facilitate discussion on changes needed to plumbing codes to allow and encourage the use of greywater and rainwater and bring and promote the recommendations to appropriate state agencies.

d. Monitoring: Track use of municipal water supplies to evaluate progress toward the goal with the Joint Planning District acting as a central location for tracking and evaluation of progress in the Joint Planning District. Begin by recording a baseline or calculating a baseline landscape water requirement as outlined in Prerequisite 3.1 of *The Sustainable Sites Initiative: Guidelines and Performance Benchmarks 2009*, from http://www.sustainablesites.org/. Savings and efficiency can then be tracked to monitor progress and evaluate water saving techniques.

3. **Big River, Clean Water:** Improve the water quality of the Mississippi River and its tributaries.

a. Promote and assist the implementation of County Water Management Plans including Benton, Stearns, and Sherburne. The County Water plans contain significant steps toward improving water quality throughout the Region and were developed with significant public input. Much of this input was provided by rural and agriculture representatives. Provide education to land owners away from the River that makes their connection to the Mississippi clear.



iv. Maintain at least one member on the Sustainability advisory committee that is a representative or employee of the Region's Soil and Water Conservation Districts. Over time this will be important to keep up to speed with multiple initiatives and evaluate the compatibility of various initiatives and funding sources.

b. Develop a regional crisis delivery system to address emergency or hot topic issues as they arise.

c. Do not create any new and reduce the number of existing stormwater outfalls to the river, unless absolutely justified and designed to meet best management practices.

General Actions

The following general actions have been identified as measures that will allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above. These actions are based on the input of stakeholders throughout the planning process.

I. Host alternative shoreline ordinance standard discussion between Local Governmental Units with the goal of strengthening the existing shoreline ordinance on a region wide basis.

II. Create and support a private, non-profit organization to sustainably balance natural preservation, development and redevelopment, recreation access, and environmental health associated with the Mississippi. The St. Paul Riverfront Corporation could be used as a precedent. The three city river corridor planning process currently underway should be used as a starting point vision for the urban area.

III. Organize an urban riverfront tour in each riverfront city. Focus on cultural and environmental education/ appreciation. Compare/ contrast cities to see what has worked and not worked.

BEST PRACTICE AREA 15: INNOVATIVE OPPORTUNITIES

Vision

The Joint Planning District encourages innovation and takes advantage of innovative opportunities to move toward sustainability as they arise.

Background

Innovation and creativity are important ways to ensure ongoing progress toward sustainability. In addition, because of the interconnectedness between the various areas of sustainability, innovation by merging the understanding of various disciplines and areas of best practice will be needed. The goals in this best practice area are intended to build connections between various experts in the Joint Planning District and promote the efforts of those active in sustainability initiatives.

Goals

A. Act as a means to facilitate connections in the community that will support innovation in sustainable initiatives.

B. Establish a forum to champion and recognize sustainability efforts, allow for active community engagement, gather feedback, and facilitate participation in the development and implementation of local sustainability efforts.

C. Engage key business and organizations who are leaders in sustainability to promote and expand their efforts and to provide support to other businesses and organizations to move toward sustainability.

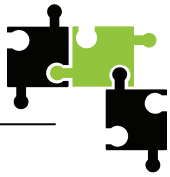
D. Engage members of agricultural community who are leaders in sustainability to promote and expand their efforts (e.g. local foods, local energy, land stewardship) and to provide support to others in the agricultural community in moving toward sustainability.

E. Leverage the partnership with sister cities to bring in additional ideas for sustainability initiatives.

F. Implement a marketing/outreach campaign to ensure that the majority of the Joint Planning District community is aware of and active in sustainability initiatives.

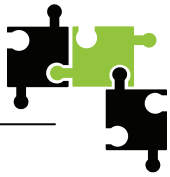
Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability. The three identified initiatives are



intended to build and recognize the connections in the community that will lead to innovation.

1. **Promote Awareness and Understanding:** Establish a forum to champion sustainability efforts, allow for active community engagement, gather feedback, and facilitate participation in the development and implementation of local sustainability efforts.
    a. Implement actions identified in BPA 12: Sustainability Education to establish a shared understanding of sustainability throughout the Joint Planning District.
    b. Continue to encourage a diverse range of participants in the Sustainability Committee (Committee members are from a number of Cities and townships in the Joint Planning District and represent various viewpoints such as renewable energy, utilities, municipalities, builders, environmental groups, community organizations, colleges and universities, etc.).
    c. Establish a website and blog to promote and catalogue Joint Planning District sustainability efforts and to encourage feedback and participation.
    d. Leverage partnerships with local organizations, businesses, colleges, universities and community groups to promote specific sustainability initiatives through a number of venues.
2. **Planning and Encouragement:** Act as a means to facilitate connections in the community that will plan for and support innovation in sustainable initiatives.
    a. Hold an annual sustainability brainstorming or networking meeting to encourage the involvement of the community and facilitate connections that will assist community members in implementing their sustainability-related ideas.
    b. Work with the St. Cloud Area Chamber of Commerce to engage local businesses in sustainability and support their efforts.
    c. Establish community-based sustainability teams to plan, promote, and implement sustainability efforts in their community.
    d. Establish a local foods and sustainable agriculture working group to promote and support the activities of the Joint Planning District agricultural community.
3. **Recognition and Assessment:** Establish a forum to recognize and evaluate sustainability efforts.
    a. Implement actions identified in BPA 12: Sustainability Education to hold an annual celebration with awards for sustainable actions.



b. Provide additional recognition for particularly innovative and sustainable organizations and companies in the Joint Planning District through awards, tours, or other promotions.

c. Provide ongoing review and assessment of sustainability efforts throughout the Joint Planning District through the Sustainability Committee. The Sustainability Committee will follow progress on sustainability initiatives led by the Joint Planning District and the cities, townships and counties that make up the Planning District. In addition, the Committee will periodically check in on progress toward sustainability in the organizations, colleges, universities, and groups in the Joint Planning District, particularly those represented on the Committee and will solicit input from the community at large on their actions.

General Actions

The following general actions have been identified as measures that will allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.

I. Schedule learning sessions and/or visits with sister cities to discover new ideas for sustainability initiatives and techniques to implement in the Joint Planning District.

II. Government and educational facilities and operations implement innovative products and programs as demonstration projects or case studies.

III. Promote innovation in the community through inventor's contests.

BEST PRACTICE AREA 16: GOVERNMENT POLICIES

Vision

Local governments in the Joint Planning District area lead by example, setting a standard for sustainability. In addition, governments' proactive and visionary policies help the entire Joint Planning District move toward sustainability.

Background

Government policies should be based on a shared vision of what a community and/or area wants to be. To move the Joint Planning District toward sustainability requires a broad awareness and understanding of sustainability. Although government can help lead and inspire the community, ultimately sustainability develops out of an informed grassroots effort that helps guide government policies.

Goals

A. Encourage community and stakeholder collaboration in development decisions and community affairs.

B. Ensure that land use approval procedures are predictable, fair, and cost effective.

C. Enact policies and regulations that include incentives to help move the Joint Planning District toward sustainability.

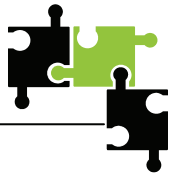
D. Remove regulatory obstacles and barriers that prevent or hinder the Joint Planning District's move toward sustainability.

E. Promote intergovernmental cooperation and consistency based on a shared understanding of sustainability. (see also BPAs 12 & 15)

Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward sustainability.

The first initiative recognizes that broad awareness and understanding of sustainability are critical tools in helping move the Joint Planning District toward sustainability. As residents, policymakers, developers, and others become more aware that sustainability is a win-win-win for the natural environment, our quality of life, and the economy, we will find more people supporting sustainability, voluntarily moving toward sustainable practices, and

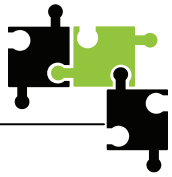


becoming more involved in community affairs. Government can help guide and inspire sustainability efforts, but others must participate in these efforts as well.

The second initiative acknowledges that government, working with the people of the area, can play an important role in helping to articulate a strong, shared vision of sustainability that will allow all parties to work together effectively toward shared sustainability goals and actions. It is especially important that neighboring and overlapping jurisdictions have a general shared understanding of sustainability so that they can work together to ensure that the whole Joint Planning District functions in a connected and sustainable manner.

The third initiative recognizes that government regulations can help or hinder the area's move toward sustainability. By removing existing inappropriate government regulations that hinder sustainable actions and by providing appropriate incentives to encourage sustainable actions, government policies can help the area attain its shared vision for a sustainable region.

1. **Learning and growing together:** Encourage community and stakeholder education and collaboration in development decisions and community affairs.
    a. Use a variety of means to promote a shared awareness and understanding of sustainability principles among all in the community. For example, consider conducting a variety of sustainability workshops throughout the community; prepare sustainability articles and brochures for community publications; use community websites and local cable television to distribute sustainability information; use community facilities with interpretive displays as a showcase for sustainable practices; implement a sustainability awards program; and so on.
    b. Actively solicit broad citizen participation in community affairs (such as community events and initiatives) and community decisions (such as planning efforts and development decisions).
    c. Coordinate with K-12 schools and institutions of higher education to promote opportunities for students and youth to be involved in community affairs.
    d. Identify underrepresented groups in the community and explore ways to gather their ideas and input into community affairs and development decisions.
    e. Use local experts to help review and craft sustainable ordinances. For example, consult representatives from local utility companies to help craft energy conservation design standards.
2. **Move forward with a shared understanding of sustainability:** Promote inter-governmental cooperation and consistency based on a shared understanding of



sustainability and by ensuring that land use approval procedures are predictable, fair, and cost effective.

a. Work to ensure open communication and good working relationships between neighboring and overlapping jurisdictions.

b. When practical and/or mutually beneficial, partner with neighboring and overlapping jurisdictions to provide efficient, cost-effective, high-quality services rooted in principles of sustainability.

c. Provide meaningful opportunities for staff, appointed and elected officials, and citizens to learn about sustainability and to keep involved in sustainability efforts.

d. Develop and implement sustainability protocols that will help inform decisions relating to development and community affairs. For example, develop a sustainability checklist (tied to the community's regulations) that developers and decision makers can refer to when considering action on a development project.

e. Ensure that government decisions clearly outline what impacts their actions will have on the community's sustainability goals. Publicly reiterate the community's vision for sustainability when taking pertinent community actions.

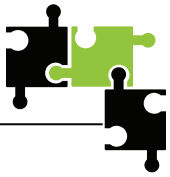
f. When feasible, use a sustainability coordinator to help ensure that community actions reflect principles of sustainability.

g. Recognize and address cultural differences when developing a shared vision for sustainability for the community and region.

3. **Make sustainability easy:** Remove regulatory obstacles and barriers and provide incentives that help the Joint Planning District move toward sustainability.

a. Review and update ordinances and regulations to ensure that they are not inadvertently hindering the community's move toward sustainability. For example, many communities have an ordinance that makes it illegal to have a lawn over eight inches in height. This type of ordinance can inadvertently prevent a landowner from installing a native grass lawn that could be more ecologically sound. Therefore, review and modify the ordinance to reflect the principles of sustainability.

b. Review and update development review procedures so that they do not inadvertently hinder integration of sustainable principles into the development proposal. Sometimes sustainable approaches to development are new to a community and may require extra time and effort for the community to review. However, excessive review time and costs may discourage developers from proposing a sustainable approach to the development. Therefore, consider opportunities to balance the costs and time associated with sustainable



development so that developers are able to propose innovative sustainable developments.

c. Identify incentives that may help promote sustainable development and actions. For example, consider reducing parking requirements for a development that has a qualified ride share program or a bike or walk to work program.

d. Where appropriate consider providing financial incentives to support sustainable development with the understanding that sustainable development will benefit the community as a whole.

General Actions

The following general actions have been identified as key steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.

I. Develop sustainability indicators to ensure sustainability goals are met. Adjust policies and actions as needed.

II. To the maximum extent possible, promote sustainable actions through voluntary measures, but use regulations as needed.

III. Enact expenditure policies that require the consideration of sustainable products and actions.

BEST PRACTICE AREA 17: FOOD AND AGRICULTURE

Vision

Healthy, organic and affordable food is available to everyone in the Joint Planning District through a diverse, locally-based sustainable food and agriculture system that creates good, green collar jobs and contributes to a vibrant local economy.

Background

Conventional produce is shipped an average of 1,500 miles before reaching consumers. As a result of industrial farming practices, 17% of all fossil fuel used in the U.S. is currently consumed by the food production system. Industrial farms cause $34.7 billion worth of environmental damage in the U.S. each year, including topsoil erosion, aquifer depletion, reduced genetic diversity, and air, water and soil pollution from toxic pesticides, fertilizers, hormones, antibiotics and harmful pathogens contained in manure. According to the EPA, agricultural practices are responsible for 70% of all pollution in U.S. rivers and streams. Fifty-eight percent of swine confinement workers suffer from chronic bronchitis. Overuse of antibiotics is contributing to antibiotic resistance, making human medicines less effective and causing U.S. health care costs to increase by $4 billion each year.[10]

According to the American Public Health Association policy statement[11]

> *"In the United States, obesity and diet-related chronic disease rates are escalating, while the public's health is further threatened by rising antibiotic resistance; chemicals and pathogens contaminating our food, air, soil and water; depletion of natural resources; and climate change. These threats have enormous human, social, and economic costs that are growing, cumulative, and unequally distributed. These issues are all related to food—what we eat and how it is produced. The US industrial food system provides plentiful, relatively inexpensive food, but much of it is unhealthy, and the system is not sustainable. Although most US food consumption occurs within this industrial system, healthier and more sustainable alternatives are increasingly available…Moving toward a healthier and more sustainable food system will involve tackling longstanding challenges and addressing new and evolving demands."*

The United Nations Universal Declaration of Human Rights states that the right to food is a fundamental human right. As stated at the UN FAO Rome Declaration on World Food Security,

[10] www.sustainabletable.org/intro/comparison
[11] American Public Health Association, 11/6/2007, *Toward a Healthy, Sustainable Food System*

"Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

Unfortunately, food insecurity in Minnesota is commonplace. A Hormel Foods survey reported one in four Minnesotans said they or someone in their family had visited a food shelf. One in ten residents said they or someone in their family went to bed hungry in the past month because of lack of money for food[12].

Goals

A. Support rural sustainable agriculture and the creation of a vibrant, economically viable sustainable agriculture food system.

B. Encourage urban/suburban sustainable food production to reduce household expenses, expand the accessibility to affordable, organic food, encourage active living and increase community engagement.

C. Bring about food nutrition and security by eliminating hunger and diet-related diseases, increasing the consumption of fruit, vegetables and other healthy foods, and improving the geographic and economic accessibility of culturally appropriate, healthy food.

D. Create a local, sustainable food processing and distribution infrastructure to build the region's economy, create living wage jobs, save people money, increase the added value of raw agricultural products, reduce fossil fuel consumption and make fresher food available.

E. Expand local economic development in the food industry by securing a larger portion of government and institutional food purchasing for local farmers, developing eco-industrial zones, creating green jobs, increasing demand for local food, and attracting complementary businesses and industries.

F. Analyze existing practices, regulations and codes and develop policies and programs that encourage a local, sustainable food system and make the Joint Planning District a leader and innovator.

G. Create an annual sustainable food and agriculture award program that recognizes individuals and institutions in urban and rural sustainable food production, processing, distribution and preservation at a widely-publicized annual community-wide sustainability celebration.

[12] Legal Services Advocacy Project, Feb. 2007, *1Simple Task*

H. Identify the best examples of urban and rural sustainable food production, processing, distribution and preservation and offer tours and information about their practices.

I. Create an innovative, engaging, informative and persuasive "Buy Local, Buy Organic" information campaign to increase the demand for local, sustainable food.

J. Create a community-wide Sustainable Food System Leadership Team from the public, private and non-profit sectors to help chart the course for creating a fully sustainable food system in the Joint Planning District.

Initiatives and Action Steps

The following three initiatives for initial action were identified through public input and reflect local stakeholders' views of which goals would have the most profound effect on moving the Joint Planning District toward a sustainable food system. It was felt that a key priority is residential food production because it provides local, healthy and inexpensive organic food while engaging and educating the public, addressing food security, overcoming "nature deficit disorder", utilizing existing space, beautifying the community and providing numerous other benefits, such as exercise and stress relief. A second priority was to create a strong local sustainable food infrastructure both because of the energy expenditure of shipping local food to the Twin Cities for processing and because it is essential in order to have healthy, local food available from food distributors and processors. Food security was selected as an essential third priority because no one in the Joint Planning District should be hungry or malnourished and everyone should have healthy, affordable food choices.

1. **Grow Your Own:** Encourage Urban and Suburban Sustainable Food Production

    a. Set an Urban/Suburban Food Production Goal - Within a year, there should be a goal of at least 25% of the homeowners in organized neighborhoods having a food garden and for community gardens and/or container gardens being encouraged for all multi-unit housing. The goal should be increased to at least 37% the following year, which is in keeping with the national average in a 2009 study by the Garden Writers of America. There should be an ultimate goal that at least 50% of the residents would be participating in some type of organic food growing.

    b. Master Sustainable Gardener Program – Expand the availability, outreach, and publicity of the Cooperative Extension's Master Garden Program with a focus on sustainable practices. Make the services free for low-income communities, and develop an expanded apprentice program that trains young people for jobs, and have a local master garden club for kids.

    c. Adopt-a-Block Program – Expand St. Cloud State's student-run Adopt-a-Block program where young people work with a block to establish organic food production, processing, storage and other sustainable practices.

d. Local Food Growing Business – As is present in the Twin Cities, support the creation of small garden businesses that work with homeowners to create and help tend productive organic backyard gardens at a cost of approximately $1,000.

e. Organic Community Gardens – Expand the availability and promotion of organic community gardens to each neighborhood and school and provide long-term leases, water, proper fencing, tools, and storage. Use these as a base for educational workshops (from transplanting and organic gardening to composting, food preservation and storage) and organizing around local food self-reliance. Examine the possibilities for year round growing with hoop houses and greenhouses. Allow for easy, online sign-up. Create highly visible demonstration "Victory Gardens" on public land (such as a Mayor's Garden and Greenhouse at City Hall) and make sure that every school has a community garden and a greenhouse. Build community garden partnerships with job training, agricultural, and nutrition groups.

f. Promote Local Sustainable Food Production - Work with the media (including social media such as Facebook) and existing organizations to identify, promote, and educate the community about the benefits of locally-grown, organic and sustainable food, Community Supported Agriculture, co-ops, community gardens, backyard gardening, container gardens, roof-top gardens, and farmer's markets. Create an innovative, engaging, informative and persuasive "Buy Local, Buy Organic" information campaign to increase the demand for local, sustainable food.

g. Expand Institutional Purchasing of Local, Organic Food – Work with supermarkets, food services and restaurants to increase their purchasing and promotion of local, organic foods.

h. Community Greenhouses – Seek out any abandoned greenhouses and renovate them for year-round community-based local food production using renewable energy and sustainable practices. There are existing opportunities at Tech High School, Children's Home and the Veteran's Administration.

i. Expand Food Education Partnerships – Create partnerships between public, non-profit and private institutions (such as nurseries and landscapers) to offer free to low-cost classes on composting, chemical-free gardening, canning, etc. Make these resources readily available on websites. Expand upon existing Community Education programs.

j. Zoning and Land-Use – Using the example of Madison, encourage urban agricultural overlay zoning to visually show the possibilities of food production and conduct public planning conversations about what types of food production (from hoop houses and market gardens to bees, chickens and other livestock) are appropriate in which zones. Re-evaluate old zoning codes and possible expansion on developed

but under-utilized public and private properties. Create ordinances allowing backyard chickens and growing food in front yards and restricting pesticide and synthetic fertilizer use.

k. Food Production in New Residential Development – Incent every new residential development to incorporate sustainable food systems into the physical plan during the pre-design phase. This is already reflected in new LEED Neighborhood Design which provides credits for fostering local food production, including neighborhood farms and gardens, community supported agriculture, and proximity to farmers markets.

l. Prison Rehabilitation through Food Production – Examine the possibilities working with local prisons on food production similar to Philadelphia's City Harvest Program working with the Philadelphia Prison System to have seedlings started by inmates and transplanted into the prison's Roots-to-Reentry garden, community gardens or local gardens. The harvest is then distributed through local food pantries. This public-private partnership addresses both food insecurity and job-readiness training for prisoners.

2. **Make It Local:** Scale-up Local, Sustainable Food Processing and Distribution Infrastructure

a. Local Sustainable Food System Study – Work with St. Cloud State University and a community-wide Sustainable Food System Leadership Team from the public, private and non-profit sectors to conduct a study of the present food system (including its energy, environmental, and economic impacts), the benefits and possibilities of a local sustainable food system and make recommendations on how to achieve it. This report would be used to seek grant funding. Release the report with a great deal of publicity and support from key producers, processors, distributors, non-profits and possible funders.

b. Set a Local Food Processing Goal – Consider a goal of having 50% of all food processing using locally grown, organic or sustainable food. Document the economic benefits from having such a goal.

c. Support Entrepreneurial and Nonprofit Food Processing Initiatives – Encourage the possible below-market rate leasing of spaces for local food processing until their operations become financially self-sustaining as has been done throughout Wisconsin, such as Beloit's Bushel & Peck locally sourced grocery and café lease a local industrial facility. Consider the possibility of TIF districts and CBDG grants to promote local food-based small business incubation, food processing and distribution enterprises.

d. Identify and Remove Barriers to Local Farm-Direct and Wholesale Food Market – Collaborate with local food producers, retailers, and distributors to identify artificial or administrative barriers to a robust local farm-direct and wholesale food market.

e. Replicate the Growing Power Local Food Production Model – Utilize the nationally recognized, award-winning model and training of agripreneur Will Allen's Growing Power nonprofit in Milwaukee, Wisconsin to develop year-round, low-environmental impact, local food production, education, hands-on job training, technical assistance, food processing and distribution program. Its facilities include greenhouses, fish runs, hoop houses, a worm depository, beehives, poultry houses and outdoor pens for live animals, compost systems, an anaerobic digester, and a small store front to make its product available to the neighborhood. They supply restaurants and farmers markets in the Milwaukee metro area and as far south as Chicago.

f. Permanent Year-Round Central Farmers Market – Create a central year-round local food marketplace providing an important commercial hub for restaurants, fair trade products, garden suppliers, artists, crafts providers, and others, as well as a public meeting space, and tourist attraction. Create neighborhood farmers markets and seek year round locations.

g. Public-Private Distribution Partnerships – Utilize the Institutional Food Market Coalition model developed by Dane County Planning and Development Department (Menomonie, WI) to expand market opportunities for regional producers and connect large volume institutional buyers from both private and public sector institutions with local and organically grown Wisconsin agricultural products.

h. Modify Zoning and Permitting to Encourage Healthy Mobile Food Vending – Follow San Francisco's model in which it updated its sustainability plan to include greater investment in sustainable food and job creation through local food procurement practices and small food business development initiatives. It is developing food enterprise zones, expedited permitting processes, tax incentives, a land-use audit to identify properties that could offer favorable lease agreements for food establishments, and expanding permit access for mobile food vendors. The City is charting its progress by tracking the number of leases offered, sales of healthy food from businesses operating under permitting incentives, and its own sourcing of local food for its events.

i. Sustainable Agricultural Job Development through Federal Stimulus Funding – The creation of sustainable agricultural jobs is now eligible for federal stimulus funding. There are several new programs promoting local, sustainable agriculture that should be pursued, including the Value-Added Producer Grant Program. It provides money to agricultural producers that add value to raw products through food processing or marketing. All food in this program must be marketed locally; and it is targeted to

fund support planning for these businesses, including business development plans, website development, and additional staff. And one percent of the current funding has been set aside for mid-tier value chains that supply local and regional networks and connect producers with markets to strengthen the competitiveness and profitability of small and medium sized businesses.

j. Local Food Procurement Policies – Local government, academic institutions and hospitals should establish a policy of purchasing healthy, local and sustainable food whenever possible.

3. **Healthy Food For All:** Promote Food Nutrition and Security

   a. No Hunger, No Malnutrition Goal – Set a goal to reduce hunger and malnutrition by X% (to be determined) in the first year and an additional Y% the second year with an ultimate goal of no hunger and no malnutrition.

   b. Healthy Food in Schools – Provide point-of-sale signage and offer healthy, local, organic food choices in school breakfast and lunch programs. Prohibit the sale of junk food in snack and beverage machines. Expand the number of local food nights at St. Cloud State University, local corn days at schools and farm-to-table programs.

   c. Promotion of Healthy Food Choices – Conduct an educational campaign in government, university, school and business publications, websites, social media like Facebook, and public service announcements that promote the benefits of locally grown, healthy food choices and counter-advertising to junk food. Publicize the availability of locally grown, healthy food on websites.

   d. Healthy Food Shelves – Continue the donation and distribution of culturally appropriate, healthy, fresh, locally-grown organic food by food shelves. Use the food shelves to promote community gardening and market gardening. Continue campaigns to support the food shelves.

   e. Healthy Food Government Vending – Provide educational information and healthy food choices at all government cafeterias and food vending.

   f. SNAP-Accessible Farmers Markets (Supplemental Nutrition Assistance Program and WIC, Women Infants and Children) – Encourage the use of discrete, convenient EBT cards (Electronic Benefit Cards) and arrange to have POS (Point of Sale) locations at farmers markets offering tokens that can then be exchanged for product at individual market stands. At closing, vendors exchange the tokens for cash.

   g. Free Seeds – Agreements should be made with seed companies to donate free seeds for low-income communities in exchange for positive publicity.

h. Attract Grocery Stores in Underserved Areas – Provide one-time loans and grants to attract supermarkets, co-ops and other fresh food retailers to underserved areas.

i. Food Enterprise Zones – Utilizing a model similar to New York City, create zoning incentives and density bonuses to encourage new fresh food stores, local street vendors and food enterprise zones in neighborhoods with low-income populations and insufficient access to full-service grocery retailers to attract green businesses that meet its residents' nutrition needs.

j. Food Gleaning Programs for Food Shelves – Encourage active food gleaning programs with local farmers, CSAs and community gardens with the food being donated to food shelves (Share the Harvest).

k. Sale and Donation of Excess Food – Encourage the implementation of The Federal Food Donation Act provisions encouraging agencies and their contractors to donate excess food to nonprofit food security organizations.

l. CSA Promotion in Underserved Areas – Encourage Community Supported Agriculture in underserved areas by negotiating reduced fees for on-farm assistance and providing convenient drop-off locations.

m. Annual Harvest Celebrations – Conduct annual neighborhood Harvest Celebrations where people prepare food they grew and share it with the community.

n. Reduce Availability of Unhealthy Foods – Consider restrictive ordinances/regulation of fast food cues (e.g. density, size and location controls on signage and advertising), mandatory menu/calorie labeling at restaurants and a moratorium on fast food outlets around public schools.

o. Conduct a Food Security Assessment. This assesses the "gaps" in a person's access to healthy and culturally acceptable food.

p. Ordinance change to allow backyard chickens

General Actions

The following general actions have been identified as additional steps to allow the Joint Planning District to move toward the goals for this Best Practice Area that were not selected as "initiatives" above.

I. Support Permaculture throughout the region.

II. Ban inhumane food production and encourage free range animals and rotational grazing.

III. Equalize or eliminate subsidies for conventional food production and large corporations and provide subsidies and incentives for organic and sustainable agriculture, including incentives for farmers to convert to organic agriculture.

IV. Encourage greater crop diversity.

V. Make it easy for people to start a farm.

VI. Allow no hormones in cows or chickens.

VII. Make better use of groundwater and use alternative irrigation while eliminating any tax breaks for irrigation.

VIII. Have policies to grow food, not fuel (unless food biomass).

IX. Create a more circular food system process and bring it closer to home.

X. Help children become more holistic as they grow up by providing broad life experiences through helping on farms.

XI. Indicate the environmental, health and social impact from producing goods so people know when they buy something what went into making it.

XII. Have people understand the concept of carrying capacity to know that soils can't grow more forever and that there is a limit.

XIII. Connect people with land and the Minnesota Sustainability Project and expand the project.

XIV. Have a policy to purchase local, organic food and consider other incentives and disincentives, such as paying for a bag.

XV. Restrict pesticide use in yards, especially in sensitive areas.

XVI. Encourage shared meals, preparation and preservation.

XVII. Encourage residential and institutional composting of food waste.

XVIII. Work with all schools and congregations to have an organic garden and greenhouse.

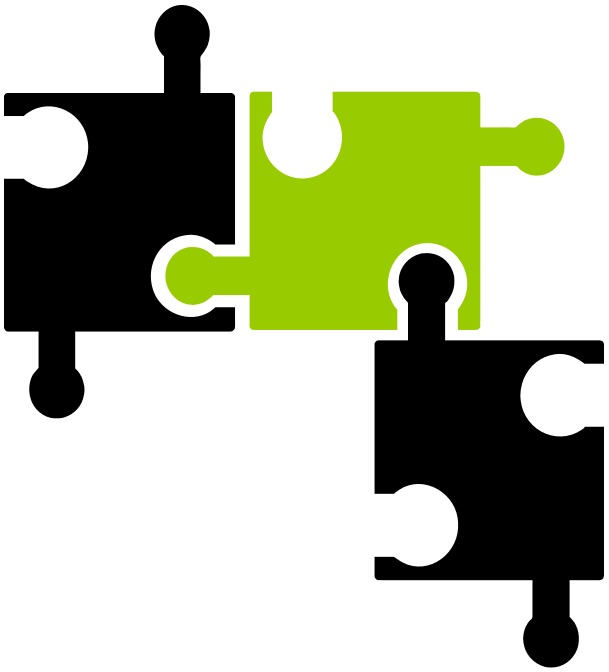
XIX. Have school lunches prepared at each school.

XX. Make education on healthy food choices widely available and have simple, positive and non-adversarial messages so people understand the benefits of sustainable food choices and choose healthy diets.

XXI. Focus on creating an organic Stearns County, especially with dairy and meats.

XXII. Work to address wasted food, such as the bread company in St. Cloud.

XXIII. Adjust the tax structure to encourage sustainable food choices.



APPENDIX A

Current Practices Survey Results

Sustainability - Energy & Buildings Edit

Default Report + Add Report

Response Summary

Total Started Surv
Total Completed Surv

Show this

PAGE: BASIC INFORMATION

1. Please provide us with the name of your organization and your department. If you'd like you may also provide your name and email address and/or phone number so we can follow up if we have questions.

			Response Percent
Show replies	Name:		100.0%
Show replies	Organization:		100.0%
Show replies	Department:		100.0%
Show replies	Email Address:		100.0%
Show replies	Phone Number:		100.0%

answered question

skipped question

Show this

PAGE: GREENHOUSE GAS REDUCTIONS

1. Are you currently tracking greenhouse gas emissions produced by any of the following sources? [check all that apply] Create Chart

	Response Percent

answered question

skipped question

1. Are you currently tracking greenhouse gas emissions produced by any of the following sources? [check all that apply] Create Chart

Electricity	10.0%
Natural gas	20.0%
Gasoline	10.0%
Diesel	20.0%
Solid Waste (methane)	10.0%
None of the above	**80.0%**
	answered question
	skipped question

2. What strategies are in place in your organization to reduce emissions? [check all that apply] Create Chart

	Response Percent
Baseline measurements to establish current situation	30.0%
Annual goals for % reduction of each source of emissions	10.0%
Public education programs to engage public in reductions	30.0%
Energy efficiency improvements	**80.0%**
Facility design	70.0%
None	20.0%
	answered question
	skipped question

Show this

PAGE: RENEWABLE ENERGY

1. Have you considered or are currently using any on-site renewable energy sources? [check all that apply] Create Chart

	Considered	Currently Using
Geothermal	**75.0% (3)**	25.0% (1)
Wind	**100.0% (3)**	0.0% (0)
Solar thermal	**100.0% (3)**	0.0% (0)
Photovoltaic (PV)	0.0% (0)	**100.0% (1)**
None	**60.0% (3)**	40.0% (2)

answered question

skipped question

2. Do you purchase green energy through your utility provider or purchase carbon offsets? [check all that apply] Create Chart

	Response Percent
Yes, green energy	12.5%
Yes, carbon offsets	25.0%
No	**62.5%**
Green energy options not available through local utility	0.0%

answered question

skipped question

3. Do your organization's policies or standards encourage or require use of passive solar principles or solar orientation for new construction? Create Chart

	Response Percent
Yes, Encourage	**62.5%**

answered question

skipped question

3. Do your organization's policies or standards encourage or require use of passive solar principles or solar orientation for new construction? Create Chart

Yes, Require		0.0%
No		37.5%

answered question

skipped question

Show this

PAGE: ENERGY EFFICIENCY

1. Have your buildings been retrofitted for the following within the last five years? [check all that apply] Create Chart

		Response Percent
Energy efficient window replacement		50.0%
Energy efficient lighting		75.0%
Added insulation		50.0%
Roofing insulation		62.5%
White/light roof to reduce heat gain		0.0%
Energy efficient heating or cooling equipment (e.g. boiler, chiller, furnace)		**87.5%**

answered question

skipped question

2. Is there a plan in place to increase energy efficiency in your organization's facilities? Create Chart

		Response Percent
Yes		**75.0%**

answered question

skipped question

2. Is there a plan in place to increase energy efficiency in your organization's facilities? Create Chart

No		12.5%
Under Consideration		12.5%

answered question

skipped question

3. How many and what percentage of your buildings have undergone energy audits? Create Chart

		Response Average	Response Total
Show replies	Number of buildings	16.25	130
Show replies	Percentage of buildings	**57.00**	**456**

answered question

skipped question

Show this

PAGE: SUSTAINABLE BUILDING PRACTICES

1. When you build or renovate do you follow sustainable design and building guidelines such as the U.S. Green Building Council LEED™ guide (Leadership in Energy and Environmental Design) or the N B3 guide (Buildings, Benchmarks and Beyond) or Energy Star? [check all that apply] Create Chart

		Response Percent
LEED™		42.9%
B3		28.6%
Energy Star		**71.4%**
Other sustainable design and building guidelines		28.6%
Not familiar with these guidelines		14.3%

answered question

skipped question

2. In your organization is there a means established for evaluating and recommending building materials for life-cycle assessment, such as durability, toxicity, sourcing, availability, etc? Create Chart

	Response Percent
Yes	14.3%
No	**85.7%**
answered question	
skipped question	

Sustainability - Planning & Natural Systems Edit

Default Report + Add Report

Response Summary

Total Started Survey: 7
Total Completed Survey: 7 (100%)

Show this Page Only

PAGE: BASIC INFORMATION

1. Please provide us with the name of your organization and your department. If you'd like you may also provide your name and email address and/or phone number so we can follow up if we have questions. Download

		Response Percent	Response Count
Show replies	Name:	100.0%	7
Show replies	Organization:	100.0%	7
Show replies	Department:	100.0%	7
Show replies	Email Address:	100.0%	7
Show replies	Phone Number:	100.0%	7
	answered question		7
	skipped question		0

Show this Page Only

PAGE: LAND USE POLICIES

1. To what extent do your organization's plans and/or ordinances and/or facility designs promote sustainable land management practices? Create Chart Download

	Response Percent	Response Count
Not at all	0.0%	0
Somewhat	57.1%	4
A great deal	42.9%	3
Unsure	0.0%	0
answered question		7
skipped question		0

2. Which of the following would help promote sustainable land management practices in your organization? [choose two most important] Create Chart Download

	Most Effective	Second Most Effective	Rating Average	Response Count
Raise public interest or understanding of sustainable land use practices	33.3% (1)	66.7% (2)	1.67	3
answered question				7
skipped question				0

2. Which of the following would help promote sustainable land management practices in your organization? [choose two most important] Create Chart Download

Allocate adequate community resources to develop and implement sustainable land use polices and standards	0.0% (0)	**100.0% (1)**	2.00	1
Develop a shared vision among community decision makers and property owners regarding the role the community and property owners should play in promoting sustainable land use practices	**83.3% (5)**	16.7% (1)	1.17	6
Provide incentives to promote sustainable land use practices	0.0% (0)	**100.0% (3)**	2.00	3
Remove barriers that discourage sustainable land use practices	**100.0% (1)**	0.0% (0)	1.00	1
			Other (please specify)	0
			answered question	**7**
			skipped question	**0**

Show this Page Only

PAGE: SUSTAINABLE MULTI-MODAL TRANSPORTATION

1. Have you worked with public transit organizations to improve service to your organization's facilities (i.e. new routes, route changes, timing changes) or to improve transit infrastructure (i.e., improvements to bus stop locations shelters, lighting, bike parking)? Create Chart Download

	Response Percent	Response Count
Yes, on improvements to service	0.0%	0
Yes, on improvements to infrastructure	0.0%	0
Yes, on both improvements to services and infrastructure	**71.4%**	**5**
No	28.6%	2
answered question	**7**	
skipped question	**0**	

2. Do you have facilities or policies at your organization's locations to promote and encourage biking, walking, or carpooling? [check all that apply] Create Chart Download

	Response Percent	Response Count
Access by connected bicycle trails	**85.7%**	**6**
Access by connected sidewalk/walking trails	42.9%	3
Incentives for carpooling (e.g. best parking spots, lower parking fees)	42.9%	3
Safe Routes to School	28.6%	2
Bicycle racks available year-round	42.9%	3
Onsite showers available for bicycle commuters	28.6%	2
None	0.0%	0
answered question	**7**	
skipped question	**0**	

2. Do you have facilities or policies at your organization's locations to promote and encourage biking, walking, or carpooling? [check all that apply] Create Chart Download

I don't know	0.0%	0
Show replies Other (please specify)	14.3%	1
answered question		7
skipped question		0

3. Do you use or are you considering the use of any of the following to decrease the impact of your vehicle fleet? [check all that apply] Create Chart Download

	Currently Use	Considering	Response Count
Hybrid vehicles	33.3% (1)	**66.7% (2)**	3
Plug-in vehicles	0.0% (0)	**100.0% (2)**	2
Flex fuel vehicles	**60.0% (3)**	40.0% (2)	5
Biodiesel vehicles	**66.7% (2)**	33.3% (1)	3
Gasoline or diesel vehicles with greater than 35 mpg fuel efficiency	33.3% (1)	**66.7% (2)**	3
None of these	**100.0% (1)**	0.0% (0)	1
	Show replies Other (please specify)		1
	answered question		6
	skipped question		1

Show this Page Only

PAGE: HEALTHY URBAN FORESTS

1. What mechanisms do you have to protect, preserve and/or improve your organization's trees? [check all that apply] Create Chart Download

	Response Percent	Response Count
A tree preservation & protection policy	**57.1%**	**4**
A reforestation plan	28.6%	2
Prohibit the planting of invasive tree species (such as amur maple, black locust, Russian olive, Siberian elm, and Norway maple)	**57.1%**	**4**
Prohibit the planting of non-native tree species	42.9%	3
Promote planting of native trees	42.9%	3
Limit use of heavy machinery that compacts soil	28.6%	2
No grading in root zone area past the dripline of existing trees	28.6%	2
Coordinate tree planting and utility locations with tree locations	42.9%	3
None	0.0%	0
Show replies	28.6%	2
answered question		7
skipped question		0

1. What mechanisms do you have to protect, preserve and/or improve your organization's trees? [check all that apply] Create Chart Download

Other (please specify)	

answered question	7
skipped question	0

2. What incentives do you have to encourage tree planting? [check all that apply] Create Chart Download

	Response Percent	Response Count
Credit for stormwater volume reduction	0.0%	0
Financial support for cost of trees and planting	14.3%	1
Education on benefits of trees	28.6%	2
None	**42.9%**	**3**
Show replies Other (please specify)	28.6%	2
answered question	**7**	
skipped question	**0**	

Show this Page Only

PAGE: SURFACE & GROUNDWATER PROTECTION

1. What standards do you have to protect surface and groundwater resources (stormwater management, minimization of impervious surfaces, water quality improvement, etc.)? [check all that apply] Create Chart Download

	Response Percent	Response Count
Require water quality treatment (stormwater ponds, filtration, etc.)	**71.4%**	**5**
Require natural buffers along water resources	**71.4%**	**5**
Require infiltration of stormwater	28.6%	2
Encourage infiltration of stormwater	**71.4%**	**5**
Define maximum allowed road widths	28.6%	2
Define maximum allowed number and size of parking stalls	14.3%	1
Allow/encourage use of porous pavement	28.6%	2
Minimize parking lot sizes	28.6%	2
Shared parking facilities	57.1%	4
Minimize roof area (encourage multi-story buildings, smaller building footprints)	0.0%	0
Encourage green roofs	0.0%	0
None	14.3%	1
Other (please specify)	0.0%	0
answered question	**7**	
skipped question	**0**	

2. What types of education programs do you have related to water resource and water quality improvement and protection? [check all that apply] Create Chart Download

	Response Percent	Response Count
Newsletter articles on what people can do to protect water quality	57.1%	4
Storm drain stenciling	28.6%	2
Grant program to fund small on-lot water quality practices	14.3%	1
Newspaper articles on what people can do to protect water quality	57.1%	4
Volunteer water quality monitoring	**71.4%**	**5**
Technical assistance for small on-lot water quality improvement projects	28.6%	2
Volunteer programs to assist in water quality improvement	42.9%	3
None	14.3%	1
Show replies Other (please specify)	14.3%	1
	answered question	**7**
	skipped question	**0**

Show this Page Only

PAGE: MISSISSIPPI RIVER AND OTHER WATER CONSERVATION

1. What types of water use reduction standards, programs, or practices do you have? [check all that apply] Create Chart Download

	Response Percent	Response Count
Weather-based sprinkler or irrigation scheduling	**42.9%**	**3**
Rain sensors to limit sprinkler or irrigation use	**42.9%**	**3**
Water use audits for buildings	0.0%	0
Native, low water use vegetation	14.3%	1
Limit non-commercial washing of cars and boats	0.0%	0
Discourage washing of pavement and sidewalks	14.3%	1
Greywater use for irrigation	14.3%	1
Rainwater harvesting for irrigation	0.0%	0
Rainbarrel promotion or use	**42.9%**	**3**
None	28.6%	2
Other (please specify)	0.0%	0
	answered question	**7**
	skipped question	**0**

Sustainability - Products & Waste Edit

Default Report + Add Report

Response Summary

Total Started Survey: 10
Total Completed Survey: 7 (70%)

Select a page to view below or view all pages:

« #2. Environmentally Preferabl... »

PAGE: ENVIRONMENTALLY PREFERABLE PURCHASING

1. Do you have an environmentally preferable purchasing policy to provide guidelines for purchasing decisions to support environmental, social, and economic sustainability? Create Chart Download

	Response Percent	Response Count
Yes	14.3%	1
No	**85.7%**	**6**
Not sure	0.0%	0
	answered question	**7**
	skipped question	**3**

2. Do you provide training on environmentally preferable purchasing for staff responsible for purchasing? Create Chart Download

	Response Percent	Response Count
Yes	14.3%	1
No	**85.7%**	**6**
Not sure	0.0%	0
	answered question	**7**
	skipped question	**3**

3. Which of these products do you regularly purchase and/or use at your facilities? [check all that apply] Create Chart Download

	Response	Response
	answered question	**7**
	skipped question	**3**

3. Which of these products do you regularly purchase and/or use at your facilities? [check all that apply] Create Chart Download

	Percent	Count
Recycled Paper (minimum 30% recycled content)	**71.4%**	**5**
Forestry Stewardship Council (FSC) certified paper	14.3%	1
Green Seal certified cleaners	42.9%	3
Energy Star certified electronic equipment (computers, fax, copier, printer, scanner, etc.)	**71.4%**	**5**
Reusable containers for food and beverage service (plates, cups, mugs, etc.)	42.9%	3
None	0.0%	0
Show replies Other (please specify)	28.6%	2
	answered question	**7**
	skipped question	**3**

Select a page to view below or view all pages:

« #2. Environmentally Preferabl... »

Sustainability - Products & Waste Edit

Default Report + Add Report

Response Summary

Total Started Survey: 10
Total Completed Survey: 7 (70%)

Select a page to view below or view all pages:

« #3. Product Stewardship »

PAGE: PRODUCT STEWARDSHIP

1. Do your contracts with vendors specify purchasing of any of these types of products? [check all that apply] Create Chart Download

	Response Percent	Response Count
Minimal packaging	14.3%	1
Recycled content	42.9%	3
Reusable	14.3%	1
Previously-used	14.3%	1
None	**57.1%**	**4**
Other (please specify)	0.0%	0
	answered question	**7**
	skipped question	**3**

2. What types of education programs do you have regarding product stewardship? [check all that apply] Create Chart Download

	Response Percent	Response Count
Recycling education	**71.4%**	**5**
Reusable goods donation education	14.3%	1
Product life cycle education	14.3%	1
Hazardous materials avoidance and management education	57.1%	4
	answered question	**7**
	skipped question	**3**

2. What types of education programs do you have regarding product stewardship? [check all that apply]	Create Chart	Download
Education on reusable products to substitute for disposable products	28.6%	2
Promotion of garage sales, trading, etc. to encourage reuse	42.9%	3
None	14.3%	1
Other (please specify)	0.0%	0
	answered question	7
	skipped question	3

Select a page to view below or view all pages:

« #3. Product Stewardship »

Sustainability - Products & Waste Edit

Default Report + Add Report

Response Summary

Total Started Survey: 10
Total Completed Survey: 7 (70%)

Select a page to view below or view all pages:

« #4. Recycling & Waste Reducti... »

PAGE: RECYCLING & WASTE REDUCTION

1. Which of these recycling practices do you implement? [check all that apply] Create Chart Download

	Response Percent	Response Count
Recycling cans	100.0%	7
Recycling plastic	100.0%	7
Recycling paper	100.0%	7
Recycling cardboard	85.7%	6
Recycling glass	85.7%	6
Battery recycling	71.4%	5
Composting	71.4%	5
None	0.0%	0
Show replies Other (please specify)	14.3%	1
answered question		7
skipped question		3

2. What programs do you have to encourage waste reduction? [check all that apply] Create Chart Download

	Response Percent	Response Count
Reusable dishes and dishwater available for staff use	0.0%	0
Defined waste reduction goals	28.6%	2
answered question		7
skipped question		3

2. What programs do you have to encourage waste reduction? [check all that apply]	Create Chart	Download
Employee training/orientation on waste reduction methods and facilities	28.6%	2
Double sided printing policy	71.4%	5
Standard recycling and waste containers and signage	**100.0%**	**7**
Demand reduction practices	28.6%	2
Show replies Other (please specify)	14.3%	1
	answered question	**7**
	skipped question	**3**

Select a page to view below or view all pages:

« #4. Recycling & Waste Reducti... »

Sustainability - Products & Waste Edit

Default Report + Add Report

Response Summary

Total Started Survey: 10
Total Completed Survey: 7 (70%)

Select a page to view below or view all pages:

« #5. Sustainable Food Systems/... »

PAGE: SUSTAINABLE FOOD SYSTEMS/PRACTICES

1. Please indicate if you feel there is an interest in or commitment to sustainable food in the following institutions in your community: Create Chart Download

	Commitment	Interest	No	Response Count
Schools	16.7% (1)	**66.7% (4)**	16.7% (1)	6
Businesses	0.0% (0)	**66.7% (4)**	33.3% (2)	6
Government	33.3% (2)	**50.0% (3)**	16.7% (1)	6
Non-Profits	0.0% (0)	**100.0% (6)**	0.0% (0)	6
Healthcare	0.0% (0)	**66.7% (4)**	33.3% (2)	6
Congregations	0.0% (0)	**83.3% (5)**	16.7% (1)	6
Community Groups	16.7% (1)	**83.3% (5)**	0.0% (0)	6
			answered question	**6**
			skipped question	**4**

2. Please indicate which of the following exist in your organization, or in the community near your organization: Create Chart Download

	In my organization	In the community	None	Don't know	Response Count
Community Gardens	28.6% (2)	**71.4% (5)**	14.3% (1)	14.3% (1)	7
Farmers Markets	42.9% (3)	**100.0% (7)**	0.0% (0)	0.0% (0)	7
Community Supported Agriculture	33.3% (2)	**66.7% (4)**	0.0% (0)	33.3% (2)	6
				answered question	**7**
				skipped question	**3**

2. Please indicate which of the following exist in your organization, or in the community near your organization: Create Chart Download

Local/organic purchasing by grocery stores	0.0% (0)	**71.4% (5)**	0.0% (0)	28.6% (2)	7
Food Co-ops and Natural Food Stores	0.0% (0)	**100.0% (7)**	0.0% (0)	0.0% (0)	7
Local/organic purchasing by restaurants	14.3% (1)	42.9% (3)	0.0% (0)	**71.4% (5)**	7
Farmers using organic or sustainable practices	14.3% (1)	**85.7% (6)**	14.3% (1)	0.0% (0)	7
Locally grown campaign	28.6% (2)	**42.9% (3)**	14.3% (1)	28.6% (2)	7
City policy encouraging home yard composting	0.0% (0)	**42.9% (3)**	14.3% (1)	**42.9% (3)**	7
Residential yard waste collection/composting	57.1% (4)	**71.4% (5)**	0.0% (0)	0.0% (0)	7
Residential food waste collection/composting	0.0% (0)	14.3% (1)	**71.4% (5)**	14.3% (1)	7
Institutional food waste composting	33.3% (2)	**50.0% (3)**	0.0% (0)	33.3% (2)	6
Restaurant food waste composting	14.3% (1)	14.3% (1)	28.6% (2)	**42.9% (3)**	7
Extension service offering advice	28.6% (2)	**85.7% (6)**	0.0% (0)	14.3% (1)	7
Master Gardener Program	28.6% (2)	**100.0% (7)**	0.0% (0)	0.0% (0)	7
Gardening or Food Production Classes	28.6% (2)	**85.7% (6)**	0.0% (0)	14.3% (1)	7
Policies encouraging sustainable food systems	0.0% (0)	0.0% (0)	**57.1% (4)**	42.9% (3)	7
Zoning encouraging sustainable food systems	0.0% (0)	0.0% (0)	**66.7% (4)**	33.3% (2)	6

answered question **7**

skipped question **3**

3. What do you see as the biggest barriers to promoting sustainable food systems in your organization? Create Chart Download

	Primary Barrier	Secondary Barrier	Rating Average	Response Count
Not an important issue	**100.0% (1)**	0.0% (0)	1.00	1
Too many other pressing priorities	**80.0% (4)**	20.0% (1)	1.20	5

answered question **7**

skipped question **3**

3. What do you see as the biggest barriers to promoting sustainable food systems in your organization?			Create Chart	Download
Lack of interest	0.0% (0)	**100.0% (1)**	2.00	1
Too difficult to do or organize	0.0% (0)	0.0% (0)	0.00	0
Lack of resources	0.0% (0)	**100.0% (1)**	2.00	1
Lack of time	0.0% (0)	**100.0% (1)**	2.00	1
Cost	33.3% (1)	**66.7% (2)**	1.67	3
Lack of farmers practicing organic and/or sustainable agriculture	0.0% (0)	0.0% (0)	0.00	0
Lack of available local, organic and/or sustainably grown foods	**100.0% (1)**	0.0% (0)	1.00	1
			Other (please specify)	0
			answered question	**7**
			skipped question	**3**

Select a page to view below or view all pages:

« #5. Sustainable Food Systems/... »

Sustainability - Community Policies Edit

Default Report + Add Report

Response Summary

Total Started Survey: 9
Total Completed Survey: 9 (100%)

Show this Page Only

PAGE: BASIC INFORMATION

1. Please provide us with the name of your organization and your department. If you'd like you may also provide your name and email address and/or phone number so we can follow up if we have questions. Download

		Response Percent	Response Count
Show replies	**Name:**	**100.0%**	**9**
Show replies	**Organization:**	**100.0%**	**9**
Show replies	**Department:**	**100.0%**	**9**
Show replies	**Email Address:**	88.9%	8
Show replies	**Phone Number:**	88.9%	8
		answered question	**9**
		skipped question	**0**

Show this Page Only

PAGE: COMMUNITY HEALTH

1. Which of the following would help promote community health initiatives in your organization? [check the two most important] Create Chart Download

	Most Important	Second Most Important	Rating Average	Response Count
Provide training for staff to promote community health initiatives	40.0% (2)	**60.0% (3)**	1.60	5
Allocate adequate funding for community health	**50.0% (1)**	**50.0% (1)**	1.50	2
Raise public interest and understanding of community health issues and solutions	**100.0% (3)**	0.0% (0)	1.00	3
Develop a shared vision among decision makers regarding the role the community should play in promoting community health	0.0% (0)	**100.0% (2)**	2.00	2
Remove barriers that are preventing community health initiatives	**50.0% (1)**	**50.0% (1)**	1.50	2
Promote understanding and awareness of the connection between community health and planning	**66.7% (2)**	33.3% (1)	1.33	3
		Other (please specify)		0
		answered question		**9**
		skipped question		**0**

2. Which, if any, of the following plans does your organization have that explicitly address community health? [check all that apply] Create Chart Download

	Response Percent	Response Count
School District operating plans	25.0%	2
Comprehensive Plan	**50.0%**	**4**
Parks and Trails Plan	37.5%	3
Transportation Plan	37.5%	3
Housing Plan	12.5%	1
Facilities Plan	12.5%	1
Downtown Plan	12.5%	1
Human Services Plan	12.5%	1
Redevelopment Plan	12.5%	1
Show replies Other (please specify)	25.0%	2
	answered question	**8**
	skipped question	**1**

3. What types of programs does your organization have related to promoting community health? [check all that apply] Create Chart Download

	Response Percent	Response Count
Newsletter articles, websites, and similar promotional material	**55.6%**	**5**
Policies that encourage or require explicit consideration of community health as they relate to pertinent planning decisions (subdivisions, redevelopment, water quality, etc.)	22.2%	2
Multi-modal transportation options	44.4%	4
None	11.1%	1
Show replies Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**0**

Show this Page Only

PAGE: SUSTAINABILITY EDUCATION

1. Please indicate if you feel there is an interest in or commitment to addressing environmental and sustainability issues in the following in your community: Create Chart Download

	Commitment	Interest	No	Response Count
Schools	**57.1% (4)**	42.9% (3)	0.0% (0)	7
Businesses	14.3% (1)	**71.4% (5)**	14.3% (1)	7
Government	**50.0% (4)**	**50.0% (4)**	0.0% (0)	8
			answered question	**8**
			skipped question	**1**

1. Please indicate if you feel there is an interest in or commitment to addressing environmental and sustainability issues in the following in your community: Create Chart Download

Non-Profits	28.6% (2)	**71.4% (5)**	0.0% (0)	7
Healthcare	42.9% (3)	**57.1% (4)**	0.0% (0)	7
Congregations	14.3% (1)	**71.4% (5)**	14.3% (1)	7
Community Groups	42.9% (3)	**57.1% (4)**	0.0% (0)	7
			answered question	**8**
			skipped question	**1**

2. Please indicate if you feel there are effective environmental or sustainability programs or education programs in the following in your community: Create Chart Download

	Yes	No	Response Count
Schools	42.9% (3)	**57.1% (4)**	7
Businesses	14.3% (1)	**85.7% (6)**	7
Government	**50.0% (4)**	**50.0% (4)**	8
Non-Profits	42.9% (3)	**57.1% (4)**	7
Healthcare	28.6% (2)	**71.4% (5)**	7
Congregations	0.0% (0)	**100.0% (7)**	7
Community Groups	28.6% (2)	**71.4% (5)**	7
		answered question	**8**
		skipped question	**1**

3. What do you see as the biggest barriers to promoting environmental and sustainability education in your institution or community? Create Chart Download

	Main Barrier	Secondary Barrier	Rating Average	Response Count
Not an important issue	0.0% (0)	0.0% (0)	0.00	0
Too many other pressing priorities	**100.0% (1)**	0.0% (0)	1.00	1
Lack of interest	0.0% (0)	**100.0% (1)**	2.00	1
Lack of resources	40.0% (2)	**60.0% (3)**	1.60	5
Lack of time	25.0% (1)	**75.0% (3)**	1.75	4
Lack of funds	**71.4% (5)**	28.6% (2)	1.29	7
			Other (please specify)	0
			answered question	**9**
			skipped question	**0**

Show this Page Only

PAGE: INNOVATIVE OPPORTUNITIES

1. Who do you partner with to accomplish your energy, environment, and sustainability goals? [check all that apply] Create Chart Download

	Response Percent	Response Count
Utility providers	**77.8%**	**7**
Local non-profits	55.6%	5
Local businesses	55.6%	5
Colleges & Universities	44.4%	4
State government agencies	55.6%	5
Local government agencies	**77.8%**	**7**
Federal government agencies	33.3%	3
Volunteers	55.6%	5
No one	11.1%	1
Other (please specify)	0.0%	0
	answered question	**9**
	skipped question	**0**

2. What innovative, sustainability-related programs, policies, or standards do you have that you do not feel have been addressed in these surveys? Download

	Response Count
Show replies	2
answered question	**2**
skipped question	**7**

Show this Page Only

PAGE: SUSTAINABLE GOVERNMENT POLICIES/PRACTICES

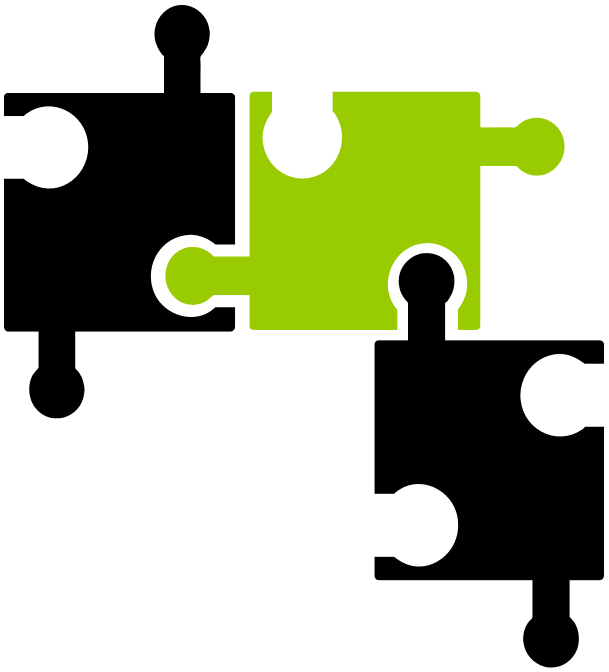
1. To what extent do your city or county's existing policies, practices, and programs present obstacles or barriers that limit your organization's ability to move toward sustainability? Create Chart Download

	Response Percent	Response Count
No obstacles or barriers	**44.4%**	**4**
Some obstacles or barriers	**44.4%**	**4**
A great deal of obstacles or barriers	0.0%	0
Unsure	11.1%	1
	answered question	**9**
	skipped question	**0**

2. To what extent do your city or county's existing policies, practices, and programs provide incentives to help your organization move toward sustainability? Create Chart Download

	Response Percent	Response Count
	answered question	**9**
	skipped question	**0**

2. To what extent do your city or county's existing policies, practices, and programs provide incentives to help your organization move toward sustainability?	Create Chart	Download
No incentives	**44.4%**	**4**
Some incentives	33.3%	3
A great deal of incentives	11.1%	1
Unsure	11.1%	1
	answered question	**9**
	skipped question	**0**



APPENDIX B

Education Sessions

Outline for St. Cloud Sustainability Education Sessions
By Terry Gips
December 10, 2009

10 am (4 pm) Welcome, Introductions, Goals, Logistics, Agenda

10:20 am (4:20 pm) Good News About the Planet, The Challenges and Opportunities We Face, and Why This is Mission Possible

10:35 am (4:35 pm) What is Sustainability: It's Roots, Definitions and Opportunities for Saving Money

10:45 am (4:45 pm) Paired and Group Discussion of Sustainability Questions and challenges participants face in their personal life, workplace and community

10:55 am (4:55 pm) Break

11:05 am (5:05 pm) Why We've Crossed the Sustainability Tipping Point - Questions/Discussion

11:15 am (5:15 pm) How We Can Climb Mt. Sustainability – The ABCD Process - Questions/Discussion

11:25 am (5:25 pm) Sustainability Visioning Exercise and Discussion

11:35 am (5:35 pm) Story of the Natural Step Framework (NSF) – Questions

11:40 am (5:40 pm) Purpose of the NSF and Who's Using It – Questions/Discussion

11:50 am (5:50 pm) Summary of the NSF – Questions/Discussion

Noon (6 pm) Break for Meal

12:15 pm (6:15 pm) NSF Four Principles for Sustainability - We provide practical examples of each principle to show how to save money, time, health and the environment. We also explore Manfred Max-Neef's Alternative Nobel Prize-winning fundamental needs analysis, addressing social and environmental concerns that can be invaluable for any institution. Participants will look at the Municipality or Workplace Action Checklist for each principle and discuss with partner.

1:10 pm (7:10 pm) Break

1:15 pm (7:15 pm) Summary of Natural Capitalism and Cradle to Cradle

1:20 pm (7:20 pm) Applying ABCD Process with the Group, including Visioning for St. Cloud

1:45 pm (7:45 pm) Questions/Discussion, Next Steps, Closing Comments and Evaluation

2 pm (8 pm) Conclude

Education Session Attendees

Scott	Mareck	Area Planning Organization
Chelle	Benson	Benton County
Jim	Whitcomb	Benton County
Spencer	Buerkle	Benton County
Rick	Miller	Central Minnesota Sustainability Project
Dan	Michaels	Central Mn Sustainability Project
Anita	Rasmussen	City of Sartell - Sustainability Committee
Paul	Weber	City of Sauk Rapids
Bill	McCabe	City of St. Augusta
Matt	Glaesman	City of St. Cloud
Nia	Primus	City of St. Cloud
Staff		City of St. Cloud Engineering
Staff		City of St. Cloud Utilities
Jane	DeAustin	CMBA
Valerie	Ohmann	CMBA
Jim	Green	CMBA
Susan	Lorenz	CMCF
Dr Ernie	Diedrich	CSB/SJU
Theo	Eggermont	CSB/SJU
Dr Jean	Lavigne	CSB/SJU
Mark	Hauck	DNR
Tom	Moore	Economic Development Party
Linda	Peck	Environmental Council
Lowell	Olson	Environmental Council
Marian	Bender	Environmental Council
Maureen	McCarter	Environmental Council
Jessica	Heim	Environmental Council
Kevin	Lanave	Environmental Council
Charlotte	Stephens	Environmental Council
Luke	Christianson	GDS Assoc
Ted	Venske	Interested in renewable energy
Tom	Cruikshank	MTC
Terry	Markfort	MTC
Sandra	Cordie	Sartell Planning Commission
Dale	Gasser	Sartell St Stephen
Steve	Ludwig	SCSU
Staff		SCSU
Judy	Willenbring	SCTC CMBA Club
Brian	Justin	SCTC CMBA Club
Lynn	Wayatschek	Sherburne County
Will	Haider	SR Green Committee
Marlene	Haider	SR Green Committee
George	Hontos	St. Cloud City Council
Judith	Peters	St. Cloud Resident - very interested
Michael	Sjogren	St. Cloud Resident - very interested
George	Rindelaub	Steans County
Staff	Rindelaub	Stearns County
Dave	Gruenes	Stearns Electric
Kim	Thielen Cremers	Stearns Soil and Water Conservation District
David	Leapaldt	Sustainability Committee
Stan	Weinberger	Sustainability Committee
Bill	Vennes	Sustainability Committee - SCTC
Keith	Schupp	Winkelman Builders

MEMORANDUM

TO: St. Cloud Area Joint Planning District Board
St. Cloud Area Joint Planning District Board Sustainability Committee

FROM: Matt Glaesman, St. Cloud Community Development Director
Nia Primus, St. Cloud Sustainability Coordinator

DATE: December 15, 2009

SUBJECT: Sustainability Framework Plan – Session 1 Evaluation

The Sustainability Committee and its consultant team hosted two community involvement sessions on December 10, 2009 at the St. Cloud Civic Center. These events were focused on developing a regional understanding of sustainability objectives and terminology, as well as generating community interest in the regional framework planning process that is to be undertaken in the coming months. Approximately 65 representatives of the area's local governments, institutions, business community, environmental organizations, and other interested parties participated in the two sessions. The following are the responses from the evaluation forms:

COURSE EVALUATION:

	Excellent	Very Good	Good	Fair	Poor
1. Overall, I would rate the session	29%	55%	15%	1%	
2. Degree to which session met your expectation	34%	34%	23%	6%	3%
3. I would rate the content	34%	56%	10%		
4. I would rate the facilitation, presentation, and discussion	38%	44%	9%	9%	
5. Degree to which questions were adequately answered	26%	50%	14%	10%	
6. I would rate the presentation by Terry Gips	59%	23%	15%	3%	
7. Relevance of seminar to your work or organization	32%	46%	17%	5%	
8, Relevance of seminar to your personal life	43%	39%	12%	6%	
9. Potential value of session for your community	47%	38%	9%	6%	
10. Potential value of becoming an eco-municipality	33%	49%	12%	8%	
11. Degree of excitement about St. Cloud Area's Sustainability Process	39%	41%	17%	3%	
12. Exercises are useful	25%	28%	30%	12%	5%

13. Appropriateness and comfort of the room	41%	31%	25%	3%	
14. Timing and duration of session	20%	36%	23%	21%	
15. Food and beverages	33%	40%	24%		3%

16. What will you do or think differently about as a result of this seminar?

- Create a desire to learn more, become involved.
- Maybe it's possible
- Compass for sustainability****(Linda Peck's comments)
- Be attentive & more responsive to local business leaders concerned about these issues, as well as congregations
- Impact of choices and sustainability
- How to apply these principles to our community in addition to my own life and work
- Engage more elements in the community. Encouraged by diverse cross section of interested parties; crosses political boundaries.
- Inform others about the seminar and help others implement ideas.
- Good ideas to take home and to work.
- Work with other county staff to promote the natural step process.
- Think about my involvement and how I can inform peers about sustainability.
- People are doing more than I thought about sustainability in the area.
- More encouraging view of sustainability.
- Add other organizational members
- Look for companies that practice green and use their products.
- Will be more open to sustainability processes.
- Check on salt pools.
- Lots!
- Become more conscious of sustainability in my home.
- Is technology the way out of our current dilemma? Univ. of Central FL Environmental Politics Professor would say otherwise.
- Feel more empowered; inspired.

17. The most valuable sections, concepts and/or exercises were?

- Examples of companies/cities making changes.
- Good to go through natural steps (4 principles)(Linda Peck's comments)
- The section on "Meeting Human Needs"
- All the information was interesting and was motivating, but too much time spent lecturing and not enough time to discuss ideas and how to implement them.
- Real examples of how concepts have been put into place.
- Checklist
- Examples of how cities have been successful in sustainability
- How major companies are getting involved in the movement
- Examples (comment made three times)
- All of it
- Last section
- NSF

- Discussion of results
- Next to last segment on examples
- Session after dinner
- NSF's ABCD steps
- Positive outlook to the potential of this natural step

18. The least valuable sections, concepts and/or exercises were?

- Too much information in too much detail
- Felt a bit like an infomercial
- Presentation should have been condensed to allow time to brainstorm ideas to make St. Cloud more sustainable and how to implement the ideas.
- Needed more time
- Nothing; a great educational session
- Survey results; not enough information
- "Evangelical" first half
- Meeting human needs
- Ending books; redundant – keep copies to include as references
- Everything was good

19. The following sections or concepts were confusing or could be improved.

- The first 1-2 hrs. could have been shortened to allow time to address what we can do and obstacles to getting things done.
- None
- Information was covered too slowly. Hoping for a more productive planning and brainstorming session.
- Could have used more time digesting the four principles
- Didn't solve the "problems" identified as promised
- The value of recycling/aluminum can equal to running TV for 1 hr.

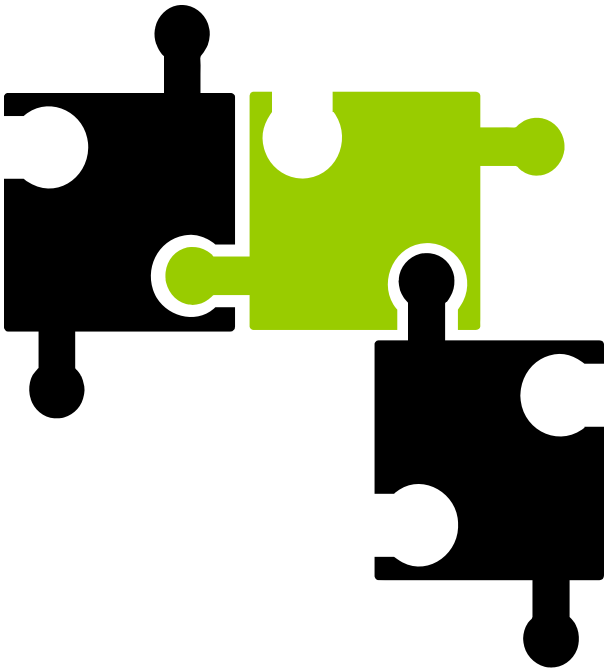
20. What do you see as the biggest community challenges or opportunities for bringing about sustainability?

- I see nothing but opportunity.
- Overcoming consumer mentality
- Greed; paying fairly for what we demand; political will; financial priorities; vested interests with power relinquishing power/growth to the common good; every pro has a con; each new technology has its good/bad side.
- Senses people at the seminar were much more concerned about finding ways to address first three principles than the "meeting human needs" principle.
- Getting buy-in; common understanding of vision and goals.
- Community's conservative, traditional mindset; a culture that is hesitant to celebrate leaders, success
- All the surrounding communities agreeing to go forward with a plan
- Developing a common vision
- Getting information to public in an understandable way
- Engaging the public

- Showing how sustainable ideas will better the community
- Disseminating information; getting people involved; funding
- Community education
- Leadership; commitment; explaining sustainability
- Coordination and planning; funding
- Getting people to believe in sustainability and changing their lifestyles; creating jobs.
- Changing people's behavior
- Greater buy-in; realize that it is not painful to be "green".
- Time; resources
- Convincing leaders of profitability and opportunities
- Resistance to change
- Moving from personal vehicles to personal rapid transit and mass transit
- Some like things the way they are; publicity

21. You may use the following quote in promoting the session (name, title, and affiliation is needed)?

- This workshop provides a valuable opportunity for people who are concerned about "sustainability" for different reasons to gather together to consider possibilities for collaboration. (Kevin LaNave)
- This is our hope for a better, richer future. (Rick Miller)
- Woo-hoo! (Lisa Vollbrecht)
- "9/11 is the day citizens of the USA became world citizens." (Nicholas Snavely, world citizen & Ass't. Area Wildlife Manager – MNDNR
- "An inspirational and empowering first session and really gets the wheels turning. Looking forward to the next steps." (Dan Michaels)



APPENDIX C

Vision and Action Planning Session

agenda

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- **Welcome and Introductions**
  8:00 AM 1:00 PM

- **Review of Sustainability Concepts & Agenda & General Topic Areas**
  8:10 AM 1:10 PM
  - Energy Efficiency
  - Greenhouse Gas Reductions
  - Building Practices
  - Renewable Energy
  - Land Use Policies
  - Multi-modal Transportation
  - Community Health
  - Urban Forests
  - Surface & Groundwater Protection
  - Mississippi River Water Conservation

- **Baseline Assessment**
  8:30 AM 1:30 PM

- **Full Group Review of Baseline Assessment Discussions**
  8:50 AM 1:50 PM

- **Break** 9:05 AM 2:05 PM

- **Visioning for St. Cloud area**
  9:15 AM 2:15 PM

- **Full Group Review of Visioning Discussions**
  9:35 AM 2:35 PM

- **Concepts & Key Questions in Energy Efficiency and Greenhouse Gas Reductions**
  9:50 AM 2:50 PM

- **Small Group Discussions on Energy Efficiency and Greenhouse Gas Reductions**
  10:00 AM 3:00 PM

- **Full Group Review of Small Group Discussions**
  10:30 AM 3:30 PM

- **Break** 10:45 AM 3:45 PM

- **Concepts & Key Questions in Building Practices and Renewable Energy**
  10:55 AM 3:55 PM

- **Small Group Discussions on Building Practices and Renewable Energy**
  11:05 AM 4:05 PM

- **Full Group Review of Small Group Discussions**
  11:35 AM 4:35 PM

- **Next Steps & Closing Comments**
  11:50 AM 4:50 PM

minutes

651 Hale Avenue North Oakdale, Minnesota 55128 telephone: 651.770.8448 facsimile: 651.770.2552 www.eorinc.com

Date | February 23, 2010

Meeting Date | February 4, 2010

Meeting Time | 1:00 PM – 5:00 PM

Meeting Location | St. Cloud City Hall, Council Chambers, St. Cloud, MN

Project | St. Cloud Area Sustainability Framework Plan

Regarding | Community Vision and Action Planning Sessions: Products & Waste

Attendee(s)	**Contact Info**
Susan Hubbard	Eureka Recycling
Terry Gips	Sustainability Assoc.
Brett Emmons	EOR
Lisa Tilman	EOR
Chelle Benson	Benton County
Lydia Brylski	Resident
Barth Buehrer	Resident
Steve Foss	City of St. Cloud
Meghan Grier	SCSU Student
Patty Hackett	Resident
Bill Haider	Sauk Rapids Green
Arnie Thell	City of St. Cloud
Rachel King	SCSU Student
Doug Lien	Tri County Waste
Rick Miller	Central MN Sustainability Project
Lowell Olson	Sustainability Committee
Lou Palmersten	Resident
Linda Peck	Sustainability Committee
Nia Primus	City of St. Cloud
Bill Schluenz	City of Waite Park
Nicholas Snavely	DNR
Charlotte Stephens	Sustainability Committee
Ric Teneis	Resident
Ted Venske	Resident
Lynn Wayatschek	Sherburne County
Jim Whitcomb	Benton County
Scott Zlotnik	City of St. Cloud

Record By | Lisa Tilman

Brief Review of Sustainability Concepts and Agenda

EOR provided an overview of the process and goals for the session: set a vision and discuss actions that will lead the St. Cloud area toward sustainability. The process will start with an assessment of where we are now, set a vision in the topic areas, and meet in small groups to discuss ideas of what can be done to move toward sustainability in these areas. Sustainability Associates provided a summary of the Natural Step Framework sustainability concepts covered at the education sessions. The four principles are: 1.

Reduce what we take from the earth, 2. Reduce what toxins we make, 3. Reduce our impact on ecosystems, 4. Meet fundamental human needs.

Topic Area Overview
Eureka Recycling and Sustainability Associates provided general background on the planning topics for this session: environmentally preferable purchasing, product stewardship, recycling & waste reduction, sustainability education, and food systems & practices

Baseline Assessment
Participants divided into two groups and discussed the current status of their community and/or organization with respect to the session topics. The notes of the discussions ideas from the groups are attached.

Full Group Review of Baseline Assessment Discussions
Each group provided a brief summary of their baseline assessment.

Break

Visioning for St. Cloud area
Each group held discussions on "What would your community or organization look like if it were sustainable in these topic areas?" "What would the St. Cloud Area look like if it were sustainable in these topic areas?" The notes of the discussions ideas from the groups are attached.

Full Group Review of Visioning Discussions
Each group provided a brief summary of their vision.

Overview of Concepts & Key Questions in Preferable Purchasing, Product Stewardship, Recycling & Waste Reduction
Eureka Recycling provided an overview of sustainability concepts for environmentally preferable purchasing, product stewardship, recycling & waste reduction and key questions for the small group discussion.

Small Group Discussions on Preferable Purchasing, Product Stewardship, Recycling & Waste Reduction
Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the environmentally preferable purchasing, product stewardship, recycling & waste reduction areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions
Each group provided a brief summary of their action ideas.

Break

Overview of Concepts & Key Questions in Sustainability Education and Food Systems & Practices
Sustainability Associates provided an overview of sustainability concepts for sustainability education, and food systems & practices and key questions for the small group discussion.

Small Group Discussions on Sustainability Education and Food Systems & Practices

Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the sustainability education and food systems & practices areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions

Each group provided a brief summary of their action ideas.

Next Steps & Closing Comments

EOR summarized the ideas from the session and how they will be used by the Sustainability Committee.

Baseline	**Group 1**

Environmentally Preferable Purchasing (EPP), Product Stewardship, Waste/Recycling

Hard to find EPP

Packaging too much

Education lacking for Consumers

Recycling – seems too hard, not motivating people – how do we incentivize participation

Incentives/$ for recycling?

Plus – ex. – city collection system – cheaper

Economic Incentives Structure

Institutional Recycling lacking

- ex. Schools, away from home (parks, sport events)

Composting of waste – Not happening ~anywhere
-Not Visible (some at home being done)
- Confusion - mixed, waste composting failure

Product Stewardship – Externalized disposal cost

-ex. Plastic silverware
-true cost not showing
-oil change recycling
- extra charge (batteries – pd up front)

Confusion for what plastics are recycled

Deposits not common

Reuse – Hard to know what is reusable

Timing – Get rid of right now

Separated recycling vs. single-stream

-Does single stream have higher participation?
-What are losses of single stream

Next trends-

-less packaging needed
-preventable waste
-less lawns (less inputs)
Food storage & Practices are missing/lost

Manufacturing in St. Cloud Area?

-printers - high waste
-Lens manufacturing
-Electrolux – freezers
-Cabinetry/woodworking
-Farming/Agriculture (ex. Stearns Co. is biggest)

Pesticides – are we using integ. Pest management (IPM) ?

EPP – very costly
-up front cost vs. life cycle costs - ?
-3-bottom line vs. (1) bottom line ($ only)
-Coop. purchasing? – ex 3 Cos.
-Quantity benefits – how?
-ex. County
-Recycling – are markets there? Closing loop
-Construction/ Demo Waste – Looking at it?

Baseline	**Group 2**

Agriculture/Food

Better in 10mi. of St. Cloud (than 50 mi)
- Organic community gardens
- But still < 1%

Stearns more org. than any County in MN
- Esp. Dairy
- Marketing organizations to support

Lots of corporate farms
- Use a lot of fertilizer
- Problems in sauk R./miss. R.
- Water quality issues – especially with Ethanol

Lagoons – waste

Atrazine in groundwater

Hard to start farming

Hard to sell agricultural land (except to Corp. & Developer)

Ethanol
- Where water from
- Need to use nearby

Local food
- Small % local
- Meat more
- Milk trucked out & trucked back
- Mushroom in St. Joe to Minneapolis to package & back
- Need -> ability to distribute locally
- Need education on buy & grow local
- 1 co op
- Many farmers markets
- Some CSAs
- Supermarket – organic, not much local
- Few restaurants

Schools
- Processed
- Not organic/not local
- Local night @ st. cloud state
- One local corn day at school
- Movement to get local @ hospital & schools
- Also schools composting

Education

Kids
- Some, eg. Water bottles fill up own

High school
- Very good vs. 20 years ago
- "hip" today to be sustainable
- Buzz words everywhere "being green"
- Still a gap between knowing and doing
- Need to change behaviors
- Some for & some against rebelling
- Eco challenge & carbon footprint
- More active students – grants & scholarships
  - 1 sustainability scholarship
- Adopt a block (clean up)
- Have some recycling programs but not so clear new technology (computers, etc) want to do with it

Vision	**Group 1**

Year 2020

Environmentally Preferable Purchasing (EPP), Product Stewardship, Waste/Recycling
Recycling/Waste Reduction –

- Easy Home Recycling – everyone does it
- Easy Home Composting – everyone does it
    - Less $
- Less plastic packaging
    - Bulk purchasing
    - Less/No shrink wrap
- More people participate/involved
- Found financial incentives
- Understand 3-bottom line (need to do it)
- Garbage pale @ Curb – small , recycling – large
- Systems that encourage
    - Institutionally-supported/fostered/modeled
- Recycling @ ALL locations
- Campus housing ->
- Bottle deposits - so valuable it "disappears on its own"
- Product. Stewardship – ex. Swap phone books
- Financials -> cheaper to recycle that landfill
- Composting organic wastes
- Require Commercial Recycling – All – (small businesses, communities, schools, instit.)
- Motivated citizenry (ex. WW II)
- Clarity in what is recyclable
- Accountability -> truly recycled if labeled
- Very little waste ~ O
- Organized collection
- Pay for extra waste
- Credits for recycling -> $ better
- Understand whole system – "connections" are made
    - On internet
    - Local (ex. Craig's list)
- Government leads the way – EPP

Environmentally Preferable Purchasing (EPP),

- Info (web) from Mfg'rs – Clear, trust
- Mfgr. Takes responsibility for product ($)
    - Designs changed

Hard to recycling (furniture, mattresses...) are recycled
Created jobs (lots of them)
Electronics are recycled
Use at highest/best.....on down.
-ex. Incinerate – last
Packaging redesigned for recycling-friendly, compostable

Vision	**Group 2**

Year 2020

Agriculture/Food

- AG – small diverse farm
- Permaculture through region
- Ban inhumane food production

- Community garden in all neighborhoods
- Distribution process for local foods
- 12 month local food available
- Ordinance can grow food on own property (front yards)
- Restrict pesticide yards, esp. sensitive areas
- Residents aware where to buy local
- Equalize or eliminate subsidy in the area
- Subsidy for organic/sustain
- No subsidy for large corporations
- Crop diversity
- Local organic foods – all schools / colleges/ univ./ hospital
- Local food in grocery store
- Set aside natural areas
- Easy to start farm
- No hormones in cows/chickens
- Free range animals – rotational grazing
- Powerful multiple CSAs
- Better use of groundwater
- Alternative irrigation – no tax breaks for irrigate
- Grow food, not fuel. (unless food biomass)
- Circular process – move closer to sustainability
- All cultures have access to land & produce food multicultural food

<u>Education</u>

- All schools have a garden
- All schools have compost
- Sustain. Ed normal part of school – all levels at school
- Complete transparency of how tax $ used
- Sustainability major available
- All blocks adopted through cleanup program
    - Whoever makes waste pays for cleanup
- Cost reflects clean up, etc.
- Understand needs vs. demands
- Broad awareness of recycling
    - Local centers for recycling
- Local composting sites
    - Encouraged on own properties
- Tax on plastic bags, etc.
- Children become more holistic as grow up – broad life experience, see farm, help
- School lunch prepared at the school
- Locally aware of sustain. & celebrate it
- Impact shown on goods so know when buy what went into making it
- Healthy good food for all income levels
- Year round local sust. food & fair trade market
- Sustainable support programs – improve master gardeners, extension
- Green roofs/ rooftop gardens
- Community greenhouse
- Non emitting vehicles
- Food on public lands
- Bicycle paths/system
- Big Hurdle = opposition to change
- Recycling is model of how can move forward – little step, moves everyone forward
- Next step = have vision & move forward
- Also look back to see progress
- Show people the benefit to themselves

Actions	**Group 1**

Environmentally Preferable Purchasing (EPP), Product Stewardship, Waste/Recycling

- Consumers part of system – co. w/investors (including government $)
  To incentivize recycling
- School contest – design containers for their site
  -hospitals, etc. "Biggest Reducer" (show)
- Change Laws – organics separated – food, yard, waste
  education about barriers to composting, other
  " " potential " "
- Reuse hard to recycle stuff (mattresses, etc.)
- Show great examples that exist – web site, links on government sites
  1. "Up on Green" program – PR
- Set Standards – then recognize businesses so they get more business
- Green Expo in St. Cloud
- Construction waste – reuse systems, make aware how much it is (measure it differently)
- Zero-waste – goal for all participating organization
- Businesses self promote
- ex. Builders that use reuse materials
- Standards/oversight – who is really green
  -Certification
  -target what materials could/should be reused/recycled – start somewhere
- Government spec. be model for reuse/recycle items – address liability – studies for insurance – show OK
- College move out day ("dump & run") – reuse – social services & churches promote it
  - Designated lot for storage & new users
  - Fund raisers by churches, etc. – sell it
- Institutions – Get recycling cont. out there
- Organize trash collection – all communities
- Paper – reuse by schools – PU & recycle
  - Copiers & printers – set for 2-sided
- Neighborhood – level block parties/ sharing – info sharing/ Education sessions – ex. Composting
- Schools – find get champions & reward them – ex. Albany
- Clean up / Throw Away Day -> "Recovery Day"
- Remove barriers to reuse
- "Recycling Credits" (compared to C-credits) – Government get C credits for recycling
- Competitions – careful -> reduce waste (vs. recycling)
  - Highest & Best
- 1-Day within community – focus on this issue.

Agriculture/Food

- Gardening
  - Educ. – How
- Food preservation – (re)teach how.
- Food storage – educ.
- Educ/Awareness of what available locally
  - Sources of info-
- Central Farmers market for St. Cloud- shelters, pkg
  - Year round – urban
  - Neighborhoods also
- School Kids – Don't know where food is from – Sartell-"food to table" for schools – veggies
  - Local masters – garden club for kids
  - Change diet
- Barriers – breakdown – regulations
- Composting – educatre (smell, healthy?)
- Educate people to impacts of certain foods

  - Dairy, meats, pesticides, fertilizers
  - Higher costs for sustain. Explain benefits
  - Adjust tax structure to balance them financially
  - Not be advisarial
  - Keep messages simple & Positive
    - Ex. Focus on an organic stearns county co. dairy/meats
- Wasted Food (ex. Bread co. – big in st. cloud -) what is happening to it?
  - How to do it better
  - 2nd harvest – composting – animals
- Benefits of sustain farming
- Incentives for " " (already on conventional)

Education on sustainability
- Tech. Staff of local government – trin them
  - Institutional sustain within programs – so planning at local level is sustainability.
- ID benefits – ex. Sustainable farming
  - Experiental-based education
  - Partnerships – ex. Food – healthcare – clean environment
    - Businesses (ex. Polluters DOW) – fund local initiatives
  - Teaching gardens @ schools
    - Can do in small spaces – rooftop, green houses, Thompson greenhouses plastic
  - Tech colleges – green buildings
    - Univ. have lost ecologists (vs. medical microbiology)
  - Water reuse/recycle - @ homes – local person
  - Local TV , web sites, cable access channel

Actions	**Group 2**

Environmentally Preferable Purchasing (EPP), Product Stewardship, Waste/Recycling
- Move away from plastic bags
  - Discount to reuse bags
- Reduce packaging
  - Awareness locally
  - Encourage bulk
- Recycle competition between:
  - Schools
  - Business
- Promote post-consumer recycle
- Ban certain plastics (eg. Polystyrene)
- Measure & track progress
- Government buy environmentally preferable products
  - Bring cost down
- Group purchasing to reduce costs for individuals
- Trucks weigh recycling
  - Incentives to recycle more
- Weight based waste fee
- Mulching movers
  - One shared by neighborhood
- Sell backyard composters
- Education on composting
- Biodegradable trash bags
- National businesses purchase environmentally
- Reusable containers for food takeout etc
- Think before you buy

- Move away from consumption based economy
- First step is REDUCE
- Clothing/furniture, etc. Swaps
- Hero/Shero stories of good example
- College collection of unwanted items at end of year
    - Include school supplies
    - Curb day – out at curb for all to take
- Plant diversity of trees
- Product lifecycle tour – landfill, wastewater, etc, recycling
- Change government, schools, businesses purchasing to environmentally
    - Also focus on local purchasing
- Grants evaluate who is sustainable to get $$
- Labeling and longevity of Products
    - What to choose
    - How long last
    - What impacts
- Generic high school sweatshirts, etc.
    - Not by sport – teaches to buy
- Education on what is enough
    - E.g. story of stuff
- Collect own garbage for a week
    - What is in there
    - Raise awareness
- What are businesses doing – set standards / certification

<u>Agriculture/Food</u>

- Prioritize, make plan & goals
    - Most good first
- Courage to say what the area can support
    - Carrying capacity
    - Soils cant grow more forever
    - There is a limit
- Connect people with land (Center MN Sust. Project)
    - Expand the project
    - Integrate
    - Diversity of crops/animals
    - Shaved meals / prep./ preservation
    - Look into permaculture – education
- Define marketing approach for this lifestyle
    - City TV
    - Twitter
    - Newsletters/papers/ etc.
- Marketing where to buy
- Investigate why we stopped the sustainable practices
    - Learn from mistakes
- School / congregations gardens & greenhouse
- Use greenhouses already here to grow food
- Policy to purchase local / organic
- Consider incentives / disincentives
    - E.g. pay for bag
- Talk to grocery to include local foods
- Smaller local food stores – in all neighborhoods
    - accessible by bus as well
- Vacant land for gardens
    - Work with city
    - Education – get word out

- Council members have own gardens
    - Celebration
    - Mayors Garden & Greenhouse
- Workshops on green jobs & agriculture / landscaping, etc.
- Seek stimulus $

Education

- Expo day
    - Like living green expo
    - Tours of renewable energy
    - With CMBA
    - Volunteers from Univ.
- Earth Month
    - Move from clean up to sustainability
    - Workshops & tours
- Example site
    - Model of sustainable food & nonfood, water collection, etc.
    - Whole integrated site
- City make their efforts available / known to all
- Tree Planting
    - “model” street section
- How to “update” older home
    - Don’t start from ground up
- Habitat for humanity
    - Include yard
- NSF study circles
- Cities become ecomunicipalty
- Think of full cost over lifetime – not just now!
- Sustainability econ. Savings & benefits
- Mayor have sustain. Goal in the State of the City
- Support / education for Rotary / chamber etc.
- Internships for students to do this

minutes

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Date | February 24, 2010

Meeting Date | February 18, 2010

Meeting Time | 8:00 am – 12:00 pm

Meeting Location | St. Cloud City Hall, Council Chambers, St. Cloud, MN

Project | St. Cloud Area Sustainability Framework Plan

Regarding | Community Vision and Action Planning Sessions: Energy & Buildings

Attendee(s)	**Contact Info**
Janet Dray	CGA
Suzanne Rhees	CGA
Terry Gips	Sustainability Assoc.
Brett Emmons	EOR
Brad Aldrich	EOR
Chelle Benson	Benton County
Art Buhs	CMBA
Jane DeAustin	CMBA
Tony Freiler	Stearns County
Dave Gruenes	Sustainability Committee
Brian Justin	SCTC
Gerald Kaeter	City of St. Cloud
Rachel King	SCSU Student
Derek Larson	SJU
Judith Peters	Resident
Nia Primus	City of St. Cloud
Robbie Schultz	Winkelman
Keith Schupp	Sustainability Committee
Bill Vennes	SCTC
Ted Venske	Resident
Lynn Wayatschek	Sherburne County
Jim Whitcomb	Benton County
Judy Willenbring	SCTC

Record By | Brad Aldrich

Brief Review of Sustainability Concepts and Agenda

EOR provided an overview of the process and goals for the session: set a vision and discuss actions that will lead the St. Cloud area toward sustainability. The process will start with an assessment of where we are now, set a vision in the topic areas, and meet in small groups to discuss ideas of what can be done to move toward sustainability in these areas. Sustainability Associates provided a summary of the Natural Step Framework sustainability concepts covered at the education sessions. The four principles are: 1. Reduce what we take from the earth, 2. Reduce what toxins we make, 3. Reduce our impact on ecosystems, 4. Meet fundamental human needs.

Topic Area Overview

Sustainability Associates provided general background on the planning topics for this session: greenhouse gas reductions, energy efficiency, renewable energy, and building practices

Baseline Assessment
Participants divided into two groups and discussed the current status of their community and/or organization with respect to the session topics. The notes of the discussions ideas from the groups are attached.

Full Group Review of Baseline Assessment Discussions
Each group provided a brief summary of their baseline assessment.

Break

Visioning for St. Cloud area
Each group held discussions on "What would your community or organization look like if it were sustainable in these topic areas?" "What would the St. Cloud Area look like if it were sustainable in these topic areas?" The notes of the discussions ideas from the groups are attached.

Full Group Review of Visioning Discussions
Each group provided a brief summary of their vision.

Overview of Concepts & Key Questions in Energy Efficiency and Greenhouse Gas Reductions
Cuningham Group Architecture provided an overview of sustainability concepts for energy efficiency and greenhouse gas reductions and key questions for the small group discussion.

Small Group Discussions on Energy Efficiency and Greenhouse Gas Reductions
Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the energy efficiency and greenhouse gas reductions areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions
Each group provided a brief summary of their action ideas.

Break

Overview of Concepts & Key Questions in Building Practices and Renewable Energy
Cuningham Group Architecture provided an overview of sustainability concepts for building practices and renewable energy and key questions for the small group discussion.

Small Group Discussions on Building Practices and Renewable Energy
Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the building practices and renewable energy areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions
Each group provided a brief summary of their action ideas.

Next Steps & Closing Comments
EOR summarized the ideas from the session and how they will be used by the Sustainability Committee.

Baseline	**Group 1 – Janet, Brett**

Green House Gas Reductions, Energy Efficiency, Building Practices, and Renewable Energy

Positives

- Transport – Bus / Northstar
- Telecommuting starting
- Energy Audits
- Cars/Trucks fuel efficiency (mixed bag: cars - good, SUVs/trucks – not)
- Excel looking at other sources (not fossil fuels)
- Excel - energy efficient cost shares
- Lighting – compact fluorescents – risk of
- Experimental / Projects - Wind/solar/geothermal
- Higher interest in these topics (not necessary knowledgeable)
- Window Replacement rebates (Federal program)

Negative

- Lack of carpooling and carpool spaces
- Lots of commuters not working close to home (telecommuting)
- Large vehicles – pickup trucks (poor fuel efficiency / single occupant)
- Lack of bike paths
- Lack of energy audit follow-up
- New construction not creating energy efficient homes (*Upfront Cost “too high”)
- Houses insulated today same as 25 years ago
- Large house sizes (more than needed)
- House design not good (example of ventilation)
- Energy -- gas prices too low
- No baseline of our Carbon footprint – where to go? – example of industries
- Energy Efficiency – Not pursuing on their own - Waiting for outside funding (not looking at payback)
- Don’t do energy efficiency for environmental benefit - only do for cost-saving reasons

Baseline	**Group 2**

Green House Gas Reductions, Energy Efficiency, Building Practices, and Renewable Energy

Positives

- LEED Certified Stearns County Service Center (location good for auto traffic not transit)
- 12 geothermal contractors in area – both residential and commercial
- One contractor installed 39 Geothermal systems in 2009
- 1% savings kw/h – Stearns Co.
- 1,400 EnergyStar appliances purchased with rebates in Stearns County in 2009
- People more in tune with these issues due to
    - Rising prices
    - Economics
- EnergyStar Residential Rebate program
- Future Met. Council to improve transit – Northstar extension
- B3 Benchmark – Potential for buildings
- Greater awareness of issues
- Large wind project in W. Stearns County (Geronimo)
- Unknowns- What are others doing in the region?
    - Fleet vehicles- city and county governments
    - Universities – what are they doing?

Negatives

- No EnergyStar buildings in region
    - Federal building used to meet this standard
    - Buildings don't measure energy use
        - Commercial and institutional
- No Energy Star
    - Commercial rebate program
- Lack of efficient public transit to get to useful locations
- Benton County energy audits – none
- B3 program should be expanded to residential
- Rebates driving "eco interest" – not environmental awareness
- Long term cost / benefits not understood by public
- Costs - purchase vs. operating – not understood
- Lenders and appraisers don't understand sustainable construction (geothermal example given)
- No "comps" for geothermal or other renewable energy systems for appraisal value
- No greenhouse gas emissions benchmarks

Vision	**Group 1**

Green House Gas Reductions, Energy Efficiency, Building Practices, and Renewable Energy

- New homes can afford / it's common to use solar, geothermal, wind – zero point (net) energy
- Public embracing sustainability – happens naturally
- Electric cars (battery / other energy source)
- Renewable energy sources
- Housing sizes based on need
- Lots of bike paths/ trails
- Commuter Rail (trolleys) – within area , - to Twin Cities (Northstar)
- Businesses
    - Lights off at night (programmable)
    - Daylighting
    - Demand based ventilation (CO_2 monitoring)
- Business / industries use geothermal
    - Existing large parking lots become geothermal sites
- Food shipping – food supplies are closer / in area
    - Milk / CSA's
- Stopped sprawl
    - Better planning, dense
    - Services/goods available, walkable
- Locally-based companies (jobs) instead of being bought out
- Lots of green businesses
- Infrastructure (energy utilities) is improved – example of smart grid
- Buildings well insulated – organic sources (example: mushrooms)
- 100% EnergyStar commercial construction

Vision	**Group 2**

Green House Gas Reductions, Energy Efficiency, Building Practices, and Renewable Energy

- District heating / cooling – e.g. downtown, university, etc.

- Methane capture / digestion
- Secondary markets for recycling construction waste materials
- All buildings have EnergyStar rating – know their consumption
- Greater percent of geothermal, ponds, solar and wind in new construction
- Appliances and electronics: use 75% less energy – and are readily available to consumer
- Bike paths everywhere year round
- Transit goes more places
- Rail to St. Cloud – Northstar is extended
- 20% Electric / hybrid vehicles
- Greater education regarding economics, costs – among kids / adults (short vs. long term costs)
- Large-scale wind installations
- 50% reduction in residential / commercial water use
- MN codes to allow graywater reuse
- Better consumer education on purchasing decisions
- More customers purchasing wind energy – 50%
- Energy-saving tracking (as in MN Energy Challenge program)
- 100% composting / recycling
- 15% telecommuting / home-based businesses
- More electronic / on-line services – i.e. permit reviews

Actions	**Group 1**

Green House Gas Reductions, Energy Efficiency

- Pursue grants actively
    - Example of pilot projects – pick a business -> do all pieces (of sustainability plan)
- Process -> so people see the benefits
    - $, Social, Business (giving perks), awareness
    - Difficult delivery of message
    - Start with youth
    - Non-politicize the discussion
    - Not so individually-based – do for others
- Baselining – all business mandated to calculate
- For businesses using above “norm” ->
    - Offer free energy audit
    - Rate structure to discourage higher users
        - (ex. Penalty tier – California)
        - Spurred Solar photovoltaics in California
- Tax on inefficient appliances or rebates on efficient appliances – or do both
- SUV/Trucks – higher license fee – use $ for education
    - License fee based on fuel efficiency
- Comprehensive Regional Plan – less sprawl
- Carbon Credits -> neighborhood – “C-neutral” subdivisions
    - Use for education (demonstration neighborhood)
- Bike paths as part of transportation plan
- Get Chamber of Commerce more involved -> coordinate for high profile
    - Example – block of businesses turn lights off at night
- Less electronic/lighted billboards
- Impove aesthetics of community – billboards, parking, less land use restrictions (commercial/business strips)
- Emphasis on “recycled properties” – infill in existing developed areas

- Renewables – use info from others – already developed
- Older buildings (inefficient HVAC)
    - get them retrofitted
    - monitor air quality (prompt change) schools as model
    - Change filters (schools, homes)
- Commissioning of buildings – pays for itself
    - Existing schools do already
    - Older ones – need more fresh air
    - Exchange filters
- On-building renewables
    - Example of Winckelman's building – solar voltaics
    - Geothermal m., wind (where available), solar
- In-office recycling
- Water-saving fixtures (example of 1 pint urinals – Winckelman's)
    - Different faucet heads
    - Change habit by residents
- Natural lighting in buildings – Views
    - Example of St. Cloud Library – good
    - Occupancy sensors
    - Tasks with lower light needs
    - Light at location of use (desk vs. overhead)

Building Practices and Renewable Energy

- Materials
    - Low VOC
    - Reuse/recycled materials
    - Locally produced (i.e. within 500mi – LEED)
        - Wellser – concrete, prefab walls
            - Albany
    - Construction materials recycling
        - Existing gypsum as agricultural fertilizer / amendment
    - Understand embodied energy (Lifecycle Assessment) of materials
        - Steel studs vs. wood
        - Education sales reps.
        - Reduce misinformation
    - Design so reuse is easy
- Info for students / public on what is being done
    - Example of HVAC improvement, renewables
    - Share, post publically, show meters
    - Exposed building "infrastructure"
        - Example of NDSU – old mill
- Building siting – maximize solar exposure
    - Commercial -> daytime
    - Residential -> evenings
- Roofs – green roofs, white, cisterns – put in code/ ordinances
- Large commercial user on (geothermal) (walmart,...)
    - Required to come in at 50% of energy
- Local food
    - Yard gardens, farmers markets, farmers' coops (groceries, creamery)
- ?? Businesses / Jobs – many have left area – green jobs
    - Examples in Stearns, Fingerhut <- reuse the infrastructure that is left
    - Local capital -> invest here (not otherwise)
        - Example of Wind turbine parts

        - Strong entrepreneurial spirit here
        - Incentives – to develop on brownfields / redevelopment parcels
    - 100% EnergySstar
        - Incorporate Into building codes
        - Do as a region (not competing individual cities)
        - Technical assistance, streamline application process
    - Smart grid, cables
    - Local energy sources (less transmission distance)
        - Distribute energy systems
    - House sizes going down -> market is driving it new
        - Shared facilities / spaces

Actions	**Group 2**

Green House Gas Reductions, Energy Efficiency

- Education – Objective data
    - Tracking performance of geothermal systems for the St. Cloud area
- Education programs
    - Urban forestry education to increase energy efficiency
    - Demonstration sites
    - Education – incorporation of alternative energy
- Comps. -- educate banks, lenders; advantages of trees vs. solar (comps = comparables to determine home value)
    - Probably needs to come from a national, state level
- "SAC" and "WAC" charges
    - Currently the same if low flow or not
    - change pricing policies
    - base it on gallons used, not fixtures – 2-tiered pricing
- Savings to cities for water treatment / energy – Use less water
- Use graywater (treated) cleaner – emphasizing reuse
- Identify 10-15 large institutions to lead campaign as example to region
    - i.e. Frigidaire, Gannett (newspaper)
    - Church coalitions, congregations
    - Legislators
    - Hospitals
    - Coborns
    - SCSU
    - Utilities
    - Gold n' Plump
    - School Districts
    - Service clubs
    - SCA partnership
    - Media
- Tailor the message to each audience – farmers vs. developers vs. environmentally conscious
- Mayors – encourage involvement
- Set specific goals – indicators, metrics. Celebrate successes
- Look for comparable partner cities – best practices
    - Sister city in Germany – learn from them
- Sustainable Communities Conference 3/12/10
- Green Expo in St. Cloud – target to public sector / consumers

- Make energy audits / assessments more available – Assessments are free for Stearns Electric customers
- More info and assistance on financial resources such as tax credits, rebates for citizens so everyone has access
- Combine rebates for windows / leaks
- Humorous video(s) – new media
    - Contest for schools – prizes
- Improved monitoring of building performance for campuses
- 10-institution challenge
    - Establish baseline carbon footprint for each individual community and institution – monitor and report
- Expand LED lighting / communication systems

Building Practices and Renewable Energy

- Alternative fuels for municipal fleets
    - Natural gas (St. Cloud)
    - Move ahead with fueling station
    - Hydrogen – long term
    - Biodiesel ("B2O" is current mix)
- Car charging program – off-peak use of wind energy – for homes
    - New program-find other uses/users of off-peak wind energy
- Building performance - Materials for commercial buildings
    - More efficient windows
    - Insulation - better
    - Daylighting –> more insulation
- Better HVAC controls, lighting
- Systems approach
    - Natural cooling and ventilation
    - Open windows -- but need to address moisture problems
    - Right-sizing equipment – HVAC, etc.
    - Incorporate technology into building controls – zoning and sensors
        - (vs. human control advantage)
- Building-wide controls / benchmarking
    - "Zoning" of buildings
- [RREAL program – installs Solar Thermal – low-income and others] –shorter payback –
- Emphasize solar thermal for heavy water users
- Eliminate regulatory hurdles to energy efficiency – i.e. efficient furnaces
- Solar becoming more efficient and affordable
- EnergyStar roofs –reflectivity vs. green roofs
- Sustainable materials – repurposed – i.e. carpets from recycled materials

minutes

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Date | February 24, 2010

Meeting Date | February 18, 2010

Meeting Time | 1:00 pm – 5:00 pm

Meeting Location | St. Cloud City Hall, Council Chambers, St. Cloud, MN

Project | St. Cloud Area Sustainability Framework Plan

Regarding | Community Vision and Action Planning Sessions: Planning & Natural Systems

Attendee(s)	**Contact Info**
Janet Dray	CGA
Suzanne Rhees	CGA
Terry Gips	Sustainability Assoc.
Dave Wanberg	SWB
Brett Emmons	EOR
Brad Aldrich	EOR
Marian Bender	Minnesota Waters
Barth Bueher	Resident
Tammy Campion	City of St. Cloud
Steve Foss	City of St. Cloud
Matt Glaesman	City of St. Cloud
Therese Haffner	City of Sartell
Mark Hauck	DNR
Jessica Heim	Environmental Council
George Hontos	St. Cloud City Council / Sustainability Committee
Ava Kritzech	Resident
Mark McNamara	Benton County
Rick Miller	Central MN Sustainability Project
Michelle Musser	Area Planning Organization
Lowell Olson	Sustainability Committee
Linda Peck	Sustainability Committee
John Peck	Resident
Nia Primus	City of St. Cloud
Charlotte Stephens	Sustainability Committee
Kimberly Thelen Cremers	Stearns County Soil and Water
Ted Venske	Resident
Lynn Wayatschek	Sherburne County
Jim Whitcomb	Benton County

Record By | Brad Aldrich

Brief Review of Sustainability Concepts and Agenda

EOR provided an overview of the process and goals for the session: set a vision and discuss actions that will lead the St. Cloud area toward sustainability. The process will start with an assessment of where we are now, set a vision in the topic areas, and meet in small groups to discuss ideas of what can be done to move toward sustainability in these areas. Sustainability Associates provided a summary of the Natural Step Framework sustainability concepts covered at the education sessions. The four principles are: 1. Reduce what we take from the earth, 2. Reduce what toxins we make, 3. Reduce our impact on ecosystems, 4. Meet fundamental human needs.

Topic Area Overview
Sustainability Associates provided general background on the planning topics for this session: land use policies, multi-modal transportation, community health, urban forests, surface & groundwater protection, river water conservation

Baseline Assessment
Participants divided into two groups and discussed the current status of their community and/or organization with respect to the session topics. The notes of the discussions ideas from the groups are attached.

Full Group Review of Baseline Assessment Discussions
Each group provided a brief summary of their baseline assessment.

Break

Visioning for St. Cloud area
Each group held discussions on "What would your community or organization look like if it were sustainable in these topic areas?" "What would the St. Cloud Area look like if it were sustainable in these topic areas?" The notes of the discussions ideas from the groups are attached.

Full Group Review of Visioning Discussions
Each group provided a brief summary of their vision.

Overview of Concepts & Key Questions in Land Use, Community Health, and Multi-Modal Transportation
Sanders, Wacker, Bergly and Cuningham Group Architecture provided an overview of sustainability concepts for land use, community health, and multi-modal transportation and key questions for the small group discussion.

Small Group Discussions on Land Use, Community Health, and Mu Multi-Modal Transportation
Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the land use, community health, and multi-modal transportation areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions
Each group provided a brief summary of their action ideas.

Break

Overview of Concepts & Key Questions in Surface & Groundwater Protection, Healthy Urban Forests, and Mississippi River Water Conservation

Emmons & Olivier Resources provided an overview of sustainability concepts for surface & groundwater protection, healthy urban forests, and Mississippi River water conservation and key questions for the small group discussion.

Small Group Discussions on Surface & Groundwater Protection, Healthy Urban Forests, and Mississippi River Water Conservation

Each group brainstormed actions that will move their community and the St. Cloud Area toward sustainability in the surface & groundwater protection, healthy urban forests, and Mississippi River water conservation areas. The notes of the discussions ideas from the groups are attached.

Full Group Review of Small Group Discussions

Each group provided a brief summary of their action ideas.

Next Steps & Closing Comments

EOR summarized the ideas from the session and how they will be used by the Sustainability Committee.

Baseline **Group 1**

Land Use Policies, Multi-Modal Transportation, Community Health, Urban Forests, Surface and Groundwater Protection, and Mississippi river Water Conservation

Positives

- Environmentally Sensitive Areas (ESA) ordinances in many communities
- Natural Resource Inventories completed
- Stearns Co. Conservation Overlay District
- Great bike trails outside St. Cloud
- APO Bike-Ped Committee; funding changes
- Citizen pressure for Mississippi River Corridor project
- Groundwater/stormwater conservation efforts
- Sherburne Co. / Stearns County have adopted Wild & Scenic River Ordinances
- Landscape Ordinances

Negatives

- Low zoning densities
- No incentives to preserve large acreages
- Lack of attention to urban forest
- Lack of landscape maintenance
- Poor connections to city
- Farmland loss
- Continued failure to look at resource suitability
- Excessive surface parking + impervious coverage
- Lack of incentives for higher densities
- Poor sidewalk and trail connections
- Inadequate transit -- many areas not served
- Need to link transit to new development
- Need remote park & ride lots
- Unsafe biking conditions
- Emphasis on turf & irrigation, not natives
- Invasive species
- Water treated as waste product, unlimited quantity

Baseline **Group 2**

Land Use Policies, Multi-Modal Transportation, Community Health, Urban Forests, Surface and Groundwater Protection, and Mississippi river Water Conservation

Positives

- Exploring complete streets initiative
- St. Cloud, Sartell, Sauk Rapids-protecting core natural resources
- Mississippi River initiatives
- BLEND – Health Care initiatives program
- Protecting existing resources
- Landscape requirements – have in ordinances (some thought they were too weak)
- St. Cloud City Tree Initiative 199_?
- 1996 Natural Resources Inventory (NRI) completed
    - Cities-Level 3
    - County – Level 5
- Regional Planning Body exists

- Metro Transit Commission City Services
    - Best in Country – won an award
- Low Impact Development (LID) – Reintroducing water into aquifer
    - Sartell – identified well recharge zones
- Mississippi River – Not currently impaired
- SCSU started studies for other pollutants – including pharmaceuticals
- SCSU and St. Joseph exploring Transit Oriented Development

Negatives

- Land Use Sprawl
    - Need for concentration of services
    - Need for infill/ "backfill" development
    - Amount of impervious pavement
    - Connect natural resources with green corridors
    - Protect and connect culture back to river
    - Different policies / ordinances among various cities
    - Not making up for already lost habitat
    - All 3 counties not on board
    - Invasive species a big issue
- Conflicting ordinances
- Pharmaceuticals in groundwater & surface water
- Genetical WQ
- Sauk River impaired with fecal coliform
- Don't know about newer pollutants – low baseline data
- Better connections
    - Alternative transportation not currently option
- Present zoning discourages Low Impact Development

Vision **Group 1**

Land Use Policies, Multi-Modal Transportation, Community Health, Urban Forests, Surface and Groundwater Protection, and Mississippi river Water Conservation

- Able to live in St. Cloud without a car
- Flexible ordinances to adapt
- Development tied to landscape – protect sensitive areas
- Neighborhoods with small lots but ample open space
- More preserved open space along Mississippi River
- Open river to increased access
- Greywater recycling, compost toilets
- Fewer discharges to river; fewer intakes
- Change in attitude towards conservation
- Factor in all life cycle costs up front
- Community gardens, connected via bike trails
- Active, walkable, lively neighborhoods and centers
- Native plant landscaping, water conservations for existing and new development
- Open spaces function ecologically – biological systems
- Capture and treat surface water runoff on site
- Less parking (surface)
- Informed, aware elected officials with stewardship ethic

- Healthier food; more local food in supermarkets
- Healthy food programs in schools, other sustainable practices
- Natural resources taught at K-12 level
- Volunteer participation in eco-friendly activities
- Consistent development policies that protest Mississippi River – water quality + viewshed
- Communities look at carrying capacity of land and water supplies
- Recognize "Vision for Future of Mississippi River"
- Sense of community, not isolated pockets – shared responsibility
- Front yards that address street w/porches, not garages
- Enlightened developers and consumers who put natural resources first
- Provide greater range of housing and consumer choices
- Community that focuses on the greater good
- Recognizing historic buildings as sustainable resources
- Make it easier to rehab, not demolish

Vision **Group 2**

Land Use Policies, Multi-Modal Transportation, Community Health, Urban Forests, Surface and Groundwater Protection, and Mississippi river Water Conservation

- Transit System
    - Alternative energy
    - Connected to Twin Cities
    - Connected bi-modal transit
- Density of services in key areas
    - Shopping, Institutions, etc.
- Fewer Roads (Highways)
- Sustainable Food Systems
    - Farmers Markets
    - Community Based Agriculture
- Increase Tree Cover
    - Quantity and Quality
- Embrace the River
    - Achieve the vision of Miss. Renaissance Project, recreation, water quality
- Food Quality – Institutional Food Change
    - CentraCare
    - Local Gardens – expand to more sites
    - Rooftop Gardens
- Governance by Area
    - Regional, not individual cities
- Outdoor Environmental Sustainability Education Institutionalized
    - In schools
    - Food, natural resources, etc.
- Development and redevelopment reinforce multiple benefits, LID
- Increased permaculture opportunities
- Joint Planning District
    - Authority to make sustainability initiatives mandatory
- Infill of abandoned/ vacant sites
- Culture-Flexible, Open to New Ideas
    - Educated population - re sustainability initiatives
- Demand for sustainable development
    - Educated buyers
- Historical Resources Valued and Utilized
    - Reuse old buildings

Actions	**Group 1**

Land Use Policies, Multi-Modal Transportation, and Community Health

How to connect to decision makers – messaging campaign

- Emphasis on past succeses
- Use right terminology – health, stewardship, public safety
- Brand and agreed-upon message
- Communication professional guidance
- Avoid "green" or "enviro" label
- Find messengers from business and faith communities - make it mainstream
- Coordinated land use policies along reiver and tributaries
- Equal treatment re enforcement- of shorelands between jurisdictions – control variances
- New shoreland management standards and opportunities
- Build off three-city river corridor planning process
- Many tools already in place – reduced street width, etc.
- Revise parking requirements – lower minimums, maximums, caps/pervious
- Narrower streets
- Model with public infrastructure (example of civic center)
- Educate public regarding green features

Educate own staff on community values

- Incentives and disincentives
- More training in conservation design – architects, surveyors, engineers
- Density in appropriate places – TDRs
- Seek solutions to management of common open space in conservation subdivisions
- Explore state-sponsored purchase of devel. rights for farmland
- Tax policy issues regarding farmland protection – farmland property taxes too high

Urban Forests, Surface and Groundwater Protection, and Mississippi River Water Conservation

- Remove regulatory barriers to native plants in yards
- Educate neighbors on benefits of native plants
- Work with utilities on access to underground lines / overhead lines
- Encourage boulevard trees at least on temporary basis
- Seek shared multi-community funding for urban forestry jobs – job training in urban forestry
- Green Infrastructure "fees" like utilities
- Use brick or stone pavers above utilities – in tree planting areas
- Use porous concrete, etc.
- Increase tree cover in general – parks, boulevards
- Change street design standards with infiltration, trees, reduced width, bike/walk provisions
- Stormwater retention methods – improve larger trees in structural soils
- Rainbarrel program – training and communication
- Provide trees with genetic diversity and species diversity
- Master Naturalist program assistance
- Better community education on tree care and native landscaping – extension service.?
    - Incorporate into existing events
    - Watershed District role?
    - University role – adopt-a-block internships
    - Model Block concept
    - Integrate sustainable landscaping into affordable housing devel's
    - CMWEA – 2nd association – MS4 communities pay into stormwater utility?
- Use county water plans to initiate new programs

- Hold tours of rain gardens, other stormwater demonstration projects – tie tools to soils
    - Bike or walk tour
- Funny video a la Edina – City Cable
- Two-tier water pricing
- Storm-drain stenciling (required under MS4)
- " " video to illuminate problem
- Sister city guidance – Mayor's summer trip
- Water quality – pharmaceutical flushing; change institutional rules
    - Start drug recycling/disposal program
- Increase disincentives for agricultura irrigation

Actions	**Group 2**

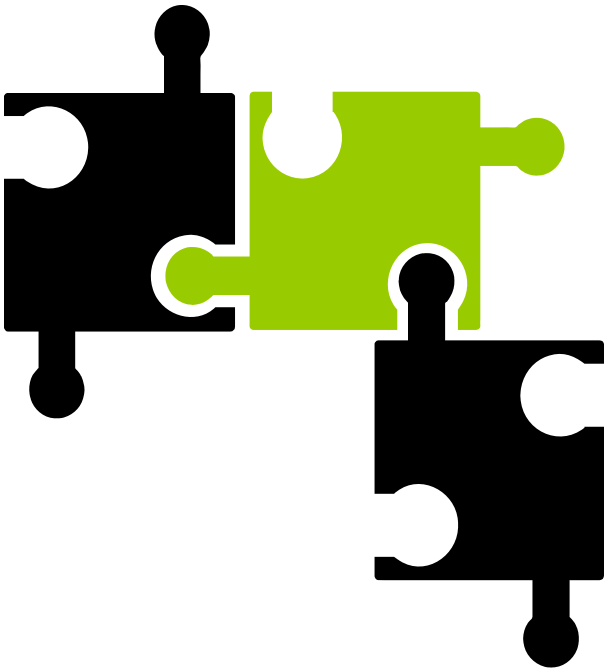
Land Use Policies, Multi-Modal Transportation, and Community Health

- Cable TV/ Media outlets for education
    - Tie to money
    - Show costs – short term vs. long term
- Well designed infrastructure
    - Aesthetic, functional, last a long time
- Adheres to triple bottom line
    - People, planet, profit
- Evaluation of short term vs. long term costs
    - Food, infrastructure, energy, etc.
    - Track subsidies
- Range of housing for all life phases
    - Aging populations
    - Incentives for range of housing
    - Flexible planning language
- Designers and builders educate and provide sustainable options to clients
- Financial incentives and taxation to support sustainability
- Encourage sustainable P.U.Ds
- Remove existing ordinance barriers
- Collaboration between officals, developers, environmental groups, charities
- Conservation overlays to protect natural resources
- Update codes to allow sustainable construction
- Fees and or taxation support sustainability initiatives
    - Example – St. Cloud waste program
- Information clearinghouse
    - How to get conservation easement, etc.
    - Grants
- EPA "water sense" program
- Potable water use reduced
    - No irrigation
    - Greywater reuse

Urban Forests, Surface and Groundwater Protection, and Mississippi river Water Conservation

- Sauk Rapids – Groundwater recharge areas identified already
    - Overlay districts to protect further
- Some communities are using soil surveys and natural resources to frame development
- Harvesting rain water – cisterns
    - Change codes and ordinances to allow & encourage
- Water sensing irrigation – requirement?

- Information clearinghouse
    - Public outreach
    - Grants
    - Water districts
    - Education
- Training-contractors, installers, designers, maintenance construction practices
- Stormwater
- Mississippi River Renaissance Project – turn vision into action items
- Public purchase and enhancement of parcels as they're available – continue throughout region, not just St. Cloud
- Urban riverfront tour in St. Cloud
    - Culture and environmental education/ appreciation
- Strong visions instigate action
- Non-profit advocacy for Mississippi River
    - Similar to St. Paul Rriverfront Corp, Port Authority, etc.
- Public tree inventory in each city
- Landscape ordinances improved
    - Tree preservation – larger penalty for removing existing significant trees
    - Require more drought tolerant landscaping - native
- Convert unused land into city gardens -> community gardens, church lands
- Improve – enhance existing parcels
    - Permaculture site
- Compost programs
    - St. Cloud -> spread to surrounding communities
- Food scraps to agricultural uses
    - Large scale
- Pharmaceutical collections
    - Education
- Demonstration Sites
    - Various BMPS



APPENDIX D

Implementation Session

St. Cloud Joint Planning District
Sustainability Framework Plan

Public Input Session

Thursday May 27, 2010
4:30 PM – 7:30 PM
St. Cloud City Hall Council Chambers
400 2nd St S, St. Cloud, MN 56301

Agenda

4:30 Welcome and Introductions

4:40 Brief Review of Sustainability Planning Process

4:50 Breakout Sessions 1

Session A	Session B	Session C	Session D
• Energy Efficiency • Renewable Energy • Greenhouse Gas Reductions	• Sustainable Land Use • Community Health	• Healthy Urban and Rural Landscapes • Surface and Groundwater Protection • Mississippi River and Water Conservation	• Product Stewardship • Preferable Purchasing • Recycling and Waste Reduction

5:50 Full Group Review of Breakout Session Discussions

6:00 Break

6:15 Breakout Sessions 2

Session A	Session B	Session C	Session D
• Sustainable Building Practices	• Multi-modal Transportation	• Innovative Opportunities • Government Policies/Practices	• Sustainable Food Systems • Sustainability Education

7:15 Full Group Review of Breakout Session Discussions

7:25 Next Steps & Closing Comments

minutes

651 Hale Avenue North Oakdale, Minnesota 55128 telephone: 651.770.8448 facsimile: 651.770.2552 www.eorinc.com

Date | June 4, 2010

Meeting Date | May 27, 2010

Meeting Time | 4:30 – 7:30

Meeting Location | St. Cloud City Hall

Project | St. Cloud Area Sustainability Framework

Regarding | Implementation Input Sessions

Attendee(s)		**Contact Info**	
	Brett Emmons		EOR
	Brad Aldrich		EOR
	Suzanne Rhees		Cuningham Group Arch.
	Janet Dray		Cuningham Group Arch.
	Dave Wanberg		Sanders, Wacker, Bergly
	Terry Gips		Sustainability Associates
	Matt Glaesman		Sustainability Committee & City of St. Cloud
	Nia Primus		Sustainability Committee & City of St. Cloud
	Steve Foss		City of St. Cloud
	Scott Zlotnik		City of St. Cloud
	Judy Peters		Sustainability Committee
	Todd Schultz		City of Sauk Rapids
	Steve Ludwig		Sustainability Committee & SCSU
	John Frischmann		SCSU
	Mitch Bender		SCSU
	Suzanne Rodell		St. Cloud Neighborhood Coalition
	Stuart Swenson		CMBA
	Lynn Wayatschek		Sustainability Committee & Sherburne County
	Chelle Benson		Sustainability Committee & Benton County
	Lowell Olson		Sustainability Committee & Stearns County Planning Commission
	Charlotte Stephens		Sustainability Committee & Environmental Council
	Jane DeAustin		Sustainability Committee & CMBA
	Kimberly Thielen Cremers		Stearns County Soil and Water
	Ted Venske		Sustainability Committee
	Paul Weber		City of Sauk Rapids Council
	Dave Gruenes		Sustainability Committee &

	Stearns Electric
Linda Peck	Sustainability Committee & Environmental Council
Kelly Bartlow	St. Cloud Neighborhood Coalition
Susie Osaki Holmes	Resident
Rick Miller	Sustainability Committee & Central MN Sustainability Project
Stan Weinberger	Sustainability Committee & Gray Plant Mooty Law Firm
Duane Willenbring	City of Rockville Council

Record By | Suzanne Rhees, Terry Gips, Matt Glaesman, Brad Aldrich, Janet Dray

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BREAKOUT SESSION 1-A

GREENHOUSE GAS REDUCTIONS – BPA 3

Priority Goals: Of the nine goals from the Draft actions, the group selected the following three goals on which to focus:

Goal C. Reduce greenhouse gas emissions through improvements to management and operations of municipal fleets. Increase use of electric vehicles, hybrid vehicles and flexible/alternative fuels.

Potential Actions and Comments:

- Publicize the substantial efforts already going on in this area – for example, the Husky Fried Ride (new Metro Bus St. Cloud State route powered by recycled deep fryer vegetable oil) Metro Bus use of E-85)

Goal F. Reduce greenhouse gas emissions through prevention, recycling and composting of municipal solid waste.

Potential Actions and Comments:

- Use incentives to encourage people to meet recycling goals and produce less trash
  - Current green bags, priced at $2, encourage people to recycle vs. toss.
- Encourage recycling in public places (restaurants, public buildings, businesses, etc).
- Provide compost kits for homes
  - Partner with builders association to enlist local kids to build, and sell them to residents.
  - Incorporate educational tools—website and brochure—on how to compost

Goal I. Educate and build public support for greenhouse gas reductions by emphasizing funding sources and incentives for the goals mentioned in this section, as well as the long-term cost savings and benefits of greater energy independence (refer also to BPA 7).

Potential Actions and Comments:

Time did not allow expansion on this item

General Discussion:

- Goal I (Education component) can be more difficult for budgets—it takes greater investment in resources.

- Goal A (collect baseline data) to be covered in BPA 8 (Building Practices).
- Goal D (water conservation) – there is a state mandate regarding water conservation covering the 7-county metro area, to become state-wide in 2012.
- Goal G (capturing landfill gas) – already capturing at Sherburne facility; Stearns facility is flared-off, little potential there.
- Goal E (local foods) – may be covered in BPA 17 (Food and Agriculture)

RENEWABLE ENERGY – BPA 6 & ENERGY EFFICIENCY – BPA 7

Priority Goals: Of the nine goals from the BPA 6 and 7 Draft actions, the group selected the following three goals on which to focus:

Goal A & Goal H: (Combined) Support ongoing efforts to conserve energy through rebates and other utility incentive programs.

Potential Actions and Comments:

- Conservation is critical, and should be done in combination with all other efforts.

Goals B, C, D, E: (all relate to renewables)- Encourage and support use of renewables in all construction (new development and redevelopment, public and private); recognize and create incentives; encourage investment in renewable energy to create jobs and businesses; take advantage of local and regional hydroelectric, solar, wind and non-food-based biomass to support local energy security. [1]

Potential Actions and Comments:

- State legislation enacted in 2007 mandates that eligible renewable electricity account for 25% of retail electricity sales to retail customers by 2025. (Xcel Energy has a different, higher standard.)
- Use 1970's data from passive solar housing— learn from good examples and give a head start to projects wishing to incorporate this technology. (See work by Ed Mazria, AIA 2030, on passive solar)
- Stearns County currently considering a moratorium on large wind energy installations to provide more opportunities to research impacts.

Goal F: Gather building performance data that support the use and financing of renewable energy technologies such as geothermal and solar hot water. (refer to BPA 8 – Bldg Practices)

Potential Actions and Comments:

- Encourage property owners/managers to incorporate signage that provide information on the energy efficiency features of buildings
- Provide displays that monitor and show employees and the public the daily energy consumption of buildings.

BREAKOUT SESSION 1-B

LAND USE – BPA 4

Priority Goals: Of the six goals from the BPA 4 draft actions, the group selected the following three goals on which to focus:

[1] http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=MN14R&re=1&ee=1

Goal A. (revised) Conserve and enhance significant natural areas and functional open space as interconnected corridors, emphasizing the benefits for wildlife, for multi-modal transportation, and for outdoor activity and community health.

Potential Actions and Comments:
See discussion under Community Health

Goal D. Promote and strengthen compact development in areas with existing infrastructure. Encourage mixed-use in selected high-activity areas.

Potential Actions and Comments:
- Encourage more creative site design, as an alternative to the large-lot residential development common in the region.
    - Design residential areas to provide more common open space.
    - Encourage a greater range of housing types (see Goal E below).
- Encourage re-use of vacant sites in urban areas.
- Mixed-use development provides incentives for walkability and community health.

Goal E. Encourage land uses that provide a range of housing opportunities, choices, and locations to meet the needs of residents.

Potential Actions and Comments:
- Provide greater flexibility in city ordinances and codes to allow smaller housing units and smaller lots
    - Note that providing zoning flexibility without using the Planned Unit Development approach is a challenge.
- Provide zoning flexibility regarding minimum lot sizes and housing types.
    - Note that the region still faces challenges with market acceptance of higher-density and attached housing.
- Strive for economies of scale so that infill development and mixed housing types can compete in the marketplace.

COMMUNITY HEALTH – BPA 9

Priority Goals: Of the seven goals from the BPA 9 Draft actions, the group selected the following three goals on which to focus:

"Animate the system" – Provide activities that will get people outside and build a sense of community. (Essentially a restatement of Goal E: Enhance access to and development of natural and cultural amenities and activities as a means to build a strong sense of community for the region and the individual communities within the region).

Potential Actions and Comments:
- Create opportunities for community gardening and local food production, in response to the growing interest in these areas. Promote "plants in the ground"! Encourage these activities within city parks and along trail corridors.

Promote economic sustainability through livability and community health. (Revision of Goal F: Work with government agencies, non-profit organizations, businesses, industries, and others to build a sustainable economy in the region that includes strong employment opportunities with good living wages.)

Potential Actions and Comments:

- Emphasize the relationship between community health, livability, multi-modal transportation options, and the resulting attractiveness of the region for future investment.
- Take advantage of savings that can be achieved through more compact development patterns. Pass along any savings to developers and the public.

Goal D. Create interconnected, walkable, and bikable communities that reduce our use of fossil fuels and that promote healthy, physical activities that can help reduce the obesity rate and promote overall fitness.

Potential Actions and Comments:

- Work with school districts to rein in "school sprawl" – excessive reliance on bussing, excessive acreage requirements, acquisition and development of school sites distant from urban services, and then forcing cities to extend those services.

BREAKOUT SESSION 1-C

HEALTHY URBAN AND RURAL LANDSCAPES – BPA 11

Priority Goals: Of the 9 goals from the BPA 11 Draft actions, the group selected the following three goals on which to focus:

Goals F and H combined: Reduce and control the establishment and spread of invasive species in all landscapes and enhance open spaces to function as ecological systems providing benefits to the region's biota as well as humans.

Potential Actions and Comments:
Time did not allow expansion on this item

Goals E and G combined: Reduce the amount of high input landscapes that depend on pesticides, herbicides, and regular irrigation, like turf grass, by increasing the number and type of gardens and natural landscaping in urban and suburban areas (e.g. backyard and community/ neighborhood food gardens, permaculture gardens, raingardens, native landscaping, woodland gardens, etc.)

Potential Actions and Comments:
Time did not allow expansion on this item

Goal E: Increase the percent of tree cover and the diversity of native tree species in urban and suburban areas, specifically linear roadway corridors, and in agricultural hedgerows and existing woodlots.

Potential Actions and Comments:
Time did not allow expansion on this item

SURFACE AND GROUNDWATER PROTECTION – BPA 13

Priority Goals: Of the 8 goals from the BPA 13 Draft actions, the group selected the following three goals on which to focus:

Goal F: Educate consumers, designers, contractors, government officials, etc. on the design, construction and implementation of Best Management Practices *BMPs*

Potential Actions and Comments:

- Implement existing BMP technologies mandated by MS4 program instead of creating new BMPs – enforcement, incentive programs

Goals C and H (modified): Dramatically reduce the input of toxins, including pharmeceuticals, agricultural pesticides & herbicides, into surface and ground waters in order to protect water quality, sustain human health, and sustain healthy fish and wildlife populations.

Potential Actions and Comments:
Time did not allow expansion on this item

Goal D: Adopt consistent ordinances and incentives throughout the St. Cloud Area Joint Planning District that require Low Impact Development LID.

Potential Actions and Comments:

- Implement existing BMP technologies mandated by MS4 program instead of creating new BMPs – enforcement, incentive programs

MISSISSIPPI RIVER WATER CONSERVATION – BPA 14

Priority Goals: Of the 2 goals from the BPA 14 Draft actions, the group selected selected 2 goals and added an additional 2 goals to focus on.

Goal A: Dramatically reduce the use of potable surface water for residential or commercial irrigation with the long-term goal of eliminating its use for irrigation

Potential Actions and Comments:

- Amend local ordinances to permit & encourage native plantings in yards
- Provide financial incentives – cost share

Goal B: Improve the water quality of the Mississippi River and its tributaries

Potential Actions and Comments:

- Provide native aquatic buffers on all public lands

Goal C: Improve and unify shoreline ordinance standards for the region

Potential Actions and Comments:

- Host alternative shoreline ordinance standard discussion between Local Government Units

Goal D: Support the Mississippi River Renaissance Project

Potential Actions and Comments:
Time did not allow expansion on this item

BREAKOUT SESSION 1-D

ENVIRONMENTALLY PREFERABLE PURCHASING – BPA 1

PRODUCT STEWARDSHIP – BPA 2
WASTE REDUCTION (Reduce, ReUse, Recycle, Compost) – BPA 10

Priority Goals: Of the goals from the BPA 1, 2, 10 Draft actions, the group selected the following three goals on which to focus:

Goals B and E combined: Goal B. Increase the amount of materials being reused by removing barriers to reuse, promoting existing reuse options and increasing the opportunity for additional reuse initiatives and increase the durability of goods by supporting state and local initiatives that require product stewardship. Goal E. Increase local economy/green jobs by developing markets for recycled and reused materials by promoting current opportunities for the salvage and purchase of these items, creating incentives for building deconstruction versus demolition and through economic development incentives for recycled, reuse or composting businesses.

Potential Actions and Comments:

- Create product stewardship education programs to promote existing regional, state and national initiatives.
- Develop additional local policy to reflect the values of the community.
- Explore opportunities to partner with local waste generating business or value added manufacturers for funding.

Goals C and D combined: Goal C. Increase the number of people participating in recycling programs and amount of material being recycled through education efforts around the benefits of recycling, by creating incentives for recycling and providing additional opportunities for recycling by all members of the community including commercial facilities, multi-family housing, single family housing, government, and educational institutions. Goal D. Increase number of people composting <food and yard> and amount being composted by education for target groups (residents, businesses, schools and institutions) providing technical assistance to start up, provide incentives and increase the opportunity for participation <community garden connection>.

Potential Actions and Comments:

- Improve resident's ability to recycle away from home (in public and at institutions). State and national surveys show that this is where much of the remaining residential waste is borne and residents are frustrated that there are not opportunities to recycle.
- Identify areas to increase commercial recycling efforts (ex. multifamily buildings, apartments, condos, etc.) residents live increasingly in homes that are not single-family.

Goal F. Increase the use of environmentally preferable products including recycled/reused materials by promoting current opportunities to purchase verifiable/certified "green" products, improving procurement practices based on successful programs in other communities and through the creation and enhancement of cooperative purchasing options.

Potential Actions and Comments:

- Increase the impact of EPP- review and identify opportunities within current government EPP, quantify what impact the policies have already had and what additional potential exists within government purchases.
- Create methods for businesses and residents to access the same reliable EP products and reduced bulk pricing.
- Prioritize locally manufactured green products in conjunction with economic development funding.

Additional Comments:

- Draft Actions c, f, k, and l are essential tasks but should be considered under other community education BPAs.
- Use technology. Use Facebook to reach people under 30.
- Freecycle Website Site as done by Eureka Recycling (BPA 10)
- Donate, Don't Ditch at St. Cloud State (BPA 10)
- Convene a meeting with Salvation Army, Goodwill, Epilepsy foundation and others to talk about creating a free Center for Reuse (BPA 10)
- Free Community Curbside Set-out Day before the Special Pick-up Day (BPA 10)
- Explore possibility of Container Deposit Legislation or policy (BPA 2)
- Holding area for waste deconstruction materials – Then crush and sell (BPA 10)
- Municipal policy of no plastic water bottles at meeting (BPA 10)
- Retail plastic bag policy requiring reusable or bio-based compostable or recyclable bags (BPA 2)
- Take out container policy requiring re-usable or bio-based, compostable. (BPA 2)
- Offer recycling for plastic containers without necks. (BPA 10)

BREAKOUT SESSION 2-A

BUILDING PRACTICES – BPA 8

Priority Goals: Of the seven goals from the BPA 8 Draft actions, the group selected the following three goals on which to focus:

Goal A: Employ rating, benchmarking and monitoring systems for building performance, including Energy Star, B3-MSBG (Buildings, Benchmarks and Beyond, MN Sustainable Building Guidelines), LEED, and the Sustainable Sites Initiative.

Potential Actions and Comments:

- Calculate CO2 emissions from individual public buildings, including publicly-owned recreational and utility buildings.
- Audit (or re-commission) all buildings in the bottom third of the energy performance ranking and implement all energy efficiency opportunities that offer a payback under 5 years.
- Enter yearly public building data into the MN B3-MSBG database and rank buildings in regard to energy performance. See http://www.msbg.umn.edu/support.html
- Calculate CO2 emissions from wastewater treatment, water towers, and life stations.
- Designate a city department responsible for collection and assembly of data, including a contact person within each facility to implement and assist with data collection.
- Compare data to baseline.
- Encourage private property owners (residential and commercial) to submit data to Energy Star database.

Goal C: Educate building occupants and the general public about energy savings inherent in efficient building performance and support education efforts with benchmarking and monitoring of building performance (see Goal A).

Potential Actions and Comments:

- Encourage property owners/managers to incorporate signage that provide information on the energy efficiency features of buildings.
- Encourage building managers to share information regarding building performance.

Goals D &F combined (embodied energy of buildings): Recognize and conserve the embodied energy within buildings and building materials; encourage the use of both locally-produced and other environmentally preferable building materials as well as reduction and eventual elimination of construction waste through Construction Waste Management practices; support deconstruction of buildings as a method to salvage usable materials and further reduce construction waste.

Potential Actions and Comments:

- Continue to explore options for making recycling of sheetrock cost-effective. (Noted problems with a potential start-up recycling business.)
- Educate residents, developers and builders to understand the value of building materials, based on life-cycle assessment.
- Require that municipal buildings receiving city financing over a specified dollar amount meet B3-MSBG standards.
- Create standards for development projects applying for a conditional use permit, variance or rezoning to meet or qualify for a green building standard (this provides an opportunity for education)
- Provide incentives, such as density bonus, to builders who build to green building standards.
- Work with local school districts to ensure that all new or remodeled schools over a specified dollar amount are built to a green building standard.

BREAKOUT SESSION 2-B

MULTI-MODAL TRANSPORTATION – BPA 5

Priority Goals: Of the ten goals from the BPA 5 Draft actions, the group selected the following three goals on which to focus:

Goal B. Improve the integration of transportation modes by designing and retrofitting streets for multiple modes where appropriate (the "complete streets" concept) and improve the connectivity (reduce gaps) of the transportation system for all modes, including bike, pedestrian, motor vehicle, transit and freight.

Potential Actions and Comments:

- Emphasize balance among modes, rather than favoring motor vehicles disproportionately. Recognize that local streets can be designed for shared use.
- Create parallel bike routes that enable cyclists to "get across town" while avoiding congested streets.
- Require bike parking as well as automobile parking; also explore separate standards for mopeds and scooters (a particular issue for the SCSU campus). Consider "right-sizing" off-street parking requirements.

Goal E. Increase the availability and use of public transportation between the Twin Cities and the greater St. Cloud region and between communities within the planning region.

Potential Actions and Comments:

- Use transit to fill "gaps" in the trail system.
- Build on the momentum and interest generated by the Northstar Commuter Rail to increase linkages between the Big Lake terminus and St. Cloud.
- Provide better infrastructure for transit routes, such as improved shelters, lighting, real-time information signage, etc., to increase transit user safety and comfort.
- Explore potential for smaller buses on routes with lighter ridership.

Goal I. Address congestion primarily through improved land use planning, complete streets, and increased mode share for transit, bicycling, walking, and carpooling rather than roadway widening.

- See discussion above under Goals B and E.

BREAKOUT SESSION 2-C

GOVERNMENT POLICIES – BPA 16

Priority Goals: Of the 5 goals from the BPA 16 Draft actions, the group selected the following three goals on which to focus:

Goal A: Encourage community and stakeholder education and collaboration in development decisions and community affairs.

Potential Actions and Comments:

- Local experts advising/ helping to craft development ordinances (i.e. electric company advising on energy conservation design standards)

Goals B and E: Promote inter-governmental cooperation and consistency based on a shared understanding of sustainability and by ensuring that land use approval procedures are predictable, fair, and cost effective

Potential Actions and Comments:

- Recognize and address cultural differences

Goals C and D: Remove regulatory obstacles and barriers and provide incentives that prevent or hinder the St. Cloud area's move toward sustainability.

Potential Actions and Comments:

- Review, refine, and/ or develop (where relevant) policy tools to make them consistent with community's sustainability goals.

INNOVATIVE OPPORTUNITIES – BPA 15

Priority Goals: Of the 6 goals from the BPA 15 Draft actions, the group selected the following three goals on which to focus:

Promote Awareness and Understanding
Potential Actions and Comments:

- Link sustainability to various cultures in the community
- Create a strong vision and make it visible

Planning and Encouragement
Potential Actions and Comments:

- Identify potential partners and their particular challenges and interests. Help partners craft and implement a sustainable approach to address their problem
- Find strong community champions of sustainability
    - Government officials
    - Civic engagement – Rotary clubs, church groups, etc.

Recognition and Assessment
Potential Actions and Comments:

- Awards
- Highlight positives

BREAKOUT SESSION 2-D

SUSTAINABILITY EDUCATION – BPA 12

Priority Goals: Of the goals from the BPA 12 Draft actions, the group selected the following three goals on which to focus:

Goal A. Create a shared understanding <emphasize "learn by practice"/hands on activities> of sustainability in public and private K-12 schools, vocational schools, colleges, universities and other higher education institutions, government agencies, businesses, congregations, service organizations, foundations and other non-profits.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

Goal E. Encourage every public, private and non-profit institution in the St. Cloud area to make a commitment to sustainability and develop a public sustainability vision, baseline assessment, goals, action plan, metrics and annual report.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

Goal I. Create an area-wide sustainability leadership team made up of leaders from the public, private and non-profit sectors to help coordinate on-going sustainability efforts in the community.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

Additional Comments:

- Goal E, Action e. City or County Sustainability Commission – The city or county should establish a Sustainability Commission composed of community members that would work in conjunction with the Sustainability Team to get public input and review the sustainability plan and ongoing efforts. The Sustainability Coordinator would staff the Commission. <reference regional effort>
- Goal E, Action f. Draft City/County Sustainability Plan – The Sustainability Team should take the departmental plans and integrate them into a proposed city or county sustainability plan. <reference regional effort>
- Goal E, Action p. Sustainability Indicators – The Sustainability Team, in conjunction with the Sustainability Commission, should develop a set of key sustainability indicators that can be tracked over time to monitor the city/county's progress in achieving its goals and becoming sustainable. There should be a process for engaging community leaders and the public with final approval by the City Council or County Board. <reference coordination with Minnesota Technical Advisory Panel (MnTAP) and Sustainability Corps>

FOOD AND AGRICULTURE – BPA 17

Priority Goals: Of the goals from the BPA 17 Draft actions, the group selected the following three goals on which to focus:

Goal B. Encourage urban/suburban sustainable food production to reduce household expenses, expand the accessibility to affordable, organic food, encourage active living and increase community engagement.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

Goal C. Bring about food nutrition and security by eliminating hunger and diet-related diseases, increasing the consumption of fruit, vegetables and other healthy foods, and improving the geographic and economic accessibility of culturally appropriate, healthy food.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

Goal D. Create a local, sustainable food processing and distribution infrastructure to build the region's economy, create living wage jobs, save people money, increase the added value of raw agricultural products, reduce fossil fuel consumption and make fresher food available.

Potential Actions and Comments:
No specific prioritization of actions – all draft actions are worthwhile priorities

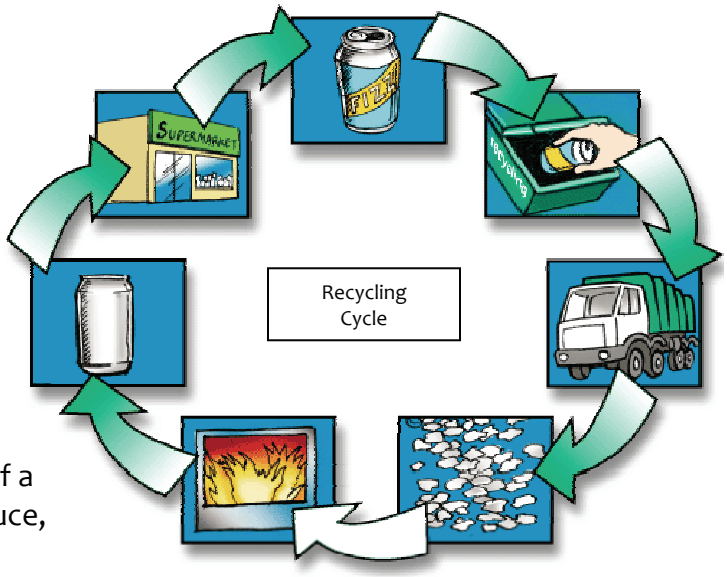
Additional Comments:

- Goal B, Action a. Set an Urban/Suburban Food Production Goal - Within a year, there should be a goal of at least 50% <establishing a goal is important, but the number is not correct> of the homeowners having a food garden and for community gardens and/or container gardens being encouraged for all multi-unit housing <consider utilizing organized neighborhoods>. The goal should be increased to 75% by the following year with an ultimate goal that 90% of the residents would be participating in some type of organic food growing.
- Goal B, Action e. ……. Create highly visible demonstration "Victory Gardens" on public land (such as a Mayor's Garden and Greenhouse at City Hall) and ……
- Goal B, Action f. Promote Local Sustainable Food Production - Work with the media and existing organizations to identify, promote, and educate the community about the benefits of locally-grown, organic and sustainable food, Community Supported Agriculture, coops, community gardens, backyard gardening, container gardens, roof-top gardens, and farmer's markets. Create an innovative, engaging, informative and persuasive "Buy Local, Buy Organic" information campaign to increase the demand for local, sustainable food.
- Goal B, Action h. Community Greenhouses – Seek out any abandoned greenhouses and renovate them for year-round community-based local food production using renewable energy and sustainable practices. <existing opportunities at Tech High School, Childrens Home, and Veterans Administration>
- Goal B. Action k. Food Production in New Residential Development – Require <should read incent, not require> that any new residential development incorporate sustainable food systems into the physical plan of any new residential development during the pre-design phase. This is already reflected in new LEED Neighborhood Design which provides credits for fostering local food production, including neighborhood farms and gardens, community supported agriculture, and proximity to farmers markets.
- Goal C, Action a. No Hunger, No Malnutrition Goal – Set a goal to reduce hunger and malnutrition by 50% <establishing a goal is important, but the number is not correct>in the first year and an additional 50% the second year with an ultimate goal of no hunger and no malnutrition.

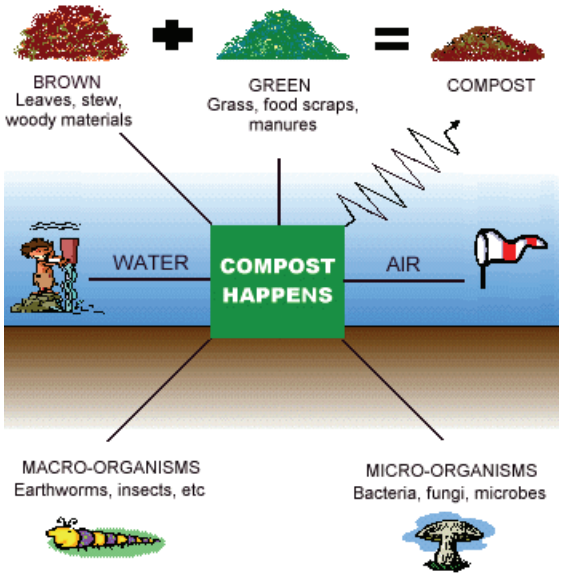
- Goal C, Action j. Food Gleaning Programs for Food Shelves – Encourage active food gleaning programs with local farmers, CSAs and community gardens with the food being donated to food shelves. Consider using prison labor. <reference "Share the Harvest">

Appendix E
Sustainability Diagrams

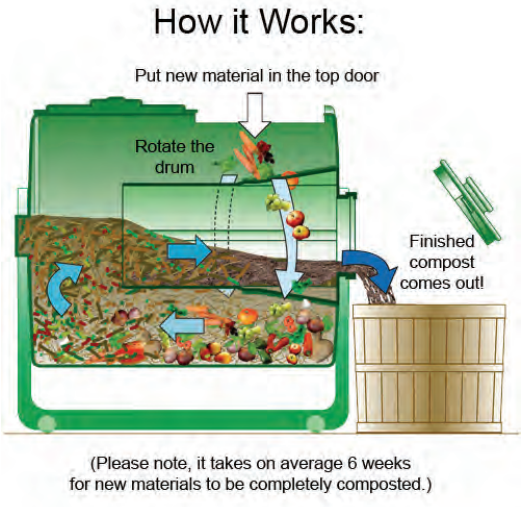
BPA #10 – **Recycling and Waste Reduction**
Identify best practices in evaluating recycling participation rates in regional operations and within the communities, as well as reducing waste and promoting reuse through development of waste reduction targets for facilities and through creation of a "Green Team" approach to reduce, reuse, and recycle.



Compost Cycle



Compost Tumbler



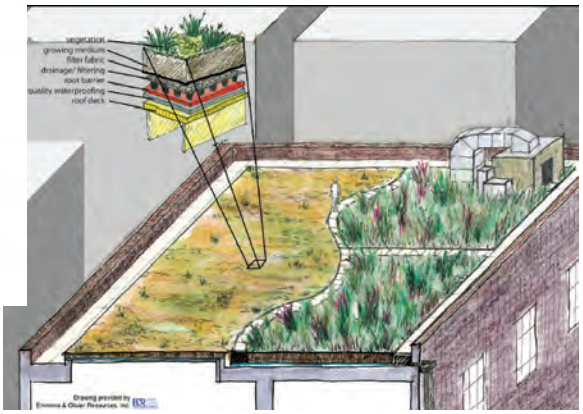
BPA #4 – **Sustainable Land Use Policies**

Identify best practices in developing land use policies that provide incentives to reduce sprawl, preserve open space, expand and enhance green corridors as new development and redevelopment occurs and that create a walk able community.

Urban Green Corridors

"Walkable" Cities

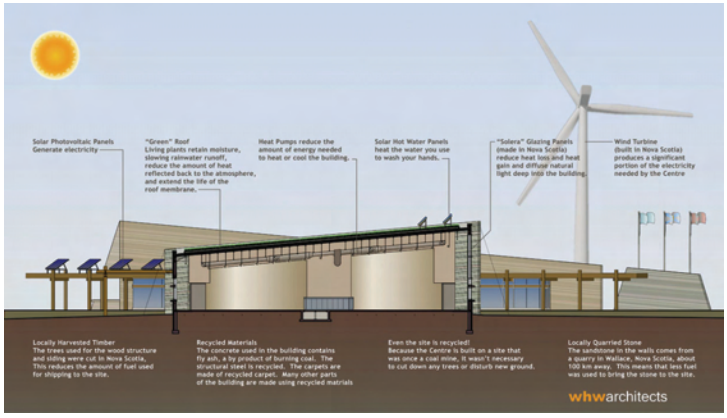
Green Roofs



Green Buildings

BPA #8 – **Sustainable Building Practices**

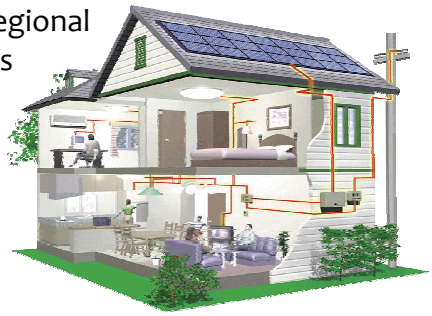
Identify best practices that will promote sustainable building practices and green construction to assist residents/builders and encourage green building techniques for both government and private development.



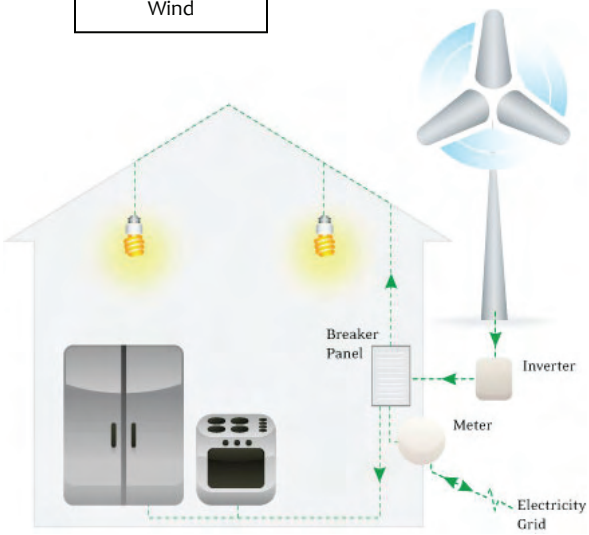
BPA #6 – **Alternative Energy**

Identify best practices for increasing the use of clean, alternative energy options to incorporate into regional facilities which may include researching methods to reduce energy consumption and investigating the use of alternative energy sources for heating/cooling throughout the participating area.

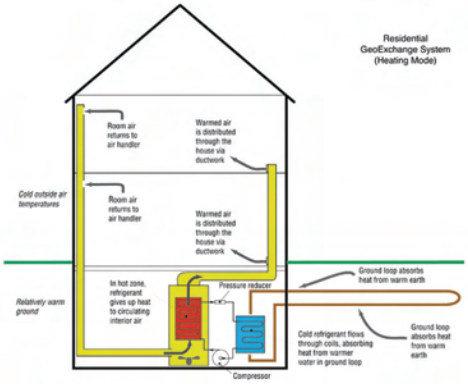
Solar



Wind



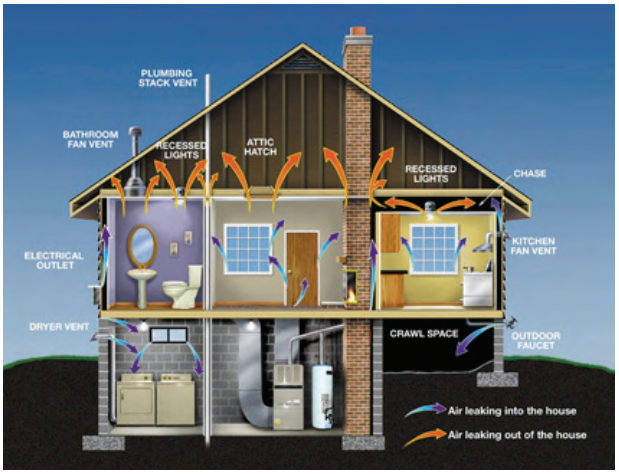
GeoThermal



BPA #7 – **Energy Efficiency**

Identify best practices in making energy efficiency a priority infrastructure which may include developing educational programs for the public about energy efficient techniques and construction practices, and investigating opportunities and ways to provide incentives to encourage private sector home and business energy improvements.

Energy Efficient Homes



BPA #9 – **Community Health**

Identify best practices in promoting healthy community programs such as development of public education programs that endorse healthy activities for residents, and development of infrastructure to enhance walking and biking opportunities.

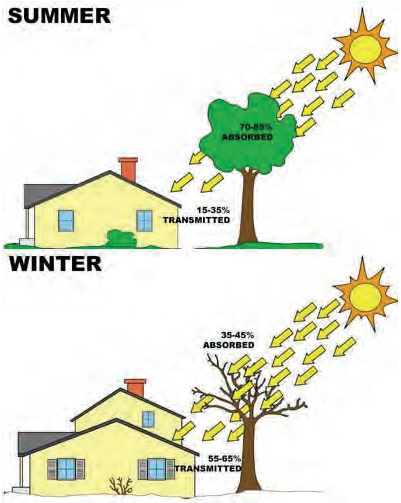
Community Connectivity

BPA #5 – **Sustainable Multi-Modal Transportation**

Identify best practices for promoting sustainable transportation systems/networks and developing educational and public information about transportation alternatives.

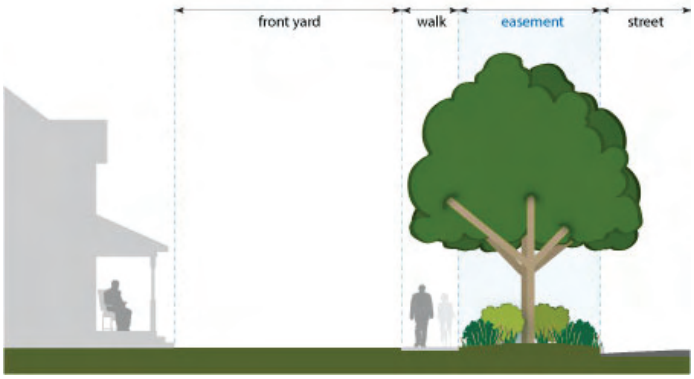
BPA #11 – **Healthy Urban Forests**

Identify best practices to maintain healthy urban forests such as promoting tree planting through programs to annually increase tree canopy throughout the region and an incentive program that encourages private sector owners to plant trees within parking lots and other areas of the region.



Energy Savings

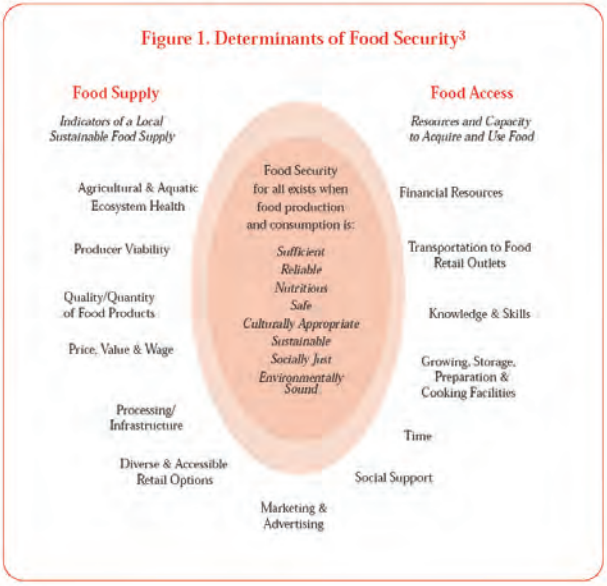
Street Trees



Food Security

BPA #17 – **Sustainable Food Systems/Practices**

Identify best practices to promote sustainable food systems through education to the private and public food service industry; including school cafeteria programs. Areas to be included are farmer's markets, buy locally, community supported agriculture (csa's), sustainable agriculture

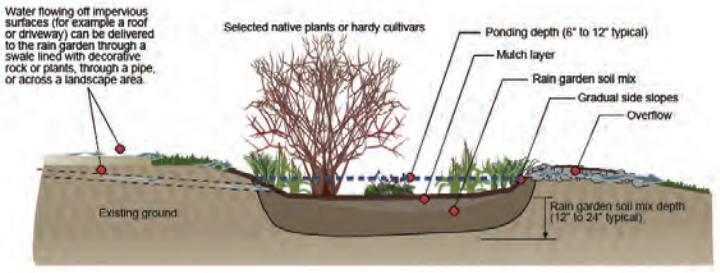


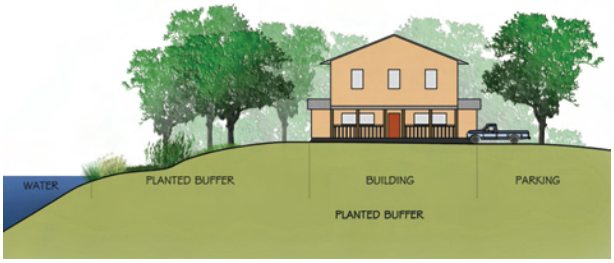
Local Foods
Farm to Market

BPA #13 – **Surface and Groundwater Resources**

Identify best practices to protect and improve surface and groundwater resources such as development of an educational program aimed at reducing water wasted through irrigation; investigating new design standards and incentives to emphasize the use of natural drainage systems; and, seeking ways to modify street improvement projects to provide less impervious surface and utilize rainwater gardens, porous pavement and other environmentally friendly techniques.

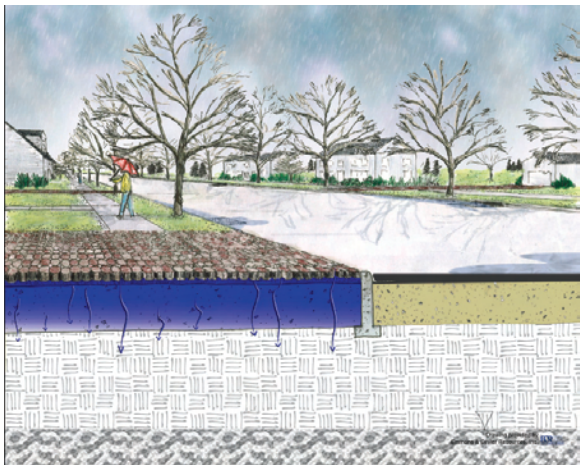
Rain Gardens





Shoreline Buffers

Pervious Pavement

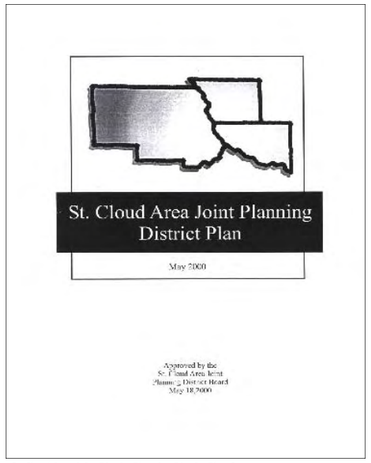


Rain Barrel

St. Cloud Joint Planning District Sustainability Framework Plan

Executive Summary

St. Cloud Area Sustainability



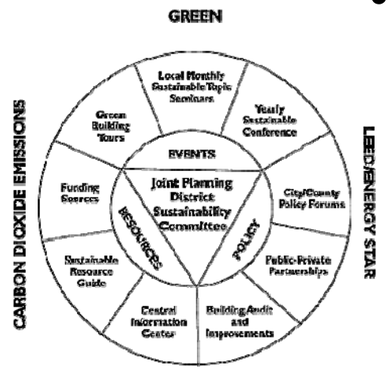
St. Cloud Area Joint District Planning District Plan Cover, 2000

Joint District Plan

- ✓ 1st Community Based Regional Plan in greater MN
- ✓ Regionally coordinated planning process establishing rural and urban growth areas
- ✓ Plan adopted in 2000
- ✓ Vision and strategies for regional land use, transportation, housing, and infrastructure
- ✓ Establishes 50-year growth boundaries

Sustainability Committee

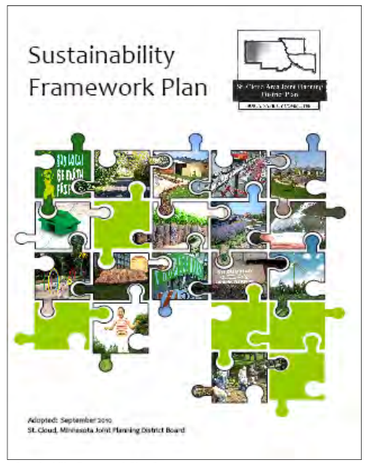
- ✓ On-Going Committee of the St. Cloud Area Joint Planning District Board
- ✓ Private and public members representing more than 20 organizations and residents
- ✓ Meets monthly
- ✓Committed to implementing sustainability framework plan through events, sustainability resources, and public policy reform



Role of St. Cloud Area's

Sustainability Framework Plan

- ✓ Adopted September 2010 as an amendment to the St. Cloud Joint District Plan
- ✓ Establishes prioritized set of local actions in 17 best practice areas
- ✓ A "living" document being actively reviewed and implemented by local private and public sector partners
- ✓Serves as guidance to future planning decision at the local and regional level within the St. Cloud Joint Planning District



Sustainability Framework Plan Cover, 2010

Sustainability Vision

The St. Cloud Area is made up of active and vibrant communities whose collective decisions support a prosperous local economy, maintain the physical and mental health of the community, and sustain high quality land and water resources.

For More Information

WEB www.ci.stcloud.mn.us/planning/sustain
EMAIL planning@ci.stcloud.mn.us
PHONE 320-255-7218

St. Cloud Joint Planning District Sustainability Framework Plan

Executive Summary

Best Practice Areas & Priorities

Products and Waste

1. Create Economic Development Through Reuse Opportunity
2. Increase Recycling and Composting
3. Purchase Environmentally Friendly Products

Greenhouse Gas Reduction

1. Provide Education on GHG Reduction
2. Promote Alternative Fleet Fuel / Operations
3. Reduce GHG through Reduce, Reuse, Recycle, and Compost

Stop Sprawl/ Strengthen Compact Development

1. Functioning Natural Environment
2. Stop Sprawl
3. Meet Housing Needs

Multi-Modal Transportation

1. Complete, Connected Streets
2. Viable Transit Options
3. Environmentally Friendly Congestion Options

The St. Cloud area has for many years been undertaking new and innovative initiatives aimed at sustainability. In continuation of this commitment, a number of state- of- the-art best practices are identified.

Each BPA lists the top 3 priorities.

Building Practices

1. Document Baseline and Set New Targets
2. Educate Occupants of Energy Efficient Operations and Savings
3. Renovate Instead of Demolish

Community Health

1. Provide Outdoor Community Activities
2. Promote and Support Local Sustainable Businesses
3. Promote Fitness on the Road to Sustainability

Healthy Rural and Urban Landscapes

1. Healthy Parks Build Healthy Communities
2. Increase Natural Landscapes, Decrease Lawn Herbicides
3. Increase Tree Canopy

Sustainability Education

1. Municipalities Lead By Example
2. Educate the Community
3. Educate the Academic Institutions

Conserve & Use Less Water

1. Support the MS River Renaissance Project
2. Conserve
3. Improve Water Quality

Innovative Opportunities

1. Promote Awareness and Understanding
2. Planning and Encouragement
3. Recognize Community Sustainability Efforts

Government Policies

1. Learn and Grow Together
2. Shared Understanding of Sustainability
3. Remove Barriers and Provide Incentives

Food and Agriculture

1. Grow Your Own
2. Make it Local
3. Healthy Food for All

Surface and Groundwater Protection

1. Stormwater Training
2. Healthy Waters, Healthy People
3. Sustainable Ordinances

Conserve & Use Less Energy

1. Conserve
2. Transition to Clean Energy Source
3. Measure and Monitor

For Details See Section 3—Sustainability Toolbox and Action Plan

www.ci.stcloud.mn.us/planning/sustain

"Best Practice" generally refers to the best possible way of doing something. It can evolve as to become better as improvements are discovered.